DRAFT - Approved by the full-faculty of Columbia Business School on September 10, 2009

Distribution to the Faculty

Master of Science in Accounting and Fundamental Analysis

Degree Program Proposal

1. Purpose

Columbia Business School proposes a new Master of Science in Accounting and Fundamental Analysis in order to create accounting experts with in depth skills in financial statement driven fundamental analysis. Students with such training are in demand in professions such as investment management, equity research, investment banking and private equity/venture capital.

This new degree will fill a gap in the current degree offerings of the Business School, providing an educational opportunity for individuals who wish to pursue a deeper more focused course of study than provided by the MBA program. We expect that this degree will primarily attract three streams of potential applicants.

First, this degree will be attractive to those desiring a specialized alternative to the traditional MBA program. The MS program will be designed to create analysis experts rather than general managers. The program would be of one year in length, with no work experience requirement.

Second, the program will attract applications from candidates interested in eventually pursuing a PhD, who do not yet have sufficient background to be admitted into a top-notch program. The MS program would serve such students by providing a focused rigorous training with a real research component that would attractively position candidates to apply to full PhD programs, including the program at Columbia.

Finally, this program would attract candidates who need additional credit hours to meet the 150 hour requirement that many states (NY from Oct 2009) are putting in place for the Certified Public Accountant (CPA) certification. Such students would find that the additional coursework would be able to help them meet the requirement, provided they have undergraduate accounting backgrounds with all other relevant CPA requirements already met.

There may be two other types of candidates, with slightly different profiles, who could also benefit from the same course of study. The first is applicants who intend to obtain the Certified Financial Analyst (CFA) certification. This program would cover a substantial portion of the requirements of the CFA, though not all.

The second category is made up of foreign nationals who receive funding from their home countries to study abroad, but typically spend a year in the United States taking classes without enrolling in a terminal degree program. Often these students are well educated, and have personal or national funding to support their time in the United States. The MS program could attract these students by providing them with more structured education rather than simply providing a nominal affiliation such as a visiting scholar would have.

The position of this program in the intellectual life of the school may perhaps be explained as follows: Doctoral study trains students not only to solve sophisticated problems but also to select the important problems to be solved. The MBA program trains students to create organizations and to manage them. Our MS program is designed for students who are attracted to the art and challenge of problem solving without wishing to be put in a position of having to create their work environment for themselves. It

will be important for the MS students to complete PhD courses as they will thus be exposed to the level of thoroughness and sophistication that will be expected of them. It will also empower them to extend the state of the art with their own social context.

Need

Why is the Proposed Program Needed?

There is a need for more analytically trained Accounting analysts sought by industry consulting firms and non-governmental organizations (NGOs). In a competitive job market landscape, the deep technical skills and expertise gained through the coursework component of a PhD program become increasingly valuable. For academically distinguished students who wish to hone these skills, the opportunity to enroll in a Master of Science degree will position them well for careers in industry, consulting, and the public sector or perhaps within the academy. While the MBA degree trains students broadly, the MS degree can provide students with a more specialized focus that allows more sophisticated solutions to business and societal management problems.

Competitive Landscape: Other Master of Science Programs in Accounting

The MS in Accounting degree program is offered by a very small subset of leading business schools. Most programs are CPA focused, providing students who may not necessarily have an accounting background the necessary coursework as well as credits. Only six schools ranked by Business Week in the top 25 MBA programs offer an MS in accounting: the University of Michigan, University of Texas at Austin, University of Notre Dame, Indiana University, University of Southern California, and Brigham Young University.

The Accounting department at Columbia is well placed to offer an MS in Accounting and Fundamental Analysis that differs significantly from these other programs. First, it will build on the school and the department's strengths in accounting driven financial statement analysis. Columbia Business School has a long tradition of excellence in fundamental analysis going back 75 years to the publication of Graham and Dodd's seminal work on Security Analysis. The accounting department's notable strength in research and teaching is in accounting based fundamental analysis, which is also reflected in success of the Center for Excellence in Accounting and Security Analysis (CEASA) at the school. Second, it will not be CPA focused. Third, the program will allow the department to take advantage of capacity within existing PhD courses and not require that new courses be developed for the MS program. Fourth, none of our strongest competitor schools in the Seven Dean's cohort offer such a program (Wharton, Harvard, Stanford, Kellogg, MIT and University of Chicago-Booth). Finally, we believe that Columbia's reputation and New York City location will help attract an impressive pool of interested candidates. While NYU once offered a CPA focused MS degree in Accounting it was discontinued several years ago. This will ensure that we will be the only such offering from top schools in the Northeast.

The only MS program that is similar in some aspects to our proposed program is the PhD track of the MS in Accounting program offered by BYU. This program essentially prepares candidates for a PhD in accounting and places 3-4 students in top PhD programs every year. We feel that there is a tremendous need for other such programs and that our offering will dominate because of the greater rigor as well as the reputation of our accounting department and Columbia Business School.

What other institutions in the metropolitan area and Northeast offer similar programs?

New York:

Baruch College's Zicklin School of Business offers a Master of Science in Accountancy is intended to meet the NY state CPA requirement. This program should not compete directly with the proposed program because of its single focus.

New England:

Boston College Carroll School of Management also offers a Master of Science in Accounting, also intended to meet the CPA requirements in most states. This program should not compete directly with the proposed program because of its single focus.

While we have not consulted extensively with our competitor schools or industry contacts about the need for this program, our intention is to begin the program with a very small number of students in order to gauge demand and build the program over time. Doing so will allow us to assess the success of the program and gauge the market demand very concretely.

2. Student Body to be Served

Admissions Standards

The student body of the MS program would be indistinguishable from the PhD candidates in their intellectual qualifications so that their participation in PhD classes would in no way dilute the quality of those classes. Nevertheless, these students would differ from the PhD students on several other key dimensions:

- 1) They would not necessarily aspire to an academic career
- 2) They would not necessarily be ready to commit to a 4-5 year course of study
- 3) They would be prepared to pay for their degree

The admissions process for the MS degree would be handled by the PhD office which currently manages applications for the PhD program. Applicants would be required to take the GRE &/or GMAT, complete an application including an essay on their career goals, provide transcripts from all post-secondary courses of study, and submit letters of recommendation. Non-native English speakers would be required to take the TOEFL exam and participate in a phone conversation with the PhD office before admission. Admitted students would have academic records similar to admitted PhD Students.

As with PhD applicants, initial screening and preparation would be provided by the PhD office and within each department, the final review of applications would be completed by a Masters Degree committee of 3 faculty members, with other members of the department each reviewing a handful of applications annually.

We expect the MS in Accounting and Fundamental Analysis program to be a selective and elite program. Admissions standards will be high and we will ensure that the candidates come in with strong academic backgrounds.

We envision an "early decision" program will be offered to Columbia College and SEAS students whereby their admission to the program will be secured prior to their senior year. This would allow them to complete certain prerequisites and background courses in their senior year at the College.

Strategies to Increase Student Diversity

There is likely to be a fairly small self-selecting applicant pool for this specialized MS program, Nevertheless, the MS program admissions and recruitment process will take several steps to make sure that qualified applicants from under-represented groups are encouraged to apply are completely considered.

- The MS Degree program director will identify promising candidates and encourage them to apply to the program. This could take place by contacting Columbia College faculty & administrators for targeted recommendations.
- The MS Degree Admissions administrator will tag all applicants that fall into underrepresented groups and guarantee that applicants who do not make the initial cuts are reviewed once again by one additional person to confirm that the right admissions decision has been made about the candidate
- If targeted electronic marketing to potential applicants takes place through degree discipline mailing lists, marketing to under-represented target groups will take priority if appropriate lists are available.

Program Size

The planned strategy for the MS Degree in Accounting and Fundamental Analysis is to launch the program at a small size in order to build the program slowly. In year one, we expect to recruit up to 10 students and expect to reach a program size to 15 students per year by year 5.

Supervision and Advising

MS Students would be initially advised by an administrator in the PhD office designated as the MS Advisor. The departmental PhD director will also serve as the director of the MS program in Accounting and Fundamental Analysis. All students in each division would take the same (or one of a menu of) classes required for the MS Degree. In the third semester (over the summer), students would enroll in "Research Seminars" taught by faculty members, who would serve as the project advisors for the MS Students. Faculty members would receive course credit for teaching the class.

3. Curriculum Requirements

The MS Program will consist of 12 to 15 months (or 3 semesters) of study at Columbia Business School. Students will enroll in the program in the fall (September). Students will complete a minimum of 10 full courses (30 credits) plus an MS thesis in which they will conduct an original research project.

They will take two semesters of coursework over Fall and Spring. In the summer semester, students would take a reduced coursework and work on completing their thesis requirements. Students are expected to submit their thesis by the end of the summer so that they can meet the requirements for October graduation. Some students who wish to complete industry internships over the summer will be allowed to submit their thesis later in the fall semester so as to graduate in December.

Prerequisites

We would expect that a large majority of students who come from undergraduate business (accounting) or economics backgrounds and would have hence completed the basic financial accounting and managerial accounting core courses. Students who do not have formal coursework in accounting could also be admitted but would be expected to prepare for and pass exemption exams for these courses.

Expected Coursework

Students will complete a minimum of 10 full courses (30 credits) in the following modules.

Fundamental Analysis Kernel (5 Courses)

The kernel around which the program would be based is the three courses in fundamental analysis offered by the accounting department along with two PhD seminars in research in accounting. The three courses in financial accounting are

- Financial Statement Analysis and Valuation (B8110),
- Earnings Quality and Financial Analysis (B8100) and
- Fundamental Analysis for Investment & Management Decisions (B8140).

These courses would provide the training and exposure that would be critical for students as they work on their MS thesis.

- The first PhD Seminar (B9110) would expose students to empirical academic research in accounting and fundamental analysis.
- The second PhD Seminar would either be an advanced empirical seminar or a theory seminar.

Together, these courses would make the MS candidates extremely attractive to hedge funds and investment management firm, who seek quantitatively trained professionals well trained in the state of art in academic research.

Training in Statistics and Economics (4 Courses)

- Students would also take 2 courses in statistics and econometrics respectively. These courses could be the existing PhD level courses offered by the DRO group or other equivalent courses elsewhere in the university.
- Students would also take 2 PhD level courses in Economics offered by the economics group of the business school.

Additional Electives (at least 1 Course)

Students will take an additional elective in an allied discipline such as Finance. Examples of relevant electives include

- Capital Markets,
- Advanced Corporate Finance as well as
- PhD seminars offered by the Finance group.

Course Sequence

The likely course sequence by semester will be

- FALL Semester 1 (4)
 - Earnings Quality and Financial Analysis (B8100)
 - PhD Microeconomics
 - Probability and Statistics
 - PhD Seminar in Accounting Research I (B9110)

- SPRING Semester 2 (4)
 - Financial Statement Analysis and Valuation (B8110)
 - PhD Micro II
 - Econometrics
 - PhD Seminar in Accounting Research II
- SUMMER Semester 3 (2 + THESIS)
 - Fundamental Analysis for Investment & Management Decisions (B8140).
 - Additional Elective (Capital Markets, Advanced Corporate Finance, PhD Seminar in Finance)
 - THESIS

Course availability for the program will be managed by the Deans' Office to ensure that the MS in Accounting and Fundamental Analysis program does not reduce the space available in popular courses for our MBA and EMBA students.

Standards of Performance

Given our desire to run an elite program, we will require that students maintain at least an HP grade in the fundamental analysis kernel of the course and expect similar standards for all other coursework.

Thesis

All MS degree students will be required to complete a substantial research project under the supervision of a faculty member, usually in the context of a research seminar. They would get ideas for research projects from the PhD seminar courses and the skills to execute it from their statistics classes. They will work in parallel with first year PhD students who have a summer paper requirement. Students will submit their theses by the end of the summer if they plan to graduate within a year (for those planning to join PhD programs or a job, or those who are visiting scholars for a year). Students will have the option of spending an extra few months in the Fall of the 2nd year and submit their theses in time for December graduation.

The thesis will be guided by faculty member who will receive teaching credit for the thesis supervision. The professor will meet at regular intervals will all MS students over the summer to discuss their ongoing research in a classroom environment. The professor will have to grade the theses to ensure that the requirements have been met, similar to the grading of course projects or independent study projects.

4. Resource Utilization

I. Faculty and Staff

The MS Degree in Accounting and Fundamental Analysis will be led by a MS degree committee of three faculty members, one of whom will be the departmental coordinator of the PhD programs. The PhD coordinator will also serve as the faculty advisor to incoming MS students, advising them about course options and helping them with administrative issues. Currently, the MS degree committee consists of Trevor Harris, Stephen Penman and Partha Mohanram (PhD coordinator).

It is expected that a majority of the members of the Accounting Division faculty will participate in the program. A complete list of the fulltime faculty members of the division is below.

- Sudhakar Balachandran, DBA, Harvard Business School, 2001 (Non-tenured)
- Tim Baldenius, Ph.D., University of Vienna, 1998 (Tenured)
- Trevor Harris, Ph.D., University of Washington, 1983 (Professor of Professional Practice)
- Nahum Melumad, Ph.D., University of California-Berkeley, 1985 (Tenured)
- Partha Mohanram, Ph.D., Harvard University, 1999 (Non-tenured)
- Doron Nissim, Ph.D., University of California-Berkeley, 1997 (Tenured)
- Stephen Penman, Ph.D., University of Chicago, 1978 (Tenured)
- Gil Sadka, Ph.D., University of Chicago, 2005 (Non-tenured)
- Andrew Schmidt, Ph.D., Arizona State, 2004 (Non-tenured)
- Julian Yeo, Ph.D., University of Melbourne, 2003 (Non-tenured)
- Yuan Zhang, Ph.D., University of Southern California, 2003 (Non-tenured)

In its first years, the program will not require any additional faculty or staff and is intended to take advantage of existing capacity in courses that are currently being offered but due to the small size of the PhD program are not being filled. The PhD program staff, the divisional staff and the student affairs and career management office staff will be more fully utilized by adding a small number of students to our current enrollment.

Given that Business School hopes to launch 2-3 programs of up to 10 Students in Fall 2010, and the entire MBA school enrollment is $^{\sim}$ 1400, this will increase the workload by about 2%, which should not overburden student facing administration. As the program grows, we will evaluate the need for additional staff and fund these incremental positions out of MS tuition.

II. <u>Description of the direct costs of the new program</u>

Given our plans to launch the program at a modest scale, we do not anticipate significant additional incremental expenses in the first year. If the programs grow as anticipated, we will assess need and add staff as necessary

- We will not hire additional faculty, nor supplement existing staff in the first year.
- We will not normally provide financial aid to candidates.

III. Indirect costs: space, library support, computer center, and other facilities

Given our plans to launch the program at a modest scale, we do not anticipate significant additional incremental indirect costs in the first year. Master of Science students would not receive dedicated work spaces.

5. Quality Control

In order to assess the academic quality and effectiveness of the Master of Science in Accounting and Fundamental Analysis Program, the division, with the help of the doctoral program office, will survey program students by e-mail at the end of their second semester, 12 months after graduation, and five years after graduation. Survey data will be archived over time, and analyzed and summarized each year to allow for program improvements and to provide feedback to program directors and faculty.

The data to be collected and analyzed will include:

• Teaching evaluations by Master of Science in Accounting and Fundamental Analysis students.

- Overall program evaluations by Master of Science in Accounting and Fundamental Analysis students addressing: advising, curriculum, research seminar experience, and Career Management Resources.
- Job placement dates, positions, and firms for Master of Science in Accounting and Fundamental Analysis students.
- Time to placement following graduation. This statistic will be collected by the Doctoral Office or the Career Management Center.
- Information regarding a graduate's future career will be maintained to the extent possible by the Doctoral Office or the Accounting Division. 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.

Budget

This budget was developed in conjunction with budgets for all proposed MS programs, in order to ensure consistent planning across all divisions. All personnel, advertising, and material estimates were made based on conversations with faculty and staff at Columbia Business School. These costs will be allocated to divisional programs on a per-student basis.

Revenue sharing for the first three years will be as follows: Divisions will keep the first \$50,000 of net income from the program in their division. Any amount of net income above \$50,000 will be split 45% - 45% -10% between the divisions, the school, and the PhD program, respectively.

Net income for this purpose is defined as total income minus all incremental costs of the program, such as faculty buyouts for additional teaching, new hires required by program, web and marketing costs, and materials as specified in the budget below. Costs will only be allocated if expenses are incurred specifically for the MS program.

MS IN ACCOUNTING AND FUNDAMENTAL ANALYSIS	
Category	Amount
INCOME	
CBS Tuition	500,000
Total Income	500,000
EXPENSES	
MS Degree Teaching (Classes offered because of new programs)	42,000
Contingency Adjunct Cost for extra teaching needs	32,000
Course materials distributed to students	14,250
Incremental Increase in PhD Program Budget	8,515
Incremental Increase in Student Affairs Budget	8,515
Incremental Increase in ITG Budget	8,515
Incremental Increase in Career Management Center Budget	17,030
Website and application design and maintenance	6,000
Student events and orientation	5,000
Marketing of the Programs (e-mail lists/ google ads)	12,000
Total Expenses	153,825
Net Revenue	346,175

MC IN ACCOUNTING AND FUNDAMENTAL ANALYSIS

SUMMARY of Revenue Sharing

# of Students	10
Total Net Revenue	346,175
To Division	183,279
To School	133,279
To PhD Program	29,618

Executive Summary

Master of Science in Accounting and Fundamental Analysis

Columbia Business School proposes new Master of Science in Accounting and Fundamental Analysis in order to fill the need for accounting experts skilled at carrying out financial statement driven fundamental analysis sought by a wide range of employers in financial services including investment management, equity research, investment banking and private equity/venture capital.

The program builds on Columbia Business School's historically strong tradition in fundamental analysis and capitalizes on the accounting department's strength in the area of accounting driven financial statement analysis and valuation. This new degree will be targeted to individuals who wish to pursue a deeper more focused course of study than provided by the MBA program and plan to deploy their technical expertise towards a career in financial services. These students, with academic preparation equivalent to that of students admitted to our PhD programs, wish to pursue a shorter course of study in order to better prepare them for their careers. The program might attract candidates interested in pursuing a PhD, who are academically prepared, but do not yet have sufficient background to be admitted into a top-notch program. The program might also attract students looking for additional coursework to meet CPA requirements or looking for additional training to help with CFA certification. Finally, the program may also appeal to foreign nationals who receive funding from their home countries to study abroad, but often spend a year in the United States taking classes without enrolling in a degree program.

In a competitive job market landscape, the deep technical skills and expertise gained through the coursework component of a PhD program become increasingly valuable. For academically distinguished students who wish to hone these skills, the opportunity to enroll in a Master of Science degree will position them well for their careers. While the MBA degree trains students broadly the Master of Science in Accounting and Fundamental Analysis degree can provide students with a specialized focus, ideal for training candidates to develop technically sophisticated solutions to business issues. The Accounting group sees the MS program as a selective and elite program producing a cohort of rigorously trained experts in accounting and fundamental analysis.

The Masters of Science in Accounting and Fundamental Analysis will consist of 12 to 15 months of study at Columbia Business School. Students are expected to take at least 10 graduate-level courses spread across three semesters (Fall, Spring and Summer). The program would be built around a kernel in fundamental analysis consisting of advanced courses in financial statement analysis and valuation, earnings quality and fundamental analysis in addition to PhD level courses in empirical and theoretical research. In addition, students would take advanced PhD level courses in statistics, econometrics and economics as well as electives in allied disciplines such as Finance. Students will also work on an MS thesis on an original research question under faculty supervision. Students who submit their thesis by the end of the summer would graduate in a year. Students could also spend a part of the Fall of the following year to finish their thesis.