Please note: This document will be shared internally with other administrative departments at Columbia Business School.

Faculty Member Name: Patrick Bolton (F&E)

FACULTY ACTIVITY REPORT: January 1 – December 31, 2016
Please complete all of the items in this report as thoroughly as possible including activities completed in calendar year 2016. Your thoughtful responses provide a valuable resource for faculty evaluation and also for the School’s fundraising and external relations.

Summary
Brief (1 - 2 paragraph) narrative description of your most significant accomplishments over the past year:

I. Research
Indicate coauthors and editors of any publication listed in this section. If an article was both accepted and published in 2016, you need only list it once under published.

1. Articles in refereed professional journals:
   a. Published in 2016:

   “Governance and Climate Change: A Success Story in Mobilizing Investor Support for Corporate Responses to Climate Change,” with Mats Andersson and Frédéric Samama (2016) Journal of Applied Corporate Finance, 28(2): 29-34

   b. Accepted in 2016:

   “From Global Savings Glut to Financing Infrastructure,” with Rabah Arezki, Sanjay Peters, Frédéric Samama and Joseph Stiglitz (2017), Economic Policy

2. Other research publications (conference proceedings and book chapters):
   a. Published in 2016:

b. Accepted in 2016:

3. Books published (please indicate whether authored or edited):

4. Working papers:
   a. Submitted in 2016 (journal and status):

   “Savings Gluts and Financial Fragility,” with Tano Santos and Jose A. Scheinkman (2016) submitted to *American Economic Review*


   “Liquidity and risk management: Coordinating investment and compensation policies,” with Neng Wang and Jinqiang Yang, (2016), revise and resubmit at the *Journal of Finance*


   b. Not yet submitted (written or revised in 2016):


   “The End of the “Modern Corporation”: Deregulation and Ownership of Electric Utilities,” with Howard Rosenthal (2016)

5. Other research in progress (new or revised in 2016):

   “CoCo Bond Issuance and Bank Funding Costs,” with Stefan Avdjiev, Wei Jiang, Anastasia Kartasheva and Bilyana Bogdanova (2016)

   “Managerial Career Concerns and Corporate Investment” with Neng Wang and Jinqiang Yang (2016)

6. Grants:
   a. Applied for (indicate source, amount, status, and co-PI’s):

   b. Received (indicate source, amount, term, and co-PI’s):

7. Please describe how your recent research has had an impact on business practice or has been incorporated into teaching content if applicable:

   My research on decarbonized market indexes reported in “Hedging Climate Risk” has been implemented by MSCI on a number of its indexes. Investment strategies based on these indexes are already being followed by a number of major pension funds, the leading fund being AP4 of Sweden.
The total amount invested in these indexes is estimated to be between 5 and 10 billion dollars. Leading asset managers such as Amundi and Blackrock are marketing and implementing such strategies for some of their clients. This material will be incorporated in the new elective “The Business of Climate Change: Investing in a Changing Environment” to be taught in the spring.

II. Research Training

1. Doctoral theses sponsored (please list student's name, degree, status, and thesis title):

Ye Li, PhD completion expected in 2017, “Procyclical Finance: The Money View” -- currently on the academic job market

2. Other theses for which you had significant supervisory responsibility (please list student's name, degree, status, and thesis title):

Guojun Chen, PhD completed in 2016, “Corporate Investment and Cash Savings under Uncertainty” – currently Assistant Professor at Nanyang Business School, Singapore

Aleksey Semenov, PhD completed in 2016, “Higher Volatility with Lower Credit Spreads: the Puzzle and Its Solution”

Byeong-Je An PhD completed in 2016, “Three Essays on Asset Pricing” – currently Assistant Professor of Finance. Nanyang Business School

DongJoon Han, PhD completed in 2016, “Earnings Manipulation and Asset Substitution: Real Effects of Financial Reporting Scrutiny on Debt Contracting” – currently Assistant Professor at CUHK Business School

Samer Shousha, PhD completed 2016, “Essays in International Macroeconomics” – currently at the Board of Governors of the Federal Reserve System

Jiayin Hu, 3rd year PhD student working on deposit insurance

Bikramaditya Datta, 3rd year PhD student working on organizational economics and career concerns

Polina Dovman, 3rd year PhD student working on dividend policy

3. Other work with doctoral students:

III. Teaching

1. Teaching evaluations:

Please review the personalized information in the table. If it is not complete or correct, please add comments or note any errors in the blank correction/additional information table and space below the personalized table.
Correction/Additional Information Table:

<table>
<thead>
<tr>
<th>Faculty Name</th>
<th>Term</th>
<th>Course Number &amp; Program</th>
<th>Course Name</th>
<th># of students</th>
<th>Course Rating</th>
<th>Professor Rating</th>
<th>co-taught</th>
<th>Response Rate</th>
<th>Full / Half Class</th>
<th>Teaching Credits</th>
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<td>Fall 2016</td>
<td>B8347 001 MBA Elective</td>
<td>Financial Crises and Regulatory Responses</td>
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<td>4.86</td>
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</table>

Comments:

2. Participation in teaching development activities (Samberg Faculty Development days, coaching, Samberg teaching workshops):

3. Innovative teaching strategies developed (e.g., new ways to assess student learning outcomes, new uses of technology in the classroom, innovative ways to use guest speakers):

4. Service as a core course coordinator:

5. Significant curriculum development work:

6. Cases written or revised in 2016:

7. Participation in executive education programs:

IV. School and University Service

*In this section please include a description of major accomplishments in role, scope of work, and/or time commitment, not just the title.*

1. Administrative positions (e.g., divisional chair, center director or research director, CDA chair or co-chair):

Chair of finance faculty search committee

2. Participation in School centers or programs in non-administrative roles (e.g., member of advisory board, leader of center event, or research project, participant in programs, etc.):
3. Participation in School CDAs in non-administrative roles:

4. Service on School and Divisional committees:

5. Service as a formal or informal teaching or research mentor to junior faculty members (please list faculty name and scope of mentorship):

6. There are many other ways to be engaged at the School. Please list involvement with students, alumni, and other school constituencies outside of the classroom:
   a. Students (involvement in student orientation or commencement, supervising independent studies, leading Chazen Institute study trips, etc.)
   b. Alumni (participation in off-campus alumni events, speaker or panelist at reunion etc.)
   c. Other constituencies (participant in board or donor meetings, serve as panelists at School sponsored conferences, etc.)

7. Other important School and Divisional assignments:

8. Service on University committees:

9. The governance of the School requires faculty participation in many different types of meetings. Please indicate your level of participation in the governance of the School (e.g., participation in Divisional and School faculty meetings):

10. In reflecting on divisional culture, please list the three faculty members in your division who have contributed the most to the divisional culture in the past year:

V. Professional Activities

1. Officer or administrative positions in professional associations:

   Executive committee member of the American Finance Association

   Scientific committee member of the Swiss Finance Institute

   Academic Advisory Board member of the Max Planck Institute for Research on Collective Goods

   Scientific Advisory Board Member of the Sovereign Wealth Fund Research Initiative

   Advisory Board Member of the Cambridge-INET Institute
2. Editorial service:
   a. Editorships:

   b. Associate editorships:

   Annual Review of Financial Economics

   c. Service on editorial boards:

   Journal of Financial Intermediation,

   International Journal of Central Banking

3. Conferences
   a. Organized and run:

   “Mobilizing Investors for Sustainable Solutions: Scaling up Market and Policy Innovation”
   Bellagio, Italy, 29, 30, 31 March; Conference hosted by the Rockefeller Foundation, co-organized with
   UNEP-FI

   “The Energy Transition, NDCs, and the Post-COP21”
   Marrakesh, Morocco, 08-09 September; Conference hosted by the OCP Policy Center and co-organized
   with CGEG, IMF

   b. Program Committee member:

   Arrow Lecture, Columbia University, November 10

   European Winter Finance Conference 2016, January 10, 11, 12

   c. Attended:

   American Finance Association meetings, San Francisco, January 2, 3, 4

   European Winter Finance Conference 2016, January 10, 11, 12

   Workshop on Potential Climate Risks in Financial Markets, Oslo, January 20, 2016

   Mobilizing Investors for Sustainable Solutions: Scaling up Market and Policy Innovation,
   Bellagio, Italy, 29, 30, 31 March

   Young Scholars Finance Consortium, April 21 –23, Texas A&M

   AFTER THE PARIS CLIMATE AGREEMENT: The role of stakeholders in the implementation,
   Stockholm June 10

   European Central Bank Forum on Central Banking, 27-29 June, Sintra, Portugal
4. Seminar presentations, talks, etc., given at universities, research labs, and professional associations:

Presentation of “Debt and Money: Financial Constraints and Sovereign Finance”, AFA Presidential Address, January 3

Presentation of “Hedging Climate Risk” at the Workshop on Potential Climate Risks in Financial Markets, Oslo, January 20

NYU Economics Seminar, March 4 presentation of “The Capital Structure of Nations”


Duke Finance seminar, March 23, presentation of “Liquidity and risk management: Coordinating investment and compensation policies”

Michigan State University Finance seminar, April 8 presentation of “Liquidity and risk management: Coordinating investment and compensation policies”

63rd Economic Policy Panel Meeting, April 22-23, Amsterdam, Netherlands presentation of “From Global Savings Glut to Financing Infrastructure”

McGill Seminar, April 29, presentation of “Liquidity and risk management: Coordinating investment and compensation policies”

Rising Star Conference, Fordham University, May 6 discussion of “Mortgage Refinancing, Consumer Spending, and Competition: Evidence from the Home Affordable Refinancing Program”


The Financial Intermediation Research Society (FIRS) Conference, Lisbon, Portugal, June 1-3 presentation of “Bank Resolution and the Structure of Global Banks”

Ninth Annual Conference of the Paul Woolley Centre (PWC) for the Study of Capital Market Dysfunctionality, London School of Economics discussion of “Good Booms, Bad Booms”

Fifth Annual Alliance Summer School in Science and Policy, Paris, June 9 presentation of “Finance and Climate Change”
Global Corporate Governance 2016 Conference, Swedish House of Finance, Stockholm, June 10-11 presentation of “From Global Savings Glut to Financing Infrastructure”

Bloomberg Conference *Accelerating Innovation in ESG Investing*, New York, June 13 presentation of “From Global Savings Glut to Financing Infrastructure”

Society of Economic Dynamics Annual Meeting, Toulouse, France July 3 presentation of “Liquidity and risk management: Coordinating investment and compensation policies”

27th CEPR European Summer Symposium in Financial Markets (ESSFM) 2016, 18-29 July 2016, Gerzensee presentation of “Bank Resolution and the Structure of Global Banks”

Oxford Financial Intermediation Theory Conference, August 22-23 presentation of “Savings gluts and financial fragility”

Webinar on “Hedging Climate Risk” organized by the Financial Analysts Journal, September 06

The Energy Transition, NDCs, and the Post-COP21 Conference, Marrakesh, Morocco, 08-09 September presentation of “Finance and Climate Change”

European Central Bank Annual Research Conference, 28-29 September, Frankfurt, Germany presentation of “Bank Resolution and the Structure of Global Banks”

Conference on the New Pedagogy of Financial Regulation, October 21, Columbia Law School

The Valuation of Securities Task Force of the NAIC Financial Conditions Committee, Kansas City, October 27-28 presentation of “The Credit Ratings Game”

Finance Seminar Amsterdam Business School, Amsterdam December 13 presentation of “The End of the “Modern Corporation”: Deregulation and Ownership of Electric Utilities”

Finance Seminar ESCP Europe, Paris December 14 presentation of “Investment, Liquidity, and Financing under Uncertainty”

Financial Regulation Seminar ESCP Europe, Paris December 15 presentation of “The End of the “Modern Corporation”: Deregulation and Ownership of Electric Utilities”

5. **Special speeches or presentations before other audiences, such as business and government groups (Please also note these on the separate Outside Activities form if applicable):**

6. **Participation in the intellectual life of the School and the University (e.g., attendance at research seminars or university activities):**

7. **Articles published in the popular press:**

“No evidence of short-termism? You must be kidding!” with Shiva Rajgopal published in Barron’s May 4, 2016
8. Corporate and non-profit board memberships (Please also note these on the separate Outside Activities form if applicable):

9. Public service:

10. Other significant professional contributions and activities with broader impact:

VI. Awards and Honors

VII. Additional Accomplishments
Please use this section for any accomplishments not covered in previous sections. Please also describe any research that would be particularly of interest to a mainstream audience via such outlets as Columbia Ideas at Work or the popular press. Such descriptions are helpful for fundraising, external relations, and media relations.

1. Other significant accomplishments:

2. New research in progress that may be of interest to mainstream audiences via such outlets as Columbia Ideas at Work or the media (Not yet covered in such outlets; optional):

3. Research that has already appeared at Ideas at Work and/or other media (Optional):

VIII. Planned Activities for the Next Three Years
Please provide a brief forward looking plan summarizing your planned intellectual contributions, classroom activities, and service to the School and University. The research plan should describe expected activities rather than provide a detailed explanation or abstract of individual planned papers. The goal is to think from a broad, strategic perspective and to identify what resources are needed to pursue big questions.

1. Planned Research
   a. Off-Term Proposal:
      If you are eligible, we also ask that you use this section to outline the planned project for your off-term support, and complete and sign the last page of this document to apply for your 2016-2017 off-term support.

In the summer term I hope to make further progress with the textbook manuscript “Corporate Finance” jointly written with Neng Wang. I also plan to work on the textbook on corporate governance with Marco Becht and Ailsa Roell. Finally, I will pursue my ongoing research projects: 1) block-ownership, governance, and deregulation of electric utilities; 2) Dynamics of equilibrium risk sharing; 3) managerial career concerns and corporate investment.
b. **Next Three Years:**

My main three broad research agendas are:

1) Dynamic Corporate Finance: I am continuing to work with Neng Wang, Hui Chen, and Jinqiang Yang on two papers, and Neng Wang and I continue with the writing of our master-level textbook on corporate finance.

2) Banking and financial regulation in the aftermath of the crisis of 2007-07. With Tano Santos and Jose Scheinkman we have a new research project on capital market dysfunctionality and implications for wealth inequality. With Jeffrey Gordon we are working on a book project on financial regulation.

3) Long-term investing and Sovereign Wealth Funds. With the center on global economic governance I am planning a conference in April on Financing the Energy Transition. I also have several ideas of research projects, but these are still at an embryonic stage.

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**2. Planned Teaching and Course Development:**

I will continue to teach the PhD course in Corporate Finance and the MBA/Law course on “Financial Crises and Regulatory Responses”. I will also teach a first-year MSc in financial economics Corporate Finance half-semester course. I co-teach the new elective MBA on “The business of climate change” with Geoff Heal, Elke Weber and Kent Daniel. I also have a new PhD-level course in the spring semester “The Law and Economics of Contracts” that I co-teach with Richard Brooks from the Law school, and I continue to run the Financial Economics colloquium as well as the Law & Economics workshop.

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**3. Planned CDA, Center and Program involvement:**

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**4. Other planned service or activities:**

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**IX. Leaves of Absence**

*Please list any leaves or exemptions from teaching duties taken during calendar year 2016 or anticipated for 2017 or 2018*

<table>
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<tr>
<th>Past Leave Taken in Calendar Year 2016</th>
<th>Semester of Leave</th>
<th>Type of Leave</th>
<th>Teaching Credits</th>
<th>Notes</th>
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<table>
<thead>
<tr>
<th>Future Leave Planned for Spring 2017, Fall 2017, or Spring 2018</th>
<th>Semester of Leave</th>
<th>Type of Leave</th>
<th>Teaching Credits</th>
<th>Notes</th>
</tr>
</thead>
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Columbia Business School

Application for Off-Term Support

<table>
<thead>
<tr>
<th>Name:</th>
<th>Patrick Bolton</th>
</tr>
</thead>
<tbody>
<tr>
<td>Division:</td>
<td>F&amp;E</td>
</tr>
<tr>
<td>Off-Term:</td>
<td>Summer 2017  X</td>
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<tr>
<td>Project Title:</td>
<td>Dynamic Corporate Finance</td>
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If you have a grant or any other non-School source of off-term support, please indicate source and amount here:

<table>
<thead>
<tr>
<th>Annual Amount</th>
<th>Source / chart-string</th>
</tr>
</thead>
</table>

By applying for off-term support and signing this form below, you acknowledge that:

1. Your off-term support will be considered taxable income (in compliance with IRS regulations).
2. You will not be teaching in the semester in which you request off-term support.
3. The School may supply your name and curriculum vitae to sponsors of Faculty Research Grants, and other interested parties, and you may be asked to acknowledge a specific sponsor when presenting your research results at a conference or when submitting an article.
4. You may be asked to prepare a non-technical abstract of the output from your research, for use in School publications, in public relations efforts, or for other School purposes.

Signature: Patrick Bolton  Date: 1/10/17

If you are eligible for off-term support during fiscal year 2017, please submit this application along with your Faculty Activity Report for 2016, which includes a research proposal outlining your planned work in section VIII to Monica Lewis in 101 Uris Hall or by e-mail to mcl2160@gsb.columbia.edu in order to be sure that off-term support payments are processed.

Thank you.

For Dean’s Office Use Only

<table>
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<th>Total off-term grant</th>
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<td>Signature of Approver (Katherine Phillips)</td>
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<td>Date of Approval</td>
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Application for Off-Term Support Fiscal Year 2017
Please note: This document will be shared internally with other administrative departments at Columbia Business School.