EXTERNAL EXAMINER REPORT FORM 2015

UNIVERSITY OF OXFORD

Title of Examination:		MSc in Mathematical and Computational Finance
External Examiner Details	**Title:**	Dr
	Name:	Michael Tehranchi
	Position:	University Lecturer
	Home Institution:	University of Cambridge

Please complete both Parts A and B.

Part A				
	Please (✓) as applicable*	**Yes**	**No**	**N/A**
A1.	Did you receive sufficient information and evidence in a timely manner to be able to carry out the role of External Examiner effectively?	✓		
A2.	Are the academic standards and the achievements of students comparable with those in other UK higher education institutions of which you have experience?	✓		
A3.	Do the threshold standards for the programme appropriately reflect the frameworks for higher education qualifications and any applicable subject benchmark statement? *[Please refer to paragraph 3(c) of the Guidelines for External Examiner Reports].*	✓		
A4.	Does the assessment process measure student achievement rigorously and fairly against the intended outcomes of the programme(s)?	✓		
A5.	Is the assessment process conducted in line with the University's policies and regulations?	✓		
A6.	Have issues raised in your previous reports been responded to and/or addressed to your satisfaction?	✓		

**** If you answer "No" to any question, please provide further comments in Part B.** Further comments may also be given in Part B, if desired, if you answer "Yes" or "N/A".*

Part B – see attached report

B1.   Academic standards

a.   *How do academic standards achieved by the students compare with those achieved by students at other higher education institutions of which you have experience?*

b.   *Please comment on student performance and achievement across the relevant programmes or parts of programmes (those examining in joint schools are particularly asked to comment on their subject in relation to the whole award).*

B2.   Rigour and conduct of the assessment process

Please comment on the rigour and conduct of the assessment process, including whether it ensures equity of treatment for students, and whether it has been conducted fairly and within the University's regulations and guidance.

B3.   Issues

Are there any issues which you feel should be brought to the attention of supervising committees in the faculty/department, division or wider University?

B4.   Good practice and enhancement opportunities

*Please comment/provide recommendations on any **good practice and innovation relating to learning, teaching and assessment**, and any **opportunities to enhance the quality of the learning opportunities** provided to students that should be noted and disseminated more widely as appropriate.*

B5.   Any other comments

Please provide any other comments you may have about any aspect of the examination process. Please also use this space to address any issues specifically required by any applicable professional body. If your term of office is now concluded, please provide an overview here.

Signature:	*[signature]*
Date:	11 Aug. 2015

Please email your completed form (preferably as a word document attachment) to: external-examiners@admin.ox.ac.uk and copied to the applicable divisional contact.

Alternatively, please return a copy by post to: The Vice-Chancellor c/o Catherine Whalley, Head of Education Planning & Quality Review, Education Policy Support, University Offices, Wellington Square, Oxford OX1 2JD.

External examiner's report
MSc in Mathematical and Computational Finance, 2014-2015

B1. Academic standards The questions for the written examination were set at a level appropriate for an MSc, covering a good breadth of mathematical finance and statistical methods. The distribution of marks for these papers indicates that the students are performing at a suitable standard.

Also, before the final examiners' meeting, I read through about 20% of the dissertations, and was satisfied that the students were producing good quality written work and this quality was reflected fairly in their marks.

B2. Rigour and conduct of the assessment process

I received draft questions for Papers A & B in December and for Papers C & D in March. I suggested some minor changes to the wording and content. I believe that these suggestions were incorporated in the final versions of the papers, though I did not see them.

The main discussion of first meeting was by how to moderate high marks downward. The examination committee argued that the marks in the other parts of the course have a smaller spread, and hence outliers could distort the average.

Conversely, in the second meeting of the examiners, it was decided to moderate low marks upward.

I understand that there were some issues involving the setting and marking of questions in paper D2 on econometrics and machine learning. These topics are new to the MSc this year (and outside my expertise) so I would recommend in future years that this paper is more carefully checked by an independent expert.

Also, I understand that there was a technical problem in the administration of paper D, involving the students access to an online data set. I recommend that such administrative procedures be tested more carefully to avoid such glitches during the actual exam sitting.

B3. Issues

The current guidelines for examiners says that a final classification of distinction is only available for students who earn over 70 in at least two of the three components of the assessment (written exams, QRM projects & programming, dissertation). Since these three components are not equally weighted, this rule seems to bind the examiners' hands awkwardly. I would recommend that a rewording of this criterion which still achieves the goal of rewarding both breadth and depth of learning, but allowing the examiners more flexibility.

This year, there were several students who had final averages over 70 but with only one component over 70 and another component at 69. We carefully scrutinised these borderline cases and were convinced that these candidates did not deserve to be classified as distinction despite the fact that the total fraction of distinctions was lower than in previous years. However, one could easily imagine other cases where having the extra flexibility would allow the examiners to promote deserving borderline candidates.

Also, for the sake of the external examiner, it would be nice to have the draft exam questions and solutions already in the final format when sent to me for review. I found it difficult to deal with the variety of formatting and inconsistent numbering.

B4. Good practice and enhancement opportunities

There was a case of suspected plagiarism last year where a student reused work from the QRM project in the dissertation. Fortunately, I am not award of plagiarism cases this year. However, I would re-iterate my recommendation from last year that students are told explicitly that the reuse of work in more than one category of assessment is not permitted.

Michael Tehranchi
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