Key databases and sources for finding relevant references and financial data for your MSc Maths Finance dissertation

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http://www.imperial.ac.uk/library/subjectsandsupport/maths
http://www.imperial.ac.uk/library/subjectsandsupport/business

Today’s session will cover

Library search tools
Accessing e-resources
How to search three key databases:
  - MathSciNet
  - Scopus
  - Web of Science

Google vs Google Scholar
Awareness of three key financial data sources
  - Datastream
  - OptionMetrics
  - Moody’s Default and Recovery Database

Plagiarism and Referencing

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Library search tools: Library website

Library Search
  - Find books & more
  - Find articles & more

Mathematics subject web page
  - Databases: MathSciNet, Scopus, Web of Science
  - Financial data: WRDS (Wharton Research Data Service)

Business subject web page
  - Company and financial information

Library Search…Books & more

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**Library Search...Articles & more**

**Accessing e-resources**

Access usually based on IP address

**Off campus**
- Virtual Private Network (VPN)
  - Automatically signed up; set up VPN connection on your machine
  - College username and password
  - Shibboleth, UK Federation

**Linking to full text**
- SFX

**Financial data databases – restricted access**
- Datastream and Moody’s Default and Recovery Database can only be accessed from within the Central Library

**Document Delivery**

If we don’t have access to a research paper you need, it is possible to request this via our Document Delivery service

**Steps involved**
- Register (and wait for acknowledgement of registration)
- Request paper via Library Search

**Secure Electronic Delivery (SED)**
- Emailed direct to your desktop

[http://www3.imperial.ac.uk/library/documentdelivery](http://www3.imperial.ac.uk/library/documentdelivery)

**Databases of scholarly research literature**

Index specific content and identify exactly what they do index
- ‘added value’ such as abstracts, reviews, citation searching
- Focus on specific or multidisciplinary subject coverage
MathSciNet: Mathematical reviews on the web

“database of reviews, abstracts and bibliographic information for much of the mathematical sciences literature”

2.8 million items
Published by the American Mathematical Society
Bibliographic data back to the 1800s
Types of research material covered
Journals, conference proceedings, books, US/ European PhD theses (from ProQuest Dissertations & Theses)
Coverage: Approximately 500 journals

MathSciNet (2)

Mathematical Reviews database
Signed reviews of the current literature written by mathematicians around the world
Authors uniquely identified by their MR Author ID
Mathematics Subject Classification
Developed by the Mathematical Reviews (MR) and Zentralblatt MATH (Zbl)
Controlled vocabulary
When a researcher writes a paper – they allocate MSC numbers to make it easier for people to find
A paper may fall into one or more subject areas

Cited reference searching

Enables you to track related research literature forward in time as well as back in time based on key references
Start with a key paper and identify not only previous papers cited by the paper, but identify future papers that have cited it
Scopus and Web of Science both offer this feature

Scopus

Life Sciences, Health Sciences, Physical Sciences, Social Sciences, Arts and Humanities
50 million records
29 million going back to 1996
21 million going back to 1823
Published by Elsevier
Coverage includes over 19,500 journal titles and 5.3 million conference proceedings - journals, conference proceedings, books, trade publications, scientific web pages and patent records
**Web of Science Core Collection**

*Sciences, social sciences, arts and humanities (256 individual disciplines)*

**46 million records** dating back to 1900

**Published by Thomson Reuters**

Coverage: over 12,000 journal titles and 150,000 conference proceedings

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**Google**

Images, tables, reports, websites, some scholarly literature

What is being searched?
How are results ranked?
How up to date are results?

**Search tips**

- ext: Filetype e.g. "carbon emissions" ext:pdf
- site: Site search e.g. methane site:.gov.uk
- intitle: Searches only title e.g. intitle:"greenhouse gases"

See [http://www.rba.co.uk/search/SelectedGoogleCommands.shtml](http://www.rba.co.uk/search/SelectedGoogleCommands.shtml)

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**Financial data**

Access to a number of databases containing financial data

List of company and financial information found via the Business subject page

Three key resources

- **DataStream**
  Available in the Business Zone – Central Library (Level 2)
- **Moody’s Default & Recovery**
- **OptionMetrics**
  Available via Wharton Research Data Service (WRDS)
DataStream
Thomson Reuters database containing global and historical financial information

"Worldwide equity coverage direct from the stock markets, comprehensive market indices, economics data direct from national government sources as well as the OECD and IMF, fixed income securities and associated indices, commodities and derivatives data. Forecast earnings data from IBES, fundamental data from Worldscope and added value data sets from respected sources such as MSCI, DJ Stoxx and FTSE All World"¹

¹ http://www.eui.eu/Documents/Research/.../DataStream50/GettingStarted.pdf

DataStream access
Can only access within the Central Library
DataStream is available on 3 PCs on level 2 of the Central Library
Book via the Library website
Login to the PCs using your college username and password.

DataStream interface & Excel AFO
Once logged onto a DataStream PC there are two ways of accessing data:

Via the DataStream interface (Advance), which provides pre-formatted charts and tabular reports

Via the Advance for office (AFO) add-in which enables you to import data straight into Excel and build models and reports without using the Advance interface.

DataStream help
A telephone next to the DataStream PCs allows you to call the Thomson Help Desk while using the database
There is also a DataStream manual and user guide available by the PCs.
DataStream Extranet

Provides factsheets, guides and codes.


Username and password details can be found here:
http://www3.imperial.ac.uk/library/find/howto - you will need to log in using your College username and password

Use of password is restricted to staff and students of Imperial College London and they should not be disclosed to anyone else.

Thomson Reuters Student training resources

Question & Answer Sessions

Online Q&A sessions especially for students using Adobe chat interactive messaging:

http://training.thomsonreuters.com/students/

OptionMetrics

Contains historical price and implied volatility data from equity and index option markets in the USA

OptionMetrics access

Access via Wharton Research Data Services (WRDS)

IP address access

Available from PC clusters in Central Library

Enter email address to get a day pass

Username and password access

Access for other South Kensington locations and off-campus access

Register to receive a username and password
Moody’s Default & Recovery Database (DRD)

Provides comprehensive data on defaults, recovery from default, and rating changes (at both the security and issuer level) for all corporate issuers of long-term bonds that have carried a Moody’s rating since 1970.

Access includes the Credit Risk Calculator, Monthly Default Reports and Announcements and Rating Actions. Select Default and Recovery Database to see corresponding files when logged in for the full database.

Moody’s Default & Recovery Database access

Users must be logged in to the database by a member of library staff and must be current students or staff of Imperial College London. Please ask at the Central Library Information Hub for assistance.

Access is restricted to two simultaneous users at the Central Library only and the username and passwords cannot be disclosed due to licence restrictions.

Located in the Business Zone on Level 2
Plagiarism: a definition

Plagiarism is: when you copy or use someone else’s work or ideas in your essay, coursework, thesis, etc and then do not acknowledge that you have done this.

How do you avoid plagiarism?

1. Plan the time you need to research, write and review your work
2. Take good notes, including details of sources and page numbers (when appropriate)
3. Cite and reference the sources you use in your work

Further information on avoiding plagiarism

Project thesis information from your course handbook
http://www3.imperial.ac.uk/mathfin/pgprogrammes/msc/projectthesis

Guidance from the Library
http://www3.imperial.ac.uk/library/subjectsandsupport/plagiarism/pgtaught

Imperial Study Guide for Master’s Students
http://www3.imperial.ac.uk/students/studyguide

College Plagiarism and Examination Offences Policy and Procedures

Referencing is...

Not just including a reference list at the end of your project but about acknowledging within the text of the project if you have taken an idea OR exact wording from a source

This acknowledgement within the text of your project is known as a citation

You need to cite the use of someone else’s ideas or exact words (known as a quotation)

Choose one style and use it consistently

Harvard and Vancouver guides both available on the Library website
http://www3.imperial.ac.uk/library/subjectsandsupport/referencemanagement
What is RefWorks?
Reference management software package
Enables you to save and organise your references
Web based – available wherever you are
Export in BibTeX format

http://www3.imperial.ac.uk/library/subjectsandsupport/referencemanagement/refworks

JabRef is a free alternative that works with LaTeX
http://jabref.sourceforge.net/

Questions?
Mathematics Learning Centre
- Tuesdays 11.00 - 13.00
- Thursdays 13.00 - 15.00

Ask for me at the Central Library information hub
- Based on Level 1 - Room 110

Email, phone
- j.evans@imperial.ac.uk
- phone ext 45736 or 0207 594 5736
MATHSCI-NET TIP SHEET

1. Start at Maths Subject page: http://www3.imperial.ac.uk/library/subjectsandsupport/maths
2. Click on MathSciNet.

PUBLICATIONS SEARCH TAB
Default search option and searches the entire Mathematical Reviews database.

AUTHORS SEARCH TAB
This option searches the associated author database created by Mathematical Reviews (MR) staff.
- Search should be entered in the form last name, first name, middle name(s) / initial(s). Commas need to be used to separate first and last names
- Wildcard (*) can be used.

JOURNALS SEARCH TAB
This option searches the MR journal database.
- Can search by keywords or journal abbreviation.

CITATIONS SEARCH TAB
Search for citations for an author, a journal, a subject or a year.

PRINT AND EMAIL YOUR RESULTS (VIA THE CLIPBOARD)
1. From your results list add relevant citations to the Clipboard by checking the box next to the reference and selecting Clipboard.
2. Go to the Clipboard by selecting the Clipboard option that has appeared on the menu at the top of the screen.
3. To email results, go to your web browser’s file menu and select Email Link.
4. To save results, select Save Clip (making sure the appropriate format is selected – ASCII, BibTeX, AMSRefs or EndNote) then go to the File menu in your browser and select Save As. To export in BibTeX or EndNote formats save as a text file.

MATHSCI-NET TUTORIALS can be found at: http://www.ams.org/mathscinet-info/
1. Start at Maths subject page:  
   http://www3.imperial.ac.uk/library/subjectsandsupport/maths
2. Click on Scopus.
3. Make sure the Document Search tab is selected.

**SCOPUS TIP SHEET**

**SEARCH TIPS**

To search for a phrase, enclose terms in “double quotation marks” or for an exact phrase search use `{ }`

* wildcard can be used for any group of characters

? wildcard can be used for any single character

Scopus automatically searches for variant spellings

**FIND THE FULL TEXT** by clicking on SFX and following the link. If we do not have online access try Library Search…books and more to find print holdings.

**PRINT AND EMAIL YOUR RESULTS** by ticking the boxes on the left of each relevant article. Then select format and output before choosing email, print or download.

**SEARCH TIPS**

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Scopus automatically searches for variant spellings

**ACCESS**

**On campus**  
IP address controlled

**Off campus**  
College username & password

**CITED REFERENCE SEARCHING**

Cited reference searching enables you to search for journal papers (or other published works) that have cited a previously published paper that are included in the Scopus database. This means you can follow an idea back in time to previous research (via Cited References), and you can follow it forward in time (via Cited by) to find subsequent relevant research.

1. Search the Scopus database for papers
2. Identify the paper you wish to check references for e.g. Conditional and marginal models: Another view by Lee, Y. & Nelder, J.A.
3. Click Cited by in Scopus
4. You will then have a list of papers in the Scopus database that have cited your original reference since 1996.

**TUTORIALS** can be found at: http://help.scopus.com/Content/tutorials/sc_menu.html

**Cited by 45 documents since 1996**

- Impact of enterococcal colonization and infection in solid organ transplantation recipients from the Swiss Transplant Cohort Study  
  Buchel, E., Kräldus, G., Boggian, K.  
  (2014) Transplant Infectious Disease

- Dependence in binary outcomes: A quadratic exponential model approach  
  Srdani, M.Z., Islam, M.A., Awang, N.  
  (2014) Bulletin of the Malaysian Mathematical Sciences Society

- Identification of confounding versus dispersing covariates by confounding influence  
  Wang, X., Yin, L.  

**View all 45 citing documents**

Inform me when this document is cited in Scopus:

- Set citation alert
- Set citation feed
WEB OF SCIENCE TIP SHEET

1. Start at Mathematics subject page: http://www3.imperial.ac.uk/library/subjectsandsupport/maths
2. Click on Web of Science (including Web of Science Core Collection)
3. Click on arrow next to All Databases and select Web of Science Core Collection.

FIND THE FULL TEXT by clicking on Full Text, selecting SFX and following the link. If we do not have online access try Library Search...books and more to find print holdings.

PRINT AND EMAIL YOUR RESULTS by ticking the boxes on the left of each relevant article. Then select format and output before choosing email, print or download.


Cited Reference searching
Citation searching enables you to search for journal papers (or other published works) that have cited a previously published paper. This means you can follow an idea back in time to previous research (via Cited References), and you can follow it forward in time (via Times Cited) to find subsequent relevant research.

1. Cited Reference Search Step 1: Click on the Cited Reference Search option, enter original reference details and click on Search.
2. Cited Reference Step 2: Select appropriate reference by ticking the box to the left. If you wish to view the index record for this paper click on View Record. Then Click on Finish Search.
3. You will then have a list of papers that have cited your original reference.