Tasmanian School of Business & Economics (TSBE)
College of Business and Economics

BEA472
ECONOMETRICS

12.50 Credit points

Semester 1, 2019

Unit Outline

Jing Tian
## Contact Details

### Unit Coordinator

<table>
<thead>
<tr>
<th>Unit coordinator:</th>
<th>Jing Tian</th>
</tr>
</thead>
<tbody>
<tr>
<td>Campus:</td>
<td>Hobart</td>
</tr>
<tr>
<td>Email:</td>
<td><a href="mailto:jing.tian@utas.edu.au">jing.tian@utas.edu.au</a></td>
</tr>
<tr>
<td>Phone:</td>
<td>03 62262323</td>
</tr>
<tr>
<td>Room location and number:</td>
<td>Centenary Building</td>
</tr>
<tr>
<td>Consultation hours:</td>
<td>Tuesday 11:00-11:50</td>
</tr>
</tbody>
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WHAT IS THE UNIT ABOUT?

Unit description

This unit provides a comprehensive introduction to the modern econometric theory used in the applied research on macroeconomics and finance. The field of econometrics is broad, and this unit represents an integration of theory, methods and examples. The objectives of this unit are to provide students with a background to enable them to understand applied econometric literature, and to provide students with experience of working with real data.

Intended Learning Outcomes

On completion of this unit, you will be able to:

1. identify the theory behind applied econometrics

2. apply modern econometric theory to conduct research or study in the area of applied econometrics

3. critically read and analyse academic papers in applied econometrics
Graduate Quality Statement

Successful completion of this unit supports your development of course learning outcomes, which describe what a graduate of a course knows, understands and is able to do. Course learning outcomes are available from the Course Coordinator. Course learning outcomes are developed with reference to national discipline standards, Australian Qualifications Framework (AQF), any professional accreditation requirements and the University of Tasmania’s Graduate Statement.

The University of Tasmania experience unlocks the potential of individuals. Our graduates are equipped and inspired to shape and respond to the opportunities and challenges of the future as accomplished communicators, highly regarded professionals and culturally competent citizens in local, national, and global society. University of Tasmania graduates acquire subject and multidisciplinary knowledge and skills, and develop critical and creative literacies and numeracies and skills of inquiry. They demonstrate the ability to apply this knowledge in changing circumstances. Our graduates recognise and critically evaluate issues of social responsibility, ethical conduct and sustainability, are entrepreneurial and creative, and are mindful of their own wellbeing and that of the community. Through respect for diversity and by working in collaborative ways, our graduates reflect the values of the University of Tasmania.

Alterations to the unit as a result of student feedback

Nil.

Prior knowledge &/or skills

Students are expected to complete BEA242 and BEA342, and to be familiar with Eviews.
HOW WILL I BE ASSESSED?

Assessment schedule

<table>
<thead>
<tr>
<th>Assessment task</th>
<th>Date due</th>
<th>Percent weighting</th>
<th>Links to Intended Learning Outcomes</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Assessment Task 1</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Assignment</td>
<td>Friday 5th April</td>
<td>20%</td>
<td>LO1, LO3</td>
</tr>
<tr>
<td><strong>Assessment Task 2</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Assignment</td>
<td>Friday 24th May</td>
<td>20%</td>
<td>LO1, LO2, LO3</td>
</tr>
<tr>
<td><strong>Assessment Task 3</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Final Exam</td>
<td>Exam Period</td>
<td>60%</td>
<td>LO1, LO2</td>
</tr>
</tbody>
</table>

Assessment details

**Assessment Task 1: Assignment**

<table>
<thead>
<tr>
<th>Task Description</th>
<th>Assignment 1 - The assignment is designed to test your understanding of what you have learned in the lectures and workshops. The assignment requires your skills of retrieving data, using Eviews and solving problems.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Criterion 1</td>
<td>Understand the advantages and disadvantages of methodologies used in applied econometrics.</td>
</tr>
<tr>
<td>Criterion 2</td>
<td>Summarize the objectives, methods and conclusions of assigned papers.</td>
</tr>
<tr>
<td>Criterion 3</td>
<td>Understand the methods adopted in the assigned papers.</td>
</tr>
<tr>
<td>Criterion 4</td>
<td>Criticize the methods adopted in the assigned papers.</td>
</tr>
<tr>
<td>Task Length</td>
<td>TBA</td>
</tr>
<tr>
<td>Due by date</td>
<td>Friday 5th April</td>
</tr>
</tbody>
</table>
### Assessment Task 2: Assignment

**Task Description**
Assignment 2 - The assignment is designed to test your understanding of what you have learned in the lectures and workshops. The assignment requires your skills of retrieving data, using Eviews and solving problems.

<table>
<thead>
<tr>
<th>Criterion</th>
<th>Description</th>
<th>Measures ILO:</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Identify the econometric issues from empirical results</td>
<td>LO1</td>
</tr>
<tr>
<td>2</td>
<td>Identify appropriate econometric methods to empirically test on economic theories.</td>
<td>LO2</td>
</tr>
<tr>
<td>3</td>
<td>Use econometric software to analyse real data and conduct empirical test for economic theories.</td>
<td>LO2</td>
</tr>
<tr>
<td>4</td>
<td>Understand the methods adopted in the assigned papers.</td>
<td>LO3</td>
</tr>
<tr>
<td>5</td>
<td>Criticize the methods adopted in the assigned papers.</td>
<td>LO3</td>
</tr>
</tbody>
</table>

**Task Length**
TBA

**Due by date**
Friday 24th May

### Assessment Task 4: Final Exam

**Task Description**
Final exam - This will be a close book examination and is designed to test your understanding of what you have learned throughout the Semester.

<table>
<thead>
<tr>
<th>Criterion</th>
<th>Description</th>
<th>Measures ILO:</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Identify the econometric issues from empirical results</td>
<td>LO1</td>
</tr>
<tr>
<td>2</td>
<td>Understand the advantages and disadvantages of methodologies used in applied econometrics.</td>
<td>LO1</td>
</tr>
<tr>
<td>3</td>
<td>Identify appropriate econometric methods to empirically test on economic theories.</td>
<td>LO2</td>
</tr>
<tr>
<td>4</td>
<td>Use econometric software to analyse real data and conduct empirical test for economic theories.</td>
<td>LO2</td>
</tr>
</tbody>
</table>

**Task Length**
3 hours

**Due by date**
Exam Period
How your final result is determined

To pass this unit, you need to demonstrate your attainment of each of the Intended Learning Outcomes.

Your grade will be determined in the following way:

Your overall mark in this unit will be determined by combining your results from each assessment task. These marks are combined to reflect the percentage weighting of each task. You need to achieve an overall score of at least 50% to successfully complete this unit. It is expected that you will seek help (from the unit coordinator in the first instance), well before the due date, if you are unclear about the requirements for an assessment task.

- PP (pass) at least 50% of the overall mark but less than 60%
- CR (credit) at least 60% of the overall mark but less than 70%
- DN (distinction) at least 70% of the overall mark but less than 80%
- HD (high distinction) at least 80% of the overall mark

All grades are provisional, until confirmation by the Assessment Board at the end of semester.

Submission of assignments

The act of submitting your assignment will be taken as certification that it is your own work.

Assignments must be submitted electronically through the relevant assignment tab in MyLO. You must ensure that your name, student ID, unit code, tutorial time and tutor’s name (if applicable) are clearly marked on the first page. If this information is missing, the assignment will not be accepted and, therefore, will not be marked.

Where relevant, Unit Coordinators may also request you to submit a paper version of your assignment. You will be advised by the Unit Coordinator of the appropriate process relevant to your campus.

Please remember that you are responsible for lodging your assessment items on or before the due date and time. We suggest you keep a copy. Even in a perfect system, items sometimes go astray.

Requests for extensions

In this Policy:

1. (a) ‘day’ or ‘days’ includes all calendar days, including weekends and public holidays;

(b) ‘late’ means after the due date and time; and
(c) ‘assessment items’ includes all internal non-examination based forms of assessment

2. This Policy applies to all students enrolled in TSBE Units at whatever Campus or geographical location.

3. Students are expected to submit assessment items on or before the due date and time specified in the relevant Unit Outline. The onus is on the student to prove the date and time of submission.

4. Students who have a medical condition or special circumstances may apply for an extension. Requests for extensions should, where possible, be made in writing to the Unit Coordinator on or before the due date. Students will need to provide independent supporting documentation to substantiate their claims.

Penalties

Late submission of assessment items will incur a penalty of 10% of the total marks possible for that piece of assessment for each day the assessment item is late unless an extension had been granted on or before the relevant due date.

Assessment items submitted more than five (5) days late will not be accepted.

Academic staff do NOT have the discretion to waive a late penalty, subject to clause 4 above.

Review of results and appeals

Review of Assessment is available to all students once the University has released the final result for a unit. If you are dissatisfied with your final result, you may apply to have it reviewed. Applications for a review of assessment are due within 10 working days of the release of the final result in the unit. When applying for a review, you must pay a $50 fee.

If you wish to have a piece of internal assessment reviewed as part of the review process, please state this clearly on the application form referred to above and include that assessment item with your application.

Please read and follow the directions provided by the University at:


Academic referencing

Before starting your assignments, you are advised to familiarise yourself with the following electronic resources.

The first is the Harvard Referencing System Style Guide, which can be accessed from the UTAS library: http://utas.libguides.com/content.php?pid=27520&sid=199808. The Harvard style is the appropriate referencing style for this unit and the guide provides
information on presentation of assignments, including referencing styles. In your written work you will need to support your ideas by referring to scholarly literature, works of art and/or inventions. It is important that you understand how to correctly refer to the work of others and maintain academic integrity.

Failure to appropriately acknowledge the ideas of others constitutes academic dishonesty (plagiarism), a matter considered by the University of Tasmania as a serious offence.

The second is the Tasmanian School of Business and Economics’ Writing Assignments: A Guide, which can be accessed at: http://www.utas.edu.au/business-and-economics/student-resources. This guide provides you with useful information about the structure and style of assignments in the TSBE.

In your written work you will need to support your ideas by referring to scholarly literature, works of art and/or inventions. It is important that you understand how to correctly refer to the work of others, and how to maintain academic integrity.

The University library provides information on presentation of assignments, including referencing styles and should be referred to when completing tasks in this unit.

Please read the following statement on plagiarism. Should you require clarification please see your unit coordinator or lecturer.

### Plagiarism

Plagiarism is a form of cheating. It is taking and using someone else’s thoughts, writings or inventions and representing them as your own; for example, using an author’s words without putting them in quotation marks and citing the source, using an author's ideas without proper acknowledgment and citation, copying another student’s work.

If you have any doubts about how to refer to the work of others in your assignments, please consult your lecturer or tutor for relevant referencing guidelines. You may also find the Academic Honesty site on MyLO of assistance.

The intentional copying of someone else’s work as one’s own is a serious offence punishable by penalties that may range from a fine or deduction/cancellation of marks and, in the most serious of cases, to exclusion from a unit, a course or the University.

The University and any persons authorised by the University may submit your assessable works to a plagiarism checking service, to obtain a report on possible instances of plagiarism. Assessable works may also be included in a reference database. It is a condition of this arrangement that the original author’s permission is required before a work within the database can be viewed.
For further information on this statement and general referencing guidelines, see the Plagiarism and Academic Integrity page on the University web site or the Academic Honesty site on MyLO.

**Academic misconduct**

Academic misconduct includes cheating, plagiarism, allowing another student to copy work for an assignment or an examination, and any other conduct by which a student:

a. seeks to gain, for themselves or for any other person, any academic advantage or advancement to which they or that other person are not entitled; or

b. improperly disadvantages any other student.

Students engaging in any form of academic misconduct may be dealt with under the Ordinance of Student Discipline, and this can include imposition of penalties that range from a deduction/cancellation of marks to exclusion from a unit or the University. Details of penalties that can be imposed are available in Ordinance 9: Student Discipline – Part 3 Academic Misconduct.
WHAT LEARNING OPPORTUNITIES ARE THERE?

**MyLO**

MyLO is the online learning environment at the University of Tasmania. This is the system that will host the online learning materials and activities for this unit.

**Getting help with MyLO**

It is important that you are able to access and use MyLO as part of your study in this unit. To find out more about the features and functions of MyLO, and to practice using them, visit the [Getting Started in MyLO unit](#). For access to information about MyLO and a range of step-by-step guides in pdf, word and video format, visit the [MyLO Student Support page](#) on the University website. If something is not working as it should, [contact the Service Desk](#) (Service.Desk@utas.edu.au, phone 6226 1818), or [Request IT Help Online](#).

**Resources**

**Required readings**

There is no prescribed text for this unit. Lecture notes and tutorial questions will be available before class. We use Matlab for this unit.

**Recommended readings**

Whilst there in no prescribed text for this unit, the following books will be useful for understanding the concepts covered:


**Reading Lists**

Reading Lists provide direct access to all material on unit reading lists in one place. This includes eReadings and items in Reserve. You can access the Reading List for this unit from the link in MyLO, or by going to [the Reading Lists page](#) on the University Library website.

**Other Required Resources**

N/A
Activities

Learning expectations

The University is committed to high standards of professional conduct in all activities, and holds its commitment and responsibilities to its students as being of paramount importance. Likewise, it holds expectations about the responsibilities students have as they pursue their studies within the special environment the University offers.

**Students are expected to participate actively and positively in the teaching/learning environment. They must attend classes when and as required, strive to maintain steady progress within the subject or unit framework, comply with workload expectations, and submit required work on time.**

Details of teaching arrangements

There will be one two-hour lecture on Tuesdays 1:00 - 2:55 pm, commencing on Tuesday 26 February, in Social Sciences Building, Room 379.

The tutorials will begin in Week 2 on Tuesdays from 3:00pm to 4:00pm. Tutorial questions will be available for students to get well prepared before class. Some tutorial questions require the use of Eviews.

The new Bloomberg Computer Lab will be our teaching space when it is ready for use. The lecture and workshop in the first a few weeks will be held in other locations which are to be announced. Please follow the announcement on Mylo for the update.

Specific attendance/performance requirements

In this unit, your active engagement will be monitored in the following way:

1. Completion of tutorial assignments
2. Active participation in the tutorial discussions

If you do not demonstrate evidence of having engaged actively with this unit by completing these two activities by Week 4 of semester, your enrolment may be cancelled or you may be withdrawn from the unit.

Teaching and learning strategies

The University is committed to a high standard of professional conduct in all activities, and holds its commitment and responsibilities to its students as being of paramount importance. Likewise, it holds expectations about the responsibilities students have as they pursue their studies within the special environment the University offers. The University’s Code of Conduct for Teaching and Learning states:

Students are expected to participate actively and positively in the teaching/learning environment. They must attend classes when and as required, strive to maintain
steady progress within the subject or unit framework, comply with workload expectations, and submit required work on time.

During the first four weeks of this semester, your participation and engagement in this unit will be monitored. If you do not demonstrate evidence of having engaged actively with this unit by Week 4 of semester, your enrolment may be cancelled or you may be withdrawn from the unit.

**Work Health and Safety (WHS)**

The University is committed to providing a safe and secure teaching and learning environment. In addition to specific requirements of this unit you should refer to the University’s [Work Health and Safety website](#) and policy.

**Communication**

**TO KEEP UP WITH ANNOUNCEMENTS REGARDING THIS UNIT**

Check the MyLO Announcement tool at least once every two days. The unit Announcement will appear when you first enter our unit’s MyLO site. Alternatively, click on the Announcement button (towards the top of the MyLO screen) at any time.

**WHEN YOU HAVE A QUESTION**

Other students may have the same question that you have. Please go to the Ask the Class Discussion forum on the unit’s MyLO site. Check the posts that are already there – someone may have answered your question already. Otherwise, add your question as a new topic. Students are encouraged to support each other using this forum – if you can answer someone’s question, please do. We will attempt to respond to questions within 48 business hours. If your question is related to a personal issue or your performance in the unit, please contact the appropriate teaching staff member by email instead.

**WHEN YOU HAVE AN ISSUE THAT WILL IMPACT ON YOUR STUDIES OR THE SUBMISSION OF AN ASSESSMENT TASK**

If you have a personal question related to your studies or your grades, please contact teaching staff by email.

For general questions about the unit, please add them to the Ask the Class Discussion forum on the unit’s MyLO site. This way, other students can also benefit from the answers.
Concerns and complaints

The University is committed to providing an environment in which any concerns and complaints will be treated seriously, impartially and resolved as quickly as possible. We are also committed to ensuring that a student may lodge a complaint without fear of disadvantage. If you have a concern, information about who to contact for assistance is available on the ‘How to resolve a student complaint’ page.

Further information and assistance

If you are experiencing difficulties with your studies or assignments, have personal or life-planning issues, disability or illness which may affect your course of study, you are advised to raise these with the unit coordinator in the first instance.

There is a range of University-wide support services available to you including Student Learning Support, Student Advisers, Disability Services, and more which can be found on the Student Support and Development page of the University website.

Should you require assistance in accessing the Library, visit their website for more information.
<table>
<thead>
<tr>
<th>Week</th>
<th>Date</th>
<th>Topic/Module/Focus Area</th>
<th>Activities</th>
<th>Due Date</th>
</tr>
</thead>
</table>
| 1    | 25 February| Module 1: General Econometrics  
• Review of Gauss-Markov Theorem  
• Inferential Analysis              | lecture                      |                               |
| 2    | 4 March    | Module 1: General Econometrics  
• Review of ordinary least square (OLS) estimator  
• Maximum likelihood estimator (MLE)  | Lecture; Workshop            |                               |
| 3    | 11 March   | Module 3: Macroeconometrics  
Distributed lag models               | Lecture; Workshop            |                               |
| 4    | 18 March   | Module 3: Macroeconometrics  
Structural models and reduced form models | Lecture; Workshop            |                               |
| 5    | 25 March   | Module 3: Macroeconometrics  
VAR: Granger causality               | Lecture; Workshop            |                               |
| 6    | 1 April    | Module 3: Macroeconometrics  
VAR: impulse responses               | Lecture; Workshop            | Assignment 1 Due on Friday 5th April |
| 7    | 8 April    | Model 3: Macroeconometrics  
Multivariate models for nonstationary variables | Lecture; Workshop            |                               |
| 8a   | 15 April   | Mid-semester Review:  
Assignment and recap                  | Lecture; Workshop            |                               |
| 8b   | 25 April   |                                                                                       |                              |                               |
| 9    | 29 April   | Module 4: Financial Econometrics  
Time-varying volatility and ARCH models | Lecture; Workshop            |                               |
| 10   | 6 May      | Module 4: Financial Econometrics  
GARCH models                          | Lecture; Workshop            |                               |
| 11   | 13 May     | Module 2: Microeconometrics/Panel Data  
• Introduction                      | Lecture; Workshop            |                               |
<p>| | | |</p>
<table>
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<tr>
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<th></th>
<th></th>
</tr>
</thead>
</table>
| 12 | 20 May | Module 2: Microeconometrics/Panel Data  
  - Fixed effects estimation and random effect estimations  
  - Policy analysis |
|   |   | Lecture; Workshop  
  Assignment 2 due on 25th May |
| 13 | 27 May | Review |

**Exam Period 8 – 25 June (inclusive)**
ACCREDITATION

AACSB Accreditation

The Tasmanian School of Business and Economics (TSBE) is currently in the process of applying for business accreditation with the Association to Advance Collegiate Schools of Business (AACSB) – the lead program for accrediting business schools globally. AACSB seeks to connect educators, students, and business to achieve a common goal – to create the next generation of business leaders.

By joining AACSB and going through the accreditation process, TSBE is joining a global alliance committed to improving the quality of business education around the world, and to share the latest innovations in business education. Gaining Business Accreditation with AACSB is a multi-year process involving TSBE demonstrating our performance against the 15 accreditation standards.

Once complete, TSBE will join a select community of accredited business schools, with only 7% of all business schools globally having completed the AACSB process. This will further enhance the reputation of TSBE, and further enhance the global recognition of your qualifications. To find out more about AACSB click [here](#).