

INFORMATION ABOUT THE ECON 121 FINAL EXAM - FALL 2025

The final exam will be on Saturday, December 6, from 3:00 PM to 6:00 PM PST in PETER 102 and SSB 107. You may take it remotely with self-proctoring on Zoom, but you must notify Prof. Vogl of your plans by email (tvogl@ucsd.edu) by Wednesday, December 4. If you do not, you will be assigned to one of the in-person exam rooms. We will announce exam room assignments on Thursday, December 5.

The exam will mimic a problem set, providing a dataset and asking questions about it. It will be open book, but you may not communicate with anyone except Prof. Vogl or Regina while taking it. Regina will grade the exam. If you think you lost points in error, discuss the issue with Regina for clarification. If you are not satisfied, you may challenge the grade, but Prof. Vogl will regrade the whole test, including questions you did not challenge. You may lose points.

The exam will ask you to analyze data from a Chinese bank that developed a new type of business loan that did not require firms to have collateral. The bank made the new loan product available to firms in 78 towns. Firms in the same town were typically close to each other and competing in the same industry. Firms in different towns were typically far from each other and operating in different industries. All firms could apply for the new loan product, but the bank randomly chose a subset of firms to be visited by a loan officer, who promoted the new loan product and helped interested firms apply. Firms in the same town faced the same probability of being visited by a loan officer, but firms in different towns faced different probabilities. In the exam, we will refer to the visit by a loan officer as “loan outreach,” and we will refer the taking out a loan as “loan takeover.”

The dataset <https://github.com/tomvogl/econ121/raw/main/data/finance.rds> contains survey data on the firms that were part of this experiment, with two observations per firm. Round 1 of the survey took place just before the loan outreach intervention, and round 2 took place two years after the intervention. The dataset includes firm and town identifiers (`firmid` and `townid`), the survey round (`round`), characteristics of the owner (`owner_male-owner_college`), variables related to firm inputs and finances (`labor-assets`), and variables related to loan outreach and loan takeover (`officer-loan_amount`).¹

You may refer to books, internet resources (including AI), notes, and code from problem sets, solutions, and classroom examples. You may **not** communicate with any person but Prof. Vogl or Regina during the exam; evidence of such communication will result in failure. If you are taking the exam remotely, record yourself with Zoom and submit the recording by email; if you have questions during the exam, you may e-mail your question to Prof. Vogl. Write code and answers in the R Markdown template. When you finish, knit to PDF (or knit to HTML and then print to PDF in a web browser), and submit the PDF on Gradescope.

¹Monetary amounts are denominated in units of 10,000 Yuan, or approximately 1600 USD. On the exam, you may refer to 10,000 Yuan as a “unit” or a “wan” (which is the Mandarin word for 10,000).

Zoom Recording If you choose to take the exam remotely, you must create a Zoom recording that shows you and all windows on your screen. Zoom will email you a link to the cloud recording, which you should forward to us. **Make sure you practice before the start of the exam.** You have 24 hours to submit the link (until Sunday, December 7, at 6:00 PM San Diego time).

1. Open Zoom
2. Start a new meeting
3. Select Share → Entire screen → Share
4. Select More → Record → Record to cloud
5. Make sure (a) video is on, (b) sound is on, (c) you and all the windows on your screen are visible
6. Begin the exam (3:00 PM)
7. Finish the exam (6:00 PM)
8. End the Zoom meeting
9. When you receive an email from Zoom containing a link to the cloud recording, forward the email to Prof. Vogl (tvogl@ucsd.edu) with the subject “ECON 121 exam - Firstname Lastname”

PDF The R Markdown template will produce a PDF containing the output alongside your code and comments. **Make sure you practice before the start of the exam.** Only the PDF needs to be submitted. When the exam is over, you have 5 minutes to upload to Gradescope.

1. Begin the exam (3:00 PM)
2. Answer exam questions by either:
 - (a) writing code and comments
 - (b) writing prose
3. Finish the exam (before 6:00 PM)
4. Click “knit” in RStudio
5. Upload the PDF to Gradescope (before 6:05 PM)