

ECON 683-PCE1
International Macroeconomics and Finance
MASTER OF SCIENCE IN APPLIED ECONOMICS PROGRAM
UNIVERSITY OF MARYLAND, FALL 2023

Instructor: Pablo Cuba Borda

Class hours & location: Tuesdays 6:30 – 9:15pm, with a 15-minute break at 7:45pm. Room: TYD 2109.

Office Hours: Wednesdays 6:00 - 7:00pm via Zoom. *No office hours on: 11/22.*

Contact: pcubabor@umd.edu

Teaching Assistant: Chenyu Mao

Office Hours: Mondays 4:30 - 5:30pm via Zoom. *No office hours on: 09/04.*

Contact: maocy@umd.edu

Zoom links for particular lectures and for office hours are available on the course calendar on ELMS-Canvas

Course Overview

This course focuses on economic analysis of international macroeconomic issues and policy. Topics can include the study of exchange rates, balance of payments, international financial markets, international business cycles, contagion, and the roles played by international economic institutions.

Prerequisites: ECON 641, 642, and 644

Required Textbooks:

1. *International Macroeconomics: A Modern Approach* (2022), by Schmitt-Grohé, Uribe and Woodford, Princeton University Press. **(SUW)**

Other useful textbooks: (not required)

1. *Foundations of International Macroeconomics* (1995), Obstfeld & Rogoff, MIT Press. **(OR)**
2. *Open Economy Macroeconomics* (2017), Uribe and Schmitt-Grohé, Princeton University Press. **(USG)**

Additional Readings: Supplementary readings from academic journals, books, working papers and non-technical articles will be posted in ELMS.

COVID Information

Up-to date information about UMD Covid-19 policies and guidance are posted at <https://umd.edu/4Maryland>. Given the evolving nature of the pandemic, the guidance and policies are subject to change. The plans are always coordinated with state and county health officials, with additional guidance provided by the University System of Maryland. The focus will always be on the health and well-being of our entire campus community. We strongly urge all students, staff and faculty to read announcements they receive about Covid-related guidance and policy, and to stay familiar with the current guidance. We thank you all for your individual efforts to help protect the collective health of our entire community.

Objectives

The Master's of Science in Applied Economics at the University of Maryland lists the following general objectives for the program:

1. **Ability to understand, evaluate, and analyze economic data**
2. **Ability to understand and interpret statistical evidence from economic data**
3. **Ability to apply empirical evidence to assessing economic arguments**
4. **Ability to apply macroeconomic theories to policy discussions**
5. Ability to apply microeconomic theories to policy discussions
6. **Ability to communicate economic ideas to a broader audience**
7. Ability to evaluate the effectiveness of policy programs using sound economic techniques

This course focuses developing skills related to objectives **1, 2, 3, 4, and 6**.

Course Requirements

Evaluation for the course will be based on numerical points on a scale from 0-100 with the following distribution of points for each graded activity

- Midterm exam: **25 points**
- Final exam: **25 points**
- Problem sets (x2): **20 points, 10 points each**
- Group presentation: **10 points**
- Policy brief: **20 points**

Numerical grades

Each activity will receive a numerical grade corresponding to the number of points described above. There will be a total of 3 problem sets, each with an equal value of 10 points. The final numerical grade for the course will be the cumulative sum of all the grades you received on each activity. For example, imagine you score 20 points on the midterm exam and 25 points on the final, 10 points in the group presentation and obtained 10 points in class participation and 15 points in the problem sets. Then your numerical grade will be equal to $20 + 25 + 10 + 10 + 15 = 80$.

Letter grades

At the end of the term, every student will have a numerical course grade between 0 and 100. I will decide upon the numerical cutoffs between various letter grades based on my professional judgement. I will consider students' performance relative to the class. I will also consider absolute standards of professional competence. Highly competent students will get A's. Barely competent students will get B's. Incompetent students will get B-'s or worse. The cutoffs that I use will respect the ordinal ranking of numerical course grades. No student with a given numerical course grade will receive a lower letter grade than someone else with a lower numerical course grade.

Exams

The midterm and final are closed book exams. The midterm will be **in person on Tuesday, October 17th**, and covers all material covered in class until week 7, including group presentations. The final exam will be **in person** and is scheduled for **Tuesday, December 5th** and is cumulative, inclusive of topics discussed during group presentations. Each exam will begin at 6:30pm on the day of the exam and last for **two (2) hours**. Further instructions on how the exams will be administered will be posted on the ELMS in due course.

Problem sets (PS)

There will be **two problem sets** throughout the term. You will have at least three weeks to complete each problem set. The due date of the problem sets is listed in **Course Outline and Schedule** section. All problem sets will be due at the start of class on the indicated due date. Late submissions will not be accepted. Students are permitted and encouraged to discuss the problem sets with one another, however each student must turn in their work individually. Identical copies of a problem set will be assigned the lowest numerical grade. Submitted work must be legible and neatly presented. Typesetting of problem sets is not required.

Group presentations (GP)

Working in pairs, students are required to prepare a short presentation of less than 15 minutes. **Individual presentations are not allowed.** Groups have to choose from the list of papers/topics listed in the syllabus. Topics will be allocated as follows. On the specified date in the course outline, groups will submit a list of 3 papers ranked by interest. If multiple groups share an interest, I will assign papers through a lottery. If groups are unmatched to papers in the first round, I will use your second choice, and so on. Groups are free to propose a different paper if it is more in line with their interests, but must get prior approval from me before proceeding. If approved, that group will not enter the lottery. **Groups will be notified of their selected paper and presentation date on week 3.**

A successful presentation clearly identifies the central topic and question of the paper. Will offer a summary of relevant evidence offering a critical assessment. The presentation should also explain policy implications, policy trade-off or provides intuition for the results.

Tips to prepare your presentation:

- Keep your slides simple. Do not crowd the slides with text
- Ensure figures and tables are legible to the audience
- Use a reasonable number of slides. For a 10-15 minute presentation, aim for 4-5 slides.
- Practice, practice, practice!

Policy Brief

Working individually, students will be required to prepare a written policy brief on a topic selected by the instructor (see Course Material section for instructions). The policy brief combines what you will learn in class with an applied exercise that will include data collection, statistical and econometric analysis. The empirical work will be at the level of ECON 642 or ECON 644. You will need time to work on all the components of the policy brief, do not wait until the last minute to start working on it. The policy brief will be due on **November 28th** at the beginning of class. I will check informally on your progress throughout the semester, but you can submit a (non-graded) draft with preliminary results on **October 31st** to receive feedback. You are welcome to ask questions related to the policy brief at any other time or during office hours.

Course Outline and Schedule (subject to change)

Week	Date	Topics	Readings/Assignments
1	8/29/23	NIPA review and BOP accounting Global Imbalances and the Geography of Debt	SUW Ch. 1-2
2	9/5/23	Current Account Sustainability The Basic Intertemporal Model	SUW Ch. 2-3 Atkeson et al. [2022] [†]
3	9/12/23	Nontradable goods and relative prices Intertemporal distortions	SUW Ch. 3-4 Group presentation topics due
4	9/19/23	Production, investment and the Current Account Uncertainty Dynamics of the Current Account	SUW Ch. 5-6, OR Ch. 1.2
5 **	9/26/23	Large vs Small Open Economies Fiscal Deficits and the Current Account	SUW Ch. 7-8, OR Ch. 2.1-2.2
6 **	10/3/23	Law of One Price Purchasing Power Parity Deviations from PPP	SUW Ch. 9 Pakko and Pollard [2003] Problem set 1 due
7	10/10/23	Relative Prices and the Real Exchange Rate TNT model	SUW Ch. 10 Group presentations
8	10/17/23	Midterm Exam	
9	10/24/23	Covered Interest Parity Uncovered Interest Parity	SUW Ch. 11 Du and Schreger [2021]
10	10/31/23	Capital Market Imperfections	SUW Ch. 12 Policy brief draft (optional, not graded) Group presentations
11	11/7/23	Nominal Rigidities and Exchange Rate Policy	SUW Ch. 13 Group presentations
12 *	11/14/23	Exchange Rate Puzzles Global Financial Cycle	Miranda-Agrippino and Rey [2022] Itskhoki and Mukhin [2020] Engel and Zhu [2019] [†]
13 *	11/21/23	Exchange Rate Puzzles Global Financial Cycle	SUW Ch 14 Problem set 2 due
14	11/28/23	Balance of Payments Crisis and Sudden Stops	SUW Ch. 15 Pesenti and Tille [2000] Policy brief due
15	12/05/23	Final Exam	

Notes: (*) Class will take place on Zoom. (**) Tentative in-person. (†) Optional reading.

Additional Readings Referenced in Course Outline

Below is the list of readings referenced above.

1. Michael R Pakko and Patricia S Pollard. Burgernomics: a big mac™ guide to purchasing power parity. Federal Reserve Bank of St. Louis Review, 85(November/December 2003), 2003
2. Paolo A Pesenti and Cédric Tille. The economics of currency crises and contagion: an introduction. Economic policy review, 6(3), 2000
3. Andrew Atkeson, Jonathan Heathcote, and Fabrizio Perri. The end of privilege: A reexamination of the net foreign asset position of the united states. Working Paper 29771, National Bureau of Economic Research, February 2022. URL <http://www.nber.org/papers/w29771>
4. Wenxin Du and Jesse Schreger. Cip deviations, the dollar, and frictions in international capital markets. Working Paper 28777, National Bureau of Economic Research, May 2021. URL <http://www.nber.org/papers/w28777>
5. Charles M Engel and Feng Zhu. Exchange rate puzzles: evidence from rigidly fixed nominal exchange rate systems. Technical report, BIS Working Paper, 2019
6. Oleg Itskhoki and Dmitry Mukhin. Exchangeexchange rate disconnect in general equilibrium: A teaching note. Working paper, UCLA, 2020. URL https://itskhoki.com/papers/disconnect_teaching-note.pdf
7. Silvia Miranda-Agrippino and H el ene Rey. The global financial cycle. volume 6 of Handbook of International Economics, pages 1–43. Elsevier, 2022. doi: <https://doi.org/10.1016/bs.hesint.2022.02.008>

Reading List for Group Presentations

Below is a list of suggested readings for group presentations. If you want to present a different paper you need prior approval from the instructor.

1. Michael D. Bauer, Ben S. Bernanke, and Eric Milstein (2023) “Risk Appetite and the Risk-Taking Channel of Monetary Policy.” *Journal of Economic Perspectives*.
2. Kenneth Rogoff (2023). “Emerging Market Sovereign Debt in the Aftermath of the Pandemic.” *Journal of Economic Perspectives*.
3. Kenneth Rogoff (2021). “The global capital market reconsidered”. *Oxford Review of Economic Policy*.
4. Pinelopi Goldberg andTristan Reed (2023). “Is the Global Economy Deglobalizing? And if so, why? And what is next?” BPEA Conference Drafts

5. Andrew Lilley, Matteo Maggiori, Brent Neiman, and Jesse Schreger (2022) “Exchange Rate Reconnect” Review of Economics and Statistics
6. Maurice Obstfeld and Alan M. Taylor (2017). “International Monetary Relations: Taking Finance Seriously.” Journal of Economic Perspectives.
7. Ricardo J. Caballero, Emmanuel Farhi, and Pierre-Olivier Gourinchas (2017) “The Safe Assets Shortage Conundrum” Journal of Economic Perspectives.
8. Guillermo Calvo and Ernesto Talvi (2005) “Sudden Stop, Financial Factors and Economic Collapse in Latin America: Learning from Argentina and Chile” National Bureau of Economic Research.
9. Maurice Obstfeld, Jonathan D. Ostry, and Mahvash S. Qureshi (2018) ”Global Financial Cycles and the Exchange Rate Regime: A Perspective from Emerging Markets” AEA Papers and Proceedings

Policy Brief Topic: What does monetary policy do to the exchange rate?

It is typically argued that monetary policy plays an important role in determining exchange rate movements. In fact, many policymakers think in terms of models that predict that a monetary policy tightening should induce an exchange rate appreciation. In this project you will empirically evaluate this claim. You will proceed in three steps.

Step 1: Data collection Using data from the IMF’s International Financial Statistics (IFS) construct a database of monthly data on exchange rates and interest rates. Your choice of countries to include in your sample should respond to the following criteria: (i) Include at least 20 countries. (ii) The sample should include a balanced composition of developing and developed countries (use whatever classification you consider relevant). (iii) For each country the data should span the longest continuous period, between 1980:m1 - 2019:m12, in which each country operated under a flexible exchange rate. For the exchange rate regime classification refer to Ilzetzki, Reinhart, and Rogoff (2019, 2021) available at: <https://www.ilzetzki.com/irr-data>. A exchange rate regime will be classified as flexible in a given month if it is coded as any of the following regimes: {11, 12, 13, or 14} in their fine classification definition. (iv) Your choice of countries should aim to maximize the number of available observations. (v) Collect monthly average of official exchange rates whenever available (E_t), otherwise you can use average market rates. All exchange rates are denominated in domestic currency units per US dollar. (vi) To measure policy sensitive interest rates (i_t), collect monthly averages of T-bill rate, discount rate, or the money market rate, depending on data availability. (vii) Collect monthly averages of the U.S. Federal Funds Rate (i_t^{US}).

Step 2: Statistical Analysis

1. For each country in your dataset compute the following correlations: $corr(\ln E_t, i_t - i_t^{US})$, $corr(\ln \Delta E_t, \Delta(i_t - i_t^{US}))$. Tabulate the mean and median of these correlations across countries for the following samples: (i) all countries, (ii) developed countries, (iii) developing countries.

2. For each country in your dataset estimate the following OLS regression: $\ln E_t = \beta_0 + \beta_1 (i_t - i_t^{US}) + \varepsilon_t$. Tabulate the mean of the estimated coefficients $\hat{\beta}_1$ and the average of the associated standard errors (*s.e*) for the following samples: (i) all countries, (ii) developed countries, (iii) developing countries.
3. **Optional:** For a developing and a developed country of your choice, estimate a monthly VAR model, with six lags and the variables ordered as follows: interest rate differential, exchange rate. Plot the impulse-response function and the 67% confidence interval associated with a **1 percent positive interest differential innovation**.

Step 3: Report. Write a report of **maximum three (3) pages** including tables, figures, and citations. **Font face 12pts, single spaced. Maximum three (3) exhibits (tables or figures) in total.** Figures and tables of publishable quality. Suggested structure: (i) motivation (ii) summary of data and empirical strategy (iii) describe your main results and provide economic intuition (iv) based on your results offer a policy recommendation or discuss the relevance of your results for policy (iv) present caveats to your analysis and conclude. You are free to present the data and results in whichever way you find convenient such as line plots, scatter plots, regression tables, summary tables, etc. Include appropriate citations to literature.

For examples of the structure of good policy briefs checkout the following resources:

Rudolfs Bems, and Racha Moussa (2023) **Emerging Market Economies Bear the Brunt of a Stronger Dollar**. IMF Blog,

<https://www.imf.org/en/Blogs/Articles/2023/07/19/emerging-market-economies-bear-the-brunt-of-a-stronger-dollar>

Filippo Ferroni , Jonas D. M. Fisher , Leonardo Melosi (2023). **How Tight Is U.S. Monetary Policy?** Chicago Fed Newsletter, <https://www.chicagofed.org/publications/chicago-fed-letter/2023/476>

Program and University Policies

Course Website

Copies of the course syllabus, your grades synchronous lecture videos, the online discussion board, student presentations, and other relevant links and documents will be posted on the course website. Problem sets and exams will also be submitted through the course webpage. You can access the site via www.elms.umd.edu. You will need to use your University of Maryland “directory ID” and password.

Email communication

The University has adopted email as the primary means of communication outside the classroom. It will be used to inform students of important announcements. Students are responsible for updating their current email address via the website link <http://www.registrar.umd.edu/current/>. (Under the first major heading of “Online Transactions” there is a link to “Update Contact Information.”) I will do my best to respond to email within 24 hours.

Work Load and Contact Hours

Mastering the material covered in this course requires a significant amount of work outside of class. Students should expect to spend more time outside of class than in class.

In a regular 15-week semester (as in the College Park version of our program): Taking 3 master’s-level courses is supposed to approach the time commitment of a full-time job (36-39 hours per week, so 12-13 hours per week per course). Taking 3 master’s-level courses while simultaneously working at a demanding full-time job during the day is not advisable. Students with questions about the workload in this program should speak with one of the program directors.

Building Access

The midterm and final exams in this course must be taken in person with a proctor on the dates indicated in the Course Outline and Schedule. Access to Morrill Hall and Morrill 1102: Morrill Hall is locked every day from 7:00 p.m. - 7:00 a.m. Your university ID gives you swipe access to the back door of the building. There is keypad access to the door of Morrill 1102. The code will be shared with students by the program coordinator.

Academic Integrity

The University of Maryland has a nationally recognized Code of Academic Integrity. You should inform yourself about the UMD policies related to academic misconduct: <https://www.studentconduct.umd.edu/home/current-students>.

Cases of academic misconduct, including plagiarism and giving or receiving unauthorized assistance on exams, will be referred to the UMD Office of Student Conduct. If found responsible for academic misconduct, students can be subject to sanctions. The standard sanction for graduate students found responsible for cheating on exams is expulsion from the university. The exams in

this course will ask students to affirm the UMD Honor Pledge: “I pledge on my honor that I have not given or received any unauthorized assistance on this examination.”

Student Conduct

Students are expected to be active contributors to the lectures when attending and should be prepared to ask and answer questions during the lectures and to participate in the online discussion boards. Students are expected to refrain from any behavior that would distract the instructor or fellow students during synchronous lectures and to conduct themselves professionally at all times.

Excused Absences

The University of Maryland’s policy on excused absences is posted here: <http://www.president.umd.edu/administration/policies/section-v-student-affairs/v-100g>. Please note: If you miss any class meetings for any reason, you are still responsible for all material covered during the meeting you missed. It is your responsibility – not the instructor’s – to get yourself caught up in the course. Instructors routinely facilitate things by posting lecture notes, etc.

If you need to miss an exam or other graded course requirement because of illness, injury, or some other emergency: Follow doctor’s orders and get documentation. Get in touch with the instructor as soon as you’re able – preferably prior to missing the exam or deadline. Communicate with the instructor to make up the course requirement as soon as possible. You are entitled to recover before you make up the course requirement, but you are not entitled to extra days to study beyond the time the doctor’s note says you’re incapacitated. If you are incapacitated for more than a week or so beyond the end of the term, your grade in the course will be an “Incomplete.” In such cases you must negotiate a plan with your instructor for completing the course requirements. Once you make up the course requirement the instructor will change your “I” to the appropriate letter grade.

School Closing and Delays

In the unlikely event that weather or some other event causes a delay or closing, information can be found on the campus website and the snow phone line: (301) 405- SNOW (405-7669). The program director will always announce cancellation information to the program as an announcement on the program’s ELMS/Canvas site. This will generally be done by 1:00 PM on days when weather or other factors are an issue.

UMD Counseling Center

Sometimes students experience academic, personal and/or emotional distress. The UMD Counseling Center in Shoemaker Hall provides comprehensive support services that promote personal, social, and academic success. The cost of these services is covered by the fees you already paid when you registered for classes, and there is no additional charge if you use the services. Proactively explore the range of services available, including the Counseling Service, Accessibility and Disability Service, Learning Assistance Service, and the Testing Office, all described at <http://www.counseling.umd.edu/>.

Students with Disabilities

The University of Maryland does not discriminate based on differences in age, race, ethnicity, sex, religion, disability, sexual orientation, class, political affiliation, or national origin. Reasonable accommodations will be arranged for students with documented disabilities. Students who have an accommodations letter from the Accessibility and Disability Service (ADS) should meet with me during the first week of the term to discuss and plan for the implementation of your accommodations. If you require reasonable accommodations but have not yet registered with ADS, please contact the Accessibility and Disability Service at 301-314-7682 or adsfrontdesk@umd.edu.

Academic Progress

The UMD Graduate School requires that students maintain a GPA of at least 3.0. Students whose cumulative GPA falls below 3.0 will be placed on academic probation by the graduate school. Students on academic probation must ask the program's director to petition the graduate school if they want to remain enrolled in the program. The petition must include a plan for getting the student's GPA up to at least 3.0. Students who do not live up to their plan can have their enrollment in the program terminated without having earned the degree. Note: a grade of "B" corresponds to a GPA of 3.0. A grade of "B-" corresponds to a GPA of 2.7.

Graduate Academic Counselor

The UMD Graduate School also has an academic counselor available to support students who are having difficulty navigating mental health resources on campus, are considering a leave of absence and/or need assistance finding mental health care off campus. The Graduate Academic Counselor also facilitates bi-weekly Graduate Student Circle Sessions which provide an opportunity to learn about resources and connect with other graduate students. Students can learn more about the Graduate Academic Counselor by going to: <https://gradschool.umd.edu/gradcounselor>.