Syllabus for

Macroeconomics in Open Economies

July 30 - August 10, 2018

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Purpose of the course

The course consists of two main parts. We first review the major building blocks of international economics. In the second part, we focus more extensively on selected topics that have been prominent areas of research in recent years.

The primary reference for the class is the textbook by Obstfeld and Rogoff (1996). We also draw on selected chapters of the recent textbook by Carlos Vegh (2014):

Obstfeld, Maurice, and Kenneth Rogoff (1996). Foundations of International Macroeconomics, MIT Press, Cambridge.

Vegh, Carlos (2014). *Open Economy Macroeconomics in Developing Countries*, MIT Press, Cambridge.

In addition to these textbooks, we rely on papers that are listed below with the url where applicable. The syllabus indicates the days in which the various topics will be covered, with mandatory readings marked by an asterisk.

Part 1: building block of international macroeconomics

The intertemporal approach to the current account (day 1)

* Obstfeld and Rogoff (1996), chapters 1-2 (sections 1.1-1.3 and 2.1-2.3.3)

The overlapping generation model (day 1)

Obstfeld and Rogoff (1996), chapter 3 (sections 3.1-3.3 and 3.7.1 and 3.7.3-3.7.6).

Weil, Philippe, 2008, "The Overlapping Generations: The First Jubilee", Journal of Economic Perspectives, 115-134. http://pubs.aeaweb.org/doi/pdfplus/10.1257/jep.22.4.115

The real exchange rate and the terms of trade (day 2)

* Obstfeld and Rogoff (1996), chapter 4 (sections 4.1-4.2.3, 4.3-4.5.4)

* Vegh (2014), chapter 4

Bussière, Matthieu, Claude Lopez and Cédric Tille (2015), "Do Real Exchange Rate Appreciations Matter for Growth?", *Economic Policy* 30(81), pp. 5-45.. http://economicpolicy.oxfordjournals.org/content/economicpolicy/30/81/5.full.pdf

International financial markets, and international portfolio choice (day 3)

- * Obstfeld and Rogoff (1996), chapter 5.
- * Coeurdacier, Nicaolas, and Hélène Rey (2013). "Home Bias in Open Economy Financial Macroeconomics", *Journal of Economic Literature*, LI(1), pp. 63-115. http://www.helenerey.eu/RP.aspx?pid=Published-Papers_en-GB&aid=72586765901_67186463733

Coeurdacier, Nicolas, and Pierre-Olivier Gourinchas (2016). "When Bonds Matter: Home Bias in Goods and Assets", *Journal of Monetary Economics* 82(C), pp. 119-137.

https://www.sciencedirect.com/science/article/pii/S0304393216300423?via%3Dihu b

- Devereux, Michael, and Alan Sutherland (2010). "Valuation Effects and the Dynamics of Net External Assets", *Journal of International Economics*, 80, pp. 129-143. http://www.sciencedirect.com/science/article/B6V6D-4WH2M7S-1/2/06a9f549315e515626871d4534853196
- Devereux, Michael, and Alan Sutherland (2008). "Country Portfolios in Open Economy Macro Models," NBER Working Papers 14372, http://www.nber.org/papers/w14372.pdf

Tille, Cédric, and Eric van Wincoop (2010). "International Capital Flows", Journal of International Economics, 80, pp. 157-175. http://www.sciencedirect.com/science/article/B6V6D-4XNW4CC-1/2/28ae7d5b7f84675a158b1ac2ce28ae81

Imperfections in international financial markets (day 4)

* Obstfeld and Rogoff (1996), chapter 6 (sections 6.1-6.2 and 6.4)

* Vegh (2014), chapter 2 (especially 2.4)

Panizza, Ugo, Federico Sturzenegger, and Jeromin Zettelmeyer. 2009. "The Economics and Law of Sovereign Debt and Default." Journal of Economic Literature, 47(3): 651–98. http://www.aeaweb.org/articles.php?doi=10.1257/jel.47.3.651

Money and exchange rates: the flexible price case (day 5)

* Obstfeld and Rogoff (1996), chapter 8 (sections 8.1-8.2 and 8.3.8 and 8.4).

Vegh (2014), chapter 16 and 17 (sections 17.1-17.4, 17.7).

Calvo, Guillermo (1998). "Capital Flows and Capital Market Crises: The Simple Economics of Sudden Stops", *Journal of Applied Economis* I(1), pp. 35-54. http://www.ucema.edu.ar/publicaciones/download/volume1/calvo.pdf

Krugman, Paul (1979). "A Model of Balance-of-Payments Crises", Journal of Money, Credit, and Banking 11(3), pp. 311-25. http://www.columbia.edu/~rhc2/Spring2006/G6904/Papers/Krugman_79.pdf

- Obstfeld, Maurice (1996). "Models of currency crises with self-fulfilling features", *European Economic Review* 40, pp. 1037-1047. http://www.nber.org/papers/w5285
- * Pesenti, Paolo, and Cédric Tille (2000). "The Economics of Currency Crises and Contagion: An Introduction", *Federal Reserve Bank of New York Economic Policy Review*.

http://www.newyorkfed.org/research/epr/00v06n3/0009pese.html

Nominal rigidities in open economy models (day 6)

- * Obstfeld and Rogoff (1996), chapter 9 (section 9.1-9.4) and chapter 10 (section 10.1-10.2)
- Dornbusch, Rudiger (1976). "Expectations and Exchange Rate Dynamics", *Journal of Political Economy* 84(6), pp. 1161-1176. http://inka.susu.adu.on/guoiiiinrong/okuw/5/Expectation% 20and% 20avebange% 20r

http://jpkc.sysu.edu.cn/guojijinrong/ckwx/5/Expectation%20and%20exchange%20r ate%20dynamic.pdf

Part 2: selected topics

Monetary policy in open economies (day 7)

- Cespedes, Luis Felipe, Roberto Chang and Andrés Velasco (2012) "Is Inflation Targeting still on Target?" NBER Working Paper No. 18570. http://www.nber.org/papers/w18570
- * Corsetti, Giancarlo, Luca Dedola, and Sylvain Leduc (2010). "Optimal monetary policy in open economies", in *Handbook of Monetary Economics*. https://sites.google.com/site/giancarlocorsetti/main/handbook-codele.pdf?attredirects=0
- * Corsetti, Giancarlo and Paolo Pesenti (2007) "The simple geometry of transmission and stabilization in closed and open economy", NBER International Seminar on Macroeconomics 2007 http://ideas.repec.org/h/nbr/nberch/3000.html

Corsetti<u>mailto:gc422@cam.ac.uk</u> Giancarlo, Keith Kuester, and Gernot Müller (2017). "Fixed on Flexible: Rethinking Exchange Rate Regimes after the Great Recession",

IMF Economic Review 65(3), pp. 586-632. https://link.springer.com/content/pdf/10.1057%2Fs41308-017-0038-0.pdf

- Devereux, Michael, and Charles Engel (2007) "Expenditure Switching Versus Real Exchange Rate Stabilization: Competing Objectives for Exchange Rate Policy", Journal of Monetary Economics, 54, pp. 2346-2374. http://www.sciencedirect.com/science/article/B6VBW-4MNR0N4-2/2/8b7716dfa78d163fa9b3335f4cdc94fb
- Korinek, Anton as (2016). "Currency Wars or Efficient Spillovers? A General Theory of International Policy Cooperation." Mimeo, Johns Hopkins. http://www.korinek.com/download/Spillovers.pdf

Monacelli, Tommaso (2013). "Is Monetary Policy in an Open Economy Fundamentally Different?", IMF Economic Review 61, pp. 6-21 http://www.palgrave-journals.com/imfer/journal/v61/n1/pdf/imfer20133a.pdf

Exchange rate regimes (day 8)

* Vegh (2014), chapter 11 (section 11.1-11.2 and 11.4)

International financial integration, exorbitant privilege (day 8)

- Bénétrix, Agustin, Philip Lane, and Jay Shambaugh (2015). "International currency exposures, valuation effects and the global financial crisis," Journal of International Economics 96(S1), 98-109. https://www.sciencedirect.com/science/article/pii/S0022199614001226
- Caballero, Ricardo, Emmanuel Farhi and Pierre-Olivier Gourinchas (2008). "An Equilibrium Model of 'Global Imbalances' and Low Interest Rates" American Economic Review, 98, pp. 359-393. http://conium.org/~pog/academic/cfg_aer98_1.pdf
- Curcuru, Stephanie, Tomas Dvorak, and Francis Warnock (2013). "On Returns Differentials", Journal of International Money and Finance 36(C), pp. 1-25. http://www.sciencedirect.com/science/article/pii/S0261560613000272
- European Central Bank (2017). "The International Role of the Euro", Frankfurt. https://www.ecb.europa.eu/pub/pdf/other/ecb.euro-international-role-201707.pdf
- * Gourinchas, Pierre-Olivier and Hélène Rey (2013). "External Adjustment, Global Imbalances and Valuation Effects", NBER working paper 19240. http://www.nber.org/papers/w19240
- * Lane, Philip, and Gian-Maria Milesi-Ferretti (2017). "International Financial Integration in the Aftermath of the Global Financial Crisis", IMF working paper 17/115

http://www.imf.org/~/media/Files/Publications/WP/2017/wp17115.ashx

Lane, Philip, and Gian-Maria Milesi-Ferretti (2014). "Global Imbalances and External Adjustment after the Crisis", IMF working paper 14/151 http://www.imf.org/external/pubs/cat/longres.aspx?sk=41842

* Lane, Philip, and Gian Maria Milesi-Ferretti (2007). "A global perspective on external positions", in R. Clarida ed. G7 Current Account Imbalances: Sustainability and Adjustment, University of Chicago Press. http://www.nber.org/papers/w11589

Patterns of international capital flows (day 9)

* Bussière, Matthieu, Julia Schmidt, and Natacha Valla (2016). "International Financial Flows in the New Normal: Key Patterns (and Why We Should Care)", CEPII Policy Brief no 10.

http://www.cepii.fr/PDF_PUB/pb/2016/pb2016-10.pdf

- Emter, Lorenz, Martin Schmitz, and Marcel Tirpák (2017). "Cross-border banking in the EU since the crisis: what drives the great retrenchment?", mimeo, ECB http://www.etsg.org/ETSG2017/papers/emter-schmitz-tirpak-2017-cross-border-banking-in-europe-after-the-crisis-ecb-17-july.pdf
- * McQuade, Peter, and Martin Schmitz (2016). "The great moderation in international capital flows : a global phenomenon ?", ECB Working Paper 1952. https://www.ecb.europa.eu/pub/pdf/scpwps/ecbwp1952.en.pdf
- * Milesi-Ferretti, Gian-Maria, and Cédric Tille (2011). "The great retrenchment: international capital flows during the global financial crisis", *Economic Policy* 66, pp. 287-342. http://onlinelibrary.wiley.com/doi/10.1111/j.1468-0327.2011.00263.x/abstract

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http://oninienorary.wney.com/doi/10.1111/j.1408-0527.2011.00205.x/at
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Dealing with volatile capital flows (day 9)

* Vegh (2014), chapter 14 (section 14.1-14.4 and 14.6-14.7)

- Aizenman, Joshua, Menzie Chinn, and Hiro Ito (2015). "Monetary Policy Spillovers and the Trilemma in the New Normal: Periphery Country Sensitivity to Core Country Conditions" NBER working paper 21128. http://www.nber.org/papers/w21128 http://web.pdx.edu/~ito/trilemma_indexes.htm
- Farhi, Emmanuel, and Iván Werning (2014). "Dilemma Not Trilemma? Capital Controls and Exchange Rates with Volatile Capital Flows", *IMF Economic Review* 62, pp. 569-605. http://www.palgrave-journals.com/imfer/journal/v62/n4/pdf/imfer201425a.pdf
- * Forbes, Kristin, and Francis Warnock (2011). "Capital Flow Waves: Surges, Stops, Flight, and Retrenchment", NBER working paper 17351. http://www.nber.org/papers/17351

Ghosh, Atish, Jun Il Kim, Mahvash Saeed Qureshi, and Juan Zalduendo (2012). "Surges", IMF working paper 12/22 http://www.imf.org/external/pubs/ft/wp/2012/wp1222.pdf

- * IMF (2013). "The Yin and Yang of Capital Flow Management: Balancing Capital Inflows with Capital Outflows", World Economic Outlook chapter 4. http://www.imf.org/external/pubs/ft/weo/2013/02/pdf/c4.pdf
- * Klein, Michael, and Jay Shambaugh (2013). "Rounding the Corners of the Policy Trilemma: Sources of Monetary Policy Autonomy", NBER working paper 19461. http://www.nber.org/papers/19461
- * Korinek, Anton (2018) "Regulating capital flows to emerging markets: An externality view" *Journal of International Economics* 111, pp. 61-80. https://www.sciencedirect.com/science/article/pii/S0022199617301472
- * Obstfeld, Maurice, Jonathan Ostry, and Mahvash Qureshi (2017). "A Tie That Binds
 : Revisiting the Trilemma in Emerging Market Economies ", IMF working paper 17/130

http://www.imf.org/~/media/Files/Publications/WP/2017/wp17130.ashx

- Obstfeld, Maurice, Jay Shambaugh, and Alan Taylor (2004). "The Trilemma in History: Tradeoffs among Exchange Rates, Monetary Policies, and Capital Mobility", NBER working paper 10396. http://www.nber.org/papers/w10396
- * Rey, Hélène (2013). "Cross-Border Capital Flows", paper presented at the 2013 Jackson Hole Symposium. http://www.kc.frb.org/publicat/sympos/2013/2013Rey.pdf

Low interest rates and safe assets (day 10)

- Bean, Charles, Christian Broda, Takatoshi Ito, and Randall Kroszner (2015). "Low for Long? Causes and Consequences of Persistently Low Interest Rates", Geneva report of the world economy 17. http://cepr.org/sites/default/files/geneva reports/GenevaP266.pdf
- * Caballero, Ricardo, Emmanuel Farhi, and Pierre-Olivier Gourinchas (2017). "The Safe Assets Shortage Conundrum", *Journal of Economic Perspectives* 31(3), pp. 29-46.

https://www.aeaweb.org/articles?id=10.1257/jep.31.3.29

- * Caballero, Ricardo, and Emmanuel Farhi (2014). "The Safety Trap", NBER Working Paper No. 19927. http://www.nber.org/papers/w19927
- Del Negro, Marco, Marc Giannoni, Domenico Giannone, and Andrea Tambalotti (2017). "Safety, Liquidity, and the Natural Rate of Interest", *Brookings Papers on Economic Activity*, pp. 235-316. https://www.brookings.edu/wp-content/uploads/2017/08/delnegrotextsp17bpea.pdf
- * Eggertsson, Gauti, and Neil Mehrotra (2014) "A Model of Secular Stagnation" NBER Working Paper No. 20574. http://www.nber.org/papers/w20574
- Gagnon, Etienne, Benjamin Johannsen, and David Lopez-Salido (2016). "Understanding the New Normal: The Role of Demographics", Finance and Economics Discussion Series Divisions of Research & Statistics and Monetary Affairs 2016-080.

https://www.federalreserve.gov/econresdata/feds/2016/files/2016080pap.pdf

- Gorton, Gary, and Guillermo Ordonez (2013). "The Supply and Demand for Safe Assets", NBER working paper 18732. http://www.nber.org/papers/18732
- Gourinchas, Pierre-Olivier, and Olivier Jeanne (2013). "Global Safe Assets", BIS Working Paper 399. http://www.bis.org/publ/work399.htm
- * Holston, Kathryn, Thomas Laubach, and John Williams (2018). "Measuring the Natural Rate of Interest: International Trends and Determinants" *Journal of International Economics* 108(S), pp. S59-75. https://www.sciencedirect.com/science/article/pii/S0022199617300065

- International Monetary Fund (2017). "Low Growth, Low Interest Rates, and Financial Intermediation", *Global Financial Stability Report*, chapter 2. http://www.imf.org/~/media/Files/Publications/GFSR/2017/April/ch2.ashx?la=en
- International Monetary Fund (2012). "Safe Assets: Financial System Cornerstone?", *Global Financial Stability Report*, chapter 3, http://www.imf.org/External/Pubs/FT/GFSR/2012/01/pdf/c3.pdf
- * Juselius, Mikael, Claudio Borio, Piti Disyatat, and Mathias Drehmann (2017).
 "Monetary Policy, the Financial Cycle, and Ultra-Low Interest Rates", *International Journal of Central Banking*, 13 (3) pp. 55-89. Discussion by Marc Giannoni. http://www.ijcb.org/journal/ijcb17q3a2.htm http://www.ijcb.org/journal/ijcb17q3a2_disc.pdf
- * Lukasz, Rachel, and Thomas Smith (2017). "Are Low Real Interest Rates Here to Stay?", *International Journal of Central Banking*, 13 (3) pp. 1-42. Discussion by Pierre-Olivier Gourinchas. http://www.ijcb.org/journal/ijcb17q3a1.htm http://www.ijcb.org/journal/ijcb17q3a1_disc.pdf