

Economic Growth and Development: Theory and Policy

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<ul style="list-style-type: none"> • Class meets <u>three times a week</u> (MWF) from 900AM to 1020PM between January 6th and March 12th (including sessions with Teaching Assistants) except for: <ul style="list-style-type: none"> ◦ Monday January 20th (Martin Luther King day) • The class will be taught in a combination of in-person (70%) and online (30%) (see below for specific in-person/online scheduling) • All in-person classes and sessions are going to take place on MWF in Keller 0007 • All sessions with the Teaching Assistants are in-person 		

Course description

This is a capstone course that enables students to deploy a variety of analytical tools to process and interpret the data and formulate a coherent diagnostic that can make sense of simultaneous observations about growth and social outcomes within a particular context. It covers the theory and practice of the Economic Complexity and Growth Diagnostics frameworks, drawing on empirical research, case studies, and real world-data to map opportunities for productive diversification, identify the most binding constraints preventing them from materializing, and formulating data-driven policy strategies to overcome them.

The course covers a broad range of topics in development economics. It begins with an overview of Malthusian dynamics, the great acceleration, the great divergence, and modern growth models, emphasizing the role of productivity and technology. The course then explores different approximations to technological progress, with particular emphasis on institutional development and knowhow – as portrayed in Hidalgo and Hausmann’s (2009) Economic Complexity framework. This methodological approach takes stock of place-specific productive capabilities and allows to define a place-specific roadmap to potential diversification opportunities which could be pursued by redeploying existing skills and sourcing missing capabilities. We will then devote a significant share of the course to the practical deployment of the Growth Diagnostic Framework (Hausmann, Rodrik and Velasco, 2008), to identify the most binding constraints that are preventing these opportunities and potential from realizing. The four principles of differential diagnostics are illustrated with practical examples that showcase their deployment to test for binding constraints across relevant production factors, such as finance, human capital, infrastructure, market failures (coordination and information externalities), government failures (taxation, regulations, property rights, and corruption) and macroeconomic risks. We will devote some sessions to diagnosing macroeconomics

as a constraint, to equip students with practical basic principles and analytical tools that enable them to understand the macroeconomic context of reform in a particular place.

Taken together, Economic Complexity and Growth Diagnostics form an innovative conceptual framework that allows policymakers to focus limited resources on the most impactful issues. The course concludes with several lectures aimed at translating the insights derived from the deployment of these frameworks into policy design and implementation. These include frameworks to think about building the state capability needed to mobilize and implement reforms.

Audience and Prerequisites

This course is designed for master students interested in international development, government, and public policy, that have undertaken previous courses in macroeconomics, statistics, or econometrics, are comfortable handling datasets in a language of their choosing (Stata, R or Python).

Grading

- Three problem sets (45%): 15% each, these are building blocks for the final report
 - Two individual assessments
 - One to be submitted in groups
- Final presentation and Country Diagnostic Report (40%)
 - Final Presentation
 - Submission of Final Growth Diagnostic Report
- Class participation (15%)
 - Recorded through Teachly

What do we expect from you?

- Read on average 50 pages per class, come to class willing to share your ideas and participate actively within a safe environment
- Choose a country and deploy the class tools to gradually further your understanding of its issues and potential remedies
- Be curious, make the most out of the different learning vehicles we have prepared

Reading Material

The course does not have a main textbook. It is based mostly on a collection of papers and readings available online, and books or book chapters that have been placed on reserve. Each class will have several assigned readings, that are not expected to average 50 pages per class. Beside these readings, the teaching team will indicate videos and podcasts chosen to complement your learning experience and provide alternative learning platforms.

Aside from these, there are a few books that I consider must-reads for students interested in development economics and might be a great travel companion during your development work:

- Adelman, J. (2014). *Worldly Philosopher: The Odyssey of Albert Hirschman*. Princeton University Press.
- Andrews, M., Pritchett, L., and Woolcock, M. (2017). *Building State Capacity: Evidence, Analysis, Action*. Oxford University Press.
- Collier, P. (2018). *The future of capitalism: Facing the new anxieties*. Harper Collins.
- Easterly, W. (2006). *The White Man's Burden: Why the West's Efforts to Aid the Rest Have Done So Much Ill, and So Little Good*. Penguin Book.
- Easterly, W. (2001). *The Elusive Quest for Economic Growth: Economists' Adventures and Misadventures in the Tropics*. The MIT Press.
- Epstein, D. (2021). *Range: Why Generalists Triumph in a Specialized World*. Riverhead Books, New York.
- Galor, O. (2022). *The Journey of Humanity: The Origins of Wealth and Inequality*. Penguin Random House.
- Heifetz, R. (1994). *Leadership without easy answers*. The Belknap Press of Harvard University Press.
- Heifetz, R. and Linsky, M. (2017). *Leadership on the line*. Harvard Business Review Press.
- Heinrich, J. (2020). *The WEIRDest People in the World: How the West Became Psychologically Peculiar and Particularly Prosperous*. Farrar, Strauss, and Giroud.
- Hirschman, O. (1958). *The strategy of economic development*. New Haven: Yale University Press.
- Hirschman, A. (1963). *Journeys towards progress: Studies of economic policy making in Latin America*. Twentieth Century Fund, New York.
- Hirschman, O. (1998). *Crossing boundaries: Selected writings*. Zone Books.
- Rodrik, R. (2015). *Economic Rules: Rights and Wrongs of The Dismal Science*. W.W.Norton
- Santos, M.A., and Hani, F. (2021). *Diagnosing Human Capital as a Binding Constraint to Growth: Tests, Symptoms, and Prescriptions*. Cambridge University Press.
- Sen, A. (2021). *Home in the world: A written memoir*.
- Yueng Yueng Ang (2016). *How China scaped the poverty trap? Series: Cornell Studies in Political Economy*, Cornell University Press.
- Werner-Müller, J. (2017). *What is populism?* Penguin Books.

LECTURES AND READINGS

(* marks signal a mandatory reading; listed in order of importance – all other readings are recommended)

Week 1 – Lecture 1 (in-person, Jan 06th): Introduction to Economic Growth and Development

- * De Long, B. (undetermined). [Berkeley Faculty Lunch Talk: Main Themes of Twentieth Century Economic History](#).
- * Romer, P. Economic Growth in *The Concise Encyclopedia of Economics*. Available at: <https://www.econlib.org/library/Enc/EconomicGrowth.html>
- * Pritchett, L. (2022). [Economic growth is enough and only economic growth is enough](#). Oxford Blavatnik School of Government and London School of Economics (with A. Lewis)
- * Pritchett, L. (1997) [Divergence, Big Time](#). *The Journal of Economic Perspectives* 11, No. 3.
- Pritchett, L. (2022). [Development Happened. Did Aid Help?](#) Oxford Blavatnik School of Government and LSE March 10th, 2022.

Week 1 – Lecture 2 (in-person, Jan 08th): From Malthusian Stagnation to Modern Growth

- * Galor, O. (2022). *The Journey of Humanity: The Origins of Wealth and Inequality*. Penguin Random House.
 - Chapter 3: The Storm Beneath the Surface (pp. 43-55).
 - Chapter 4: Full Steam Ahead (pp. 57-83).
- Galor, Oded, and David N. Weil (1999). [From Malthusian Stagnation to Modern Growth](#). *American Economic Review* 89, no. 2.
- Galor, Oded, and David N. Weil. [Population, Technology, and Growth: From Malthusian Stagnation to the Demographic Transition and Beyond](#). *American Economic Review* 90, no. 4 (2000): 806-828.
- Ashraf, Q. and Galor, O. (2011). [Dynamics and Stagnation in the Malthusian Epoch](#). *American Economic Review*, American Economic Association, vol. 101(5), pages 2003-2041, August.

Week 2 – Lecture 3 (in-person, Jan 13th): The Basics of Growth Theory

- * Solow Model Study Guide (some teaching notes I prepared to help you navigate the basic insights of the Solow model).
- * Rodrik, D. (2005). [Growth Strategies](#). Chapter 14, in Aghion, P., and Durlauf, S. (editors), *Handbook of Economic Growth*, pp. 967-1014. North Holland.
- * Jones, C. and Romer, P. (2010). [The new Kaldor facts: ideas, institutions, population, and human capital](#). *American Economic Journal: Macroeconomics* 2, no. 1.

- For those without previous exposure to the Solow model - or those that had some exposure but would like to refresh - I recommend reading: Blanchard, O. and Johnson, D. *Macroeconomics*, in particular (section and pages taken from 6th Edition, 2013).
 - Chapter 10, section 10.4 onwards (pp. 217 – 221)
 - Chapter 11, sections 11.1 – 11.3
 - Chapter 12, section 12.1

Week 2 – Lecture 4 (online, Jan 15th): Guest Lecturer Ricardo Hausmann: Technology as Know-how: Introduction to Economic Complexity

- * Hausmann, R., Hidalgo, C., Bustos, S., Coscia, M., Simoes, A. and Yildirim, M. (2013). [The Atlas of Economic Complexity: Mapping Paths to Prosperity](#). MIT Press, 2013. (Sections 1-6, pages 1-55).
- Hidalgo, C., and Hausmann, R. (2009). [The building blocks of economic complexity](#). Proceedings of the National Academy of Sciences, 106(26), 10570-10575.

Week 3 – Lecture 5 (in-person Jan 22th): Navigating the product space: Identifying opportunities for productive diversification

- * [The Atlas of Economic Complexity \(site\)](#)
- * Hausmann, R., Hidalgo, C., Bustos, S., Coscia, M., Simoes, A. and Yildirim, M. (2013). [The Atlas of Economic Complexity: Mapping Paths to Prosperity](#). MIT Press, 2013. (Sections 1-6, pages 1-55).
- * Crespi, G., Fernández-Arias, E., and Ernesto Stein (2014). [Selecting Priority Sectors for Productive Transformation](#): An Elephant in the Room? Rethinking Productive Development. Chapter 9, pp. 33-58.

Week 3 – Lecture 6 (in-person, Jan 24nd): Case Study – The Chiapas Puzzle

- * Hausmann, R., Santos, M.A., and Pan, C. (2020). The Chiapas Puzzle. Harvard Kennedy School of Government, Case Study 2174.0.

Week 4 – Lecture 7 (in-person, Jan 27th): Growth Diagnostics

- * Hausmann, R., Rodrik, D. and Velasco, A. (2008). [Growth diagnostics](#), in Stiglitz, J. and Serra, N. The Washington Consensus Reconsidered: Towards a new global governance. (Chapter 15). Oxford University Press, NY.
- * Rodrik, D. (November 2007). [Doing Growth Diagnostics well](#) (blogpost)
- Rodrik, D. (2012). [Why We Learn Nothing from Regressing Economic Growth on Policies](#). Seoul Journal of Economics Vol. 25, No. 2, pp. 137-151.
- Aghion, P., and Durlauf, S. (2009). [From Growth Theory to Policy Design](#). Commission on Growth and Development. Working Paper No. 57.

Week 4 – Lecture 8 (in-person Jan 29th): Principles of Differential Diagnosis

- * Hausmann Ricardo, Klinger Bailey, Wagner Rodrigo (2008). [Doing Growth Diagnostics in Practice: A 'Mindbook'](#) CID Working Papers Series No. 177 (pages 1-47).
- * Dixit, Avinash (2007). [Evaluating Recipes for Development Success](#). *The World Bank Research Observer*, Vol. 22, No. 2, pp. 131-157.

Week 5 – Lecture 9 (in-person Feb 3rd): Testing for Human Capital as a Binding Constraint

- * Santos, M.A. and Hani, F. (2021). Testing for Human Capital as a Binding Constraint: Checks, Symptoms, and Prescriptions. Elements in the Economics of Emerging Markets. Cambridge University Press.
- * Hausmann, Ricardo. [The Education Myth](#). *Project Syndicate*. May 31, 2015.
- Hausmann, R., Pietrobelli, C., and Santos, M.A. [Place-specific Determinants of Income Gaps: New Sub-National Evidence from Mexico](#), Journal of Business Research.
- Heckman, James, Lance Lochner, and Petra Todd (2003). [Fifty Years of Mincer Earnings Regressions. \(2003\)](#). NBER Working Paper 9732.

Week 5 – Lecture 10 (online, Feb 5rd): Testing for Finance as a Binding Constraint

- * Hausmann, R., Santos, M.A., Barrios, D., Taniparti, T., Tudela, J., Muci, J.F., and Lu, J. (2022). [A Growth Diagnostic of Namibia](#) Harvard Center for International Development Faculty Working Paper No. 405, February 2022, pp. 15-22.
- * Hausmann, R., Espinoza, L. and Santos, M.A., (2017). [Switching gears: A Growth Diagnostic of Panama](#). Harvard Center for International Development, Faculty Working Paper Series No. 325 (pages 25-28)
- * Hausmann, R., Espinoza, L., and Santos, M.A. (2015). [The low productivity trap: A growth diagnostics of Chiapas](#). Harvard Center for International Development, Faculty Working Paper Series No. 304 (pages 15-21).
- Rajan, R. and Zingales, L. (1998). [Financial Dependence and Growth](#). The American Economic Review, Vol. 88, No. 3, pp. 559-586.

Week 6 – Lecture 11 (online, Feb 10th): Macro Diagnostic: National Accounts and Balance of Payments

- * IMF Latest Article IV for the country chosen for your final Growth Diagnostic Report.
- * "[Random Tidbits on National Accounts and Keynesian Models Of Income And Expenditure](#)." The Case for Concerted Action. November 25, 2017.
- Dornbusch, R. (2001). [A Primer on Emerging Market Crises](#). NBER WP No. W8326.
- Rigobon, R. (2004) [Notes on the BBNN model](#).
- Dornbusch, R., (1980). Open Economy Macroeconomics. (Chapter 6).
- Kaminsky, G., Lizondo, S., and Reinhart, C. (1998). [Leading Indicators of Currency Crises](#). Staff Papers (International Monetary Fund) 45, no. 1 (1998): pp. 1-48.

Week 6 – Lecture 12 (online, Feb 12th): Macro Diagnostic: Fiscal Outlook and Debt Sustainability

- IMF Latest Article IV for the country chosen for your final Growth Diagnostic Report.
- * IMF Pamphlet Series No. 49: [Guidelines for Fiscal Adjustment: Section How should the Fiscal Stance be Assessed?](#)
- Eichengreen, B., Hausmann, R., and Panizza, U. (2002). [Original Sin: The Pain, The Mystery, and the Road to Redemption](#). Paper prepared for the conference Currency and Maturity Matchmaking: Redeeming Debt from Original Sin, IADB, Washington, D.C., 21-22.
- Barro, R. (1979). [On the determination of public debt](#). Journal of Political Economy, 87(5).

Week 7 – Lecture 13 (online, Feb 17th): Inequality and inclusion

- * Collier, P. (2018). [The future of capitalism: Facing the new anxieties](#). Harper Collins Publishers, New York. Chapter 7: The geographic divide: Booming metropolis, broken cities.
- * Hausmann, Ricardo, and César A. Hidalgo (2010). [Country Diversification, Product Ubiquity, and Economic Divergence](#). HKS Faculty Research Working Paper Series RWP10-045, John F. Kennedy School of Government, Harvard University.
 - Read: Abstract, Introduction (pp. 2-8), Concluding remarks (pp. 25-28).
- Wilkinson, R. (2011). [How economic inequality harms societies?](#) TED Talk.
- Lustig, N., Lopez-Calva, L., Ortiz-Juarez, E., and Monga, C. (2013). [Deconstructing the Decline in Inequality in Latin America](#). The World Bank. Policy Research WP 6552.

Week 7 – Lecture 14 (online, Feb 19th): Green Growth

- * [Greenplexity \(Harvard Growth Lab website\)](#)
- * Hausmann, R. (2022). [Green Growth Opportunities](#). IMF Publications.

Week 8 – Lecture 15 (online, Feb 24th): Case Study: Debt for Nature Swaps (El Salvador)

- * U.S. International Development Finance Corporation (DFC), [World's Largest Debt Conversion for Conservation of a River and its Watershed Completed in El Salvador](#) (October 16th, 2024).
- * Jones, M. (2023). [Exclusive: Top development banks to launch debt-for-nature swap 'task force.'](#) Reuters, November 30th 2023.

Week 8 – Lecture 16 (online, Feb 26th): Modern Industrial Policy (I): General Framework, Sector Selection and Investment Promotion (Guest Lecturer: Nangula Uaandja, Head of the Namibian Investment Promotion and Development Board)

- * Crespi, G., Fernández-Arias, E., Stein, E. (2014). [A Conceptual Framework for Productive Development Policies](#). Rethinking Productive Development. IADB. Ch. 2, pp. 33-58.
- * Crespi, G., Fernández-Arias, E., and Ernesto Stein (2014). [Selecting Priority Sectors for Productive Transformation: An Elephant in the Room?](#) Rethinking Productive Development. Chapter 9.
- Cherif, R., and Hasanov, F. (2019). [The return of the policy that shall not be named: Principles of industrial policy](#). International Monetary Fund Working Paper Series No. 19/74.

Week 9 – Lecture 17 (in-person, Mar 3rd): Modern Industrial Policy (II): General Discussion, Public Private Dialogs and Special Economic Zones

- * Santos, M.A. and Fortunato, A. (2025). Public-Private Dialogs to Spur Export-led Growth: The Case of Productivity Task Forces in Namibia. Forthcoming at Cambridge University Press.
- * Juhász, R., Lane, N., and Rodrik, D. (2024). [The New Economics of Industrial Policy](#). Annual Review of Economics
- Ghezzi, P. (2016). [Mesas Ejecutivas: A new tool for Productive Diversification](#). Ministry of Production, Peru.
- UNCTAD (2021). [Handbook of Special Economic Zones in Africa: Towards Economic Diversification across the Continent](#). Ch. 5: Guidelines Policy Recommendations (pp. 153-193).
- Hausmann, R., Santos, M.A., and Obach, J. (2016). [Special Economic Zones in Panama: A Critical Assessment](#). Harvard Kennedy School Faculty Research Working Paper No. RWP 16-044, September 2016.

Week 9 – Lecture 18 (in-person, Mar 5th): Bringing the Pieces Together: Looking Back and Looking Forward

- * Heifetz, R., and Linsky, M. (2002). Leadership on the Line: Staying Alive Through the Dangers of Leading. Harvard Business Review Press, Chapter 3: Get on the Balcony
- * Heifetz, R. (1994). Leadership without easy answers. The Belknap Press of Harvard University Press. Chapter 11. (pp. 250-276) and Chapter 4 (pp. 69-100).
- Hirschman, A. (1963). Journeys towards progress: Studies of economic policy making in Latin America. Twentieth Century Fund, NY. Chapter 5: The Contriving of Reform (pp. 251-275).
- Banerjee, A. and Duflo, E. (2011). Poor Economics. Public Affairs, New York. Chapter 10.

Week 10 – (in-person, Mar 10th): Student Presentations

Schedule

Light blue: in-person		Light green: Online	Red (no class)
Week	Lecture	Description	
1	1 (Jan 06 th)	Introduction to Economic Growth and Development Economics	
	2 (Jan 08 th)	From Malthusian Stagnation to Modern Economic Growth	
	Seminar 1 (Jan 10th)	Data Workshop and Course Database Review	
2	3 (Jan 13 th)	The Basics of Growth Theory (Convergence, Divergence, Conditional Convergence)	
	4 (Jan 15 th)	Guest Lecturer: Ricardo Hausmann Technology as Knowhow: Introduction to Economic Complexity	
	Seminar 2 (Jan 17th)	Instrumentation of Growth trajectory, structural breaks, demographic window of opportunity, peer selection	
3	(Jan 20 th)	Martin Luther King Day (no class)	
	5 (Jan 22 nd)	Navigating the product space: Identifying opportunities for diversification	
	6 (Jan 24 th)	Case Study: The Chiapas Puzzle	
4	7 (Jan 27 th)	Growth Diagnostics	
	8 (Jan 29 th)	Principles of Differential Diagnosis	
	Seminar 3 (Jan 31st)	Atlas revision, data download and exercises	
5	9 (Feb 3 rd)	Testing for Human Capital as a Constraint	
	10 (Feb 5 th)	Testing for Finance as a Constraint	
	Seminar 4 (Feb 7th)	Factor Intensity at the Sector Level (Camels and Hippos)	
6	11 (Feb 10 th)	Macro Diagnostic: National Accounts and the Balance of Payments	
	12 (Feb 12 th)	Macro Diagnostic: Fiscal Policy	
	Seminar 5 (Feb 14th)	Macro: National Accounts and Balance of Payments	
7	13 (Feb 17 th)	Inequality and Inclusion	
	14 (Feb 19 th)	Green Growth	
	Seminar 6 (Feb 21th)	Testing for constraints using qualitative data: quantities and prices	
8	15 (Feb 24 th)	Guest Lecturers: Tomas Hernandez and Miguel Arvelo, Presidency, El Salvador Case Study: Debt for Nature Swaps (El Salvador)	
	16 (Feb 26 th)	Guest Lecturer: Nangula Uaandja, Head of the Namibian Investment Promotion and Development Board: Modern Industrial Policy (I): General Framework, Sector Selection and Investment Promotion.	
	Seminar 7 (Feb 28th)	Structuring the narrative of your final presentation	
9	17 (Mar 3 rd)	Modern Industrial Policy (II): Public Private Dialogs and Special Economic Zones	
	18 (Mar 5 th)	Bringing the Pieces Together: Looking Back and Looking Forward	
	Seminar 8 (Mar 7th)	Support to ongoing Growth Diagnostic testing work for final presentation (I)	
10	Mar 10 th	Student presentations	