

AAE 731: Frontiers of Development Economics II

Offered: Fall 2019
Classes: TR 9:30-10:45, B30 Taylor Hall
Credits: 3
Instructor: Ian Coxhead, ian.coxhead@wisc.edu

Overview

In this course we study economic development at the scale of the national economy. Our goal is to understand economic growth and development in lower-income economies, especially as affected by their interactions with the global system of international trade and factor flows.

We begin by reviewing standard models of aggregate economic growth, structural change, and the distribution of income, with particular focus on these processes as they occur in small open economies. Given initial dependence of many such countries on the exploitation and export of agricultural and natural resources, we devote substantial attention to the so-called “curse” of natural resource wealth and the macroeconomic and sectoral effects of resource export booms and busts. Subsequently, we address international integration and sectoral growth, especially agricultural development and industrialization; labor markets and migration, and the acquisition of human capital.

The scope of development economics as a field is vast, so achieving depth in any sub-field requires the sacrifice of some breadth. We focus on the application of analytical general equilibrium models, an approach that yields important insights but which requires a sacrifice of time spent on statistical hypothesis-testing. Empirically, the tradeoff between *ex ante* theory and examination of evidence will be finessed in part by concentrating on theory in class, while providing the opportunity to examine evidence from a developing country or countries through short assignments, student-led discussions and a term paper.

Learning Objectives

By the end of the course, students should be familiar with the general equilibrium approach to problems of economic growth and development. They should have a good understanding of intersectoral linkages in factor and product markets as well as the constraints imposed by resource endowments, international markets, and domestic technology and preferences. They should be able to parse the economic effects of exogenous events such as resource export booms, world market shocks and domestic policy innovations on prices, sectoral production, investment incentives, incomes and income distribution, and key measures of poverty and household welfare. They should be able to interpret the implications of these results for long-run economic growth and development, including some political economy aspects. Finally, they should be able to understand and work creatively with models of international trade and globalization insofar as they inform the development process.

Getting started

The course makes extensive use of neoclassical trade theory to motivate and construct general equilibrium models. To work with these, I assume familiarity with the dual approach to optimization, especially the derivation and properties of cost and revenue functions (revenue functions, also known GDP functions or restricted profit functions). If you need to brush up on these, consult Varian: *Microeconomic Analysis*. The basics of trade models will be covered in class, but if you haven't taken at least an intermediate course in international economics, then it will help to study Dixit and Norman, *Theory of International Trade* (1980, Ch. 2), and/or R. Feenstra, *Advanced International Trade* (2004, Ch. 1 and 3). They cover the basic theorems upon which neoclassical trade theory is built.

M. Soderbom and F. Teal (2015): *Empirical Development Economics* is a good reference for applied development economists. Its focus on econometric methods complements more model-based coverage in this class.

Ultimately, the only way to acquire familiarity with development economics as a field is to read—a lot. The North-Holland *Handbook of Development Economics* is a great introduction to the literature, as are parts of the North-Holland *Handbook of Economic Growth*. These can be accessed electronically through the UW library system. You should also subscribe to both the Development Economics and International Trade series at ssrn.com; this will result in almost daily emails containing titles and abstracts of newly released papers in these fields.

Prerequisites

Econ 709 and 711 or equivalent, and AAE642. If you haven't completed these courses, you need my consent to register for the course.

Texts

There is no single textbook. The course will draw on a variety of papers, journal articles and excerpts from books, all of which will be assigned at varying levels of 'requiredness' during the semester. Nearly all are readily accessible as electronic documents either directly or through the UW library system. I'll provide links where possible, but tracking down material is ultimately your responsibility.

Assessment

Assessment will consist of a mix of short assignments combining in-class oral presentations accompanied by written reports, a substantive midterm problem set, attendance and general in-class participation, and a research paper, which you will be expected to present in class in the last part of the semester. The paper will be due for submission on

Grading will follow the scale A=93-100%, AB=88-92%, B=83-87%, BC=78-82%, C=70-77%, D=60-69%, F=0-59%.

Consultation

My office is at 417 Taylor Hall. If my door is open, I am usually available to answer quick questions at any time. Alternatively, stop by or email me at ian.coxhead@wisc.edu to make an appointment.

Policy on Student Concerns/Complaints

Any student who has a concern or complaint specific to an experience in this course should first talk with the instructor. If the solution is still not satisfactory, you should follow the [UW grievance procedures](#).

Policy on Academic Integrity

We all make mistakes sometimes, but plagiarism—the deliberate appropriation of another's work without due citation and acknowledgment—counts as academic misconduct and attracts a mandatory penalty. It's also really dumb, mainly because when you copy the work of others you deprive yourself of a learning opportunity. Because plagiarism is an act of laziness, it is almost always super-easy to detect. So engaging in plagiarism is like saying "I'm lazy, you're stupid." Of course, with more time and effort you could conceal it better, but in that case why not spend the time doing original work instead?

If you have any questions about appropriate conduct, please see me and/or refer to the complete [UW statute on academic misconduct](#).

Students with Disabilities or Special Needs

The [McBurney Disability Resource Center](#), 263-6393, provides academic support services to students with disabilities. Students seeking accommodation should contact the center and request assistance as early as possible, preferably at least eight weeks prior to the date of anticipated need. It is your responsibility to inform me, in a timely manner, of any request for accommodation.

AAE 731: Frontiers of Development Economics II, Fall 2019

Class Schedule

	Approximate dates
Introduction	Sep. 5
Growth, trade and development: theory and evidence Aggregate growth and productivity Economic structure and growth	Sep. 10 – Oct. 1
Trade-theoretic approach to development issues Small open economies Resources, trade and development	Oct. 3 – 22
Contemporary development challenges Globalization and industrial growth Labor mobility and human capital Intergenerational transmission of gains from growth	Oct. 24 – Nov. 5 Nov. 7 – 26 Dec. 3 – 5
Research paper presentations	Dec. 10 – 12

Readings by Topic

I will indicate primary readings, which you should study *before* the relevant class. Other references are “recommended,” or will serve as sources for background/broader reading. If you have trouble finding or accessing any reference let me know.

Fun and/or useful reading - any time

- Arndt, H.W. (1985). *Economic Development: The History of an Idea*. (Chicago, IL: Chicago University Press). Surveys the key ideas and debates during the formative years of ‘development economics’. A little gem. [Chapter 3](#)
- Easterly, William (2001): *The Elusive Quest for Growth* (Cambridge, MA: MIT Press). Provocative and personal accounts of growth, aid, and policy reforms.
- Helpman, Elhanan (2004). *The Mystery of Economic Growth* (Cambridge, MA: Harvard University Press). Lucid discussion of growth and many related issues.
- Krugman, P. (1995): *Development, Geography and Economic Theory* (Cambridge, MA: MIT Press).
- Ray, Debraj (1998). *Development Economics* (Princeton, NJ: Princeton University Press). Good reference for concepts, models and debates.
- Schultz, T.W., 1980. “Nobel Lecture: The economics of being poor.” *Journal of Political Economy* 88(4): 639-651.
- Solow, Robert (2000). *Growth Theory: An Exposition*. NY and Oxford, UK: Oxford University Press, 2nd edition. Survey of the field by one of its patriarchs.
- Various editors and years: *Handbook of Development Economics* and *Handbook of Economic Growth* (Amsterdam: North-Holland). (All Handbooks of Economics can be accessed thru the UW Libraries).

GROWTH, TRADE AND DEVELOPMENT**Aggregate growth models and evidence***Growth models*

- Barro, R., and Sala-i-Martin, X. (2004). *Economic Growth*, 2/e (New York: McGraw Hill), [Chapter 1](#), and [Chapter 4](#), sections 4.1-4.3.

Estevadeordal, A., and A.M. Taylor (2013). "[Is the Washington Consensus dead? Growth, openness, and the great liberalization, 1970s-2000s](#)". *Rev. Econ. Stat.* 95(5): 1669-1690.

Solow, R. (2000). *Growth Theory: An Exposition* (Oxford: OUP), pp.97-186, esp. 97-105.

Evidence

Amiti, M., and J. Konings, 2007. "Trade liberalization, intermediate inputs and productivity: evidence from Indonesia." *American Economic Review* 97(5): 1611-1638.

Barro, R., and Sala-i-Martin, X. (2004). *Economic Growth*, 2/e (New York: McGraw Hill), [Chapter 12: "Empirical analysis of a cross section of countries"](#).

Lee, H.Y., L.A. Ricci, and R. Rigobon (2004). "Once again, is openness good for growth?" *Journal of Development Economics* 75: 451-472.

Levine, R., and D. Renelt (1992), "[A sensitivity analysis of cross-country growth regressions](#)". *American Economic Review* 82(4), September: 942-963.

Mankiw, N. Gregory; David Romer, and David N. Weil (1992). "[A contribution to the empirics of economic growth](#)", *Quarterly J. Econ.* 107(2): 407-438.

Roberts, M., and U. Deichmann (2011). "International growth spillovers, geography and infrastructure." *The World Economy* 34(9):1507-1533.

Wacziarg, R., and K.H. Welch. 2008. "Trade liberalization and growth: new evidence." *World Bank Economic Review* 22(2):187-231.

Broader reading:

Aghion, P., and P. Howitt, 2009. *The Economics of Growth* (Cambridge, MA: MIT Press), [Chapter 10](#).

Baldwin, R.E. (2003). "[Openness and growth: What's the empirical relationship?](#)" NBER WP No. 9578.

Durlauf et al. (2005), Appendix B to "Growth Econometrics", in P. Aghion and S. Durlauf (eds), *Handbook of Economic Growth* (Amsterdam: North-Holland), vol.1A, pp. 652-663.

Lewer, J.J., and H. Van den Berg, 2003. "[How large is international trade's effect on economic growth?](#)" *J. Econ. Surveys* 17(3): 363-396.

McCombie, J.S.L., 2018. "Verdoorn's Law." In S. Durlauf and S. Bloom, eds: *New Palgrave Dictionary of Economics*. (Available online through UW Libraries)

Moreno, R. and B. Trehan (1997). "Location and the growth of nations." *J. Economic Growth* 2: 299-418.

Obstfeld., M and K. Rogoff, 1996. *Foundations of International Macroeconomics* (Cambridge, MA: MIT Press), Ch. 7.

Ray, D. (1998). *Development Economics* (Princeton, NJ: Princeton University Press), [Chapter 2](#).

Rebelo, S., (1992). "Growth in open economies." *Carnegie-Rochester Conference Series on Public Policy* 36: 5-46.

Rodriguez, F., and D. Rodrik (1999). "[Trade policy and economic growth: A skeptic's guide to the cross-national evidence](#)", in B. Bernanke and K.S. Rogoff, eds., *NBER Macroeconomics Annual 2000*. Cambridge, MA: MIT Press for NBER: 261-325.

Structural change and development

Basu, K. (1997). *Analytical Development Economics* (Cambridge, MA: MIT Press), [Chapter 7](#).

Leamer, Edward E. (1987): "[Paths of development in the 3-factor, n-good general equilibrium model](#)" *Journal of Political Economy* 95(5), pp.961-999.

Lewis, W. A. (1954). "[Economic development with unlimited supplies of labor](#)", *Manchester School*, May; reprinted in A.N. Agarwala and S.P. Singh, eds (1958): *The Economics of Underdevelopment* (London: OUP), pp.400-435.

McMillan, M., D. Rodrik, and C. Sepulveda, eds., 2017. [Structural change, fundamentals and growth: a framework and case studies](#). Washington, DC: IFPRI.

- Murphy, K.M; A. Schleifer, and R.W. Vishny (1989). "[Industrialization and the big push](#)", *Journal of Political Economy* 97(5), pp.1003-1026.
- Rosenstein-Rodan, P.N. (1943). "[Problems of industrialisation in Eastern and Southeastern Europe](#)," *Economic Journal* 53, pp. 202-211.
- Schott, P. (2003). "[One size fits all? Heckscher-Ohlin specialization in global production](#)". *American Economic Review* 93 (3): 686-708
- Venables, A., 2017. "[Breaking into tradables: urban form and urban function in a developing economy](#)" *Journal of Urban Economics* 98: 88-97.
- Ventura, Jaume (1997). "[Growth and interdependence](#)." *Quarterly Journal of Economics*, vol. 112, no. 1, February, pp. 57-84.

Broader reading:

- Anderson, K., 2018. "Structural transformation to manufacturing and services: what role for trade?" CEPR Discussion Papers No. 13351.
- Deardorff, Alan (1999): "[Patterns of trade and growth across cones](#)", U. of Michigan School of Public Policy, Research Seminar in International Economics Discussion Paper No. 443.
- Krugman, P. (1994): "[The fall and rise of development economics](#)", a.k.a. "Toward a counter-revolution in development theory". *Proceedings of the World Bank Annual Conference on Development Economics 1992*, pp.15-38. Reprinted in Krugman, P. (1995): *Development, Geography and Economic Theory* (Cambridge, MA: MIT Press).
- Leamer, Edward E. et al. (1999): "[Does natural resource abundance increase Latin American income inequality?](#)" *Journal of Development Economics* 59, pp. 3-42.
- Ranis, G. (2003). "[Is dualism worth revisiting?](#)". Yale University, Economic Growth Center Discussion Paper No. 870.
- Ray, D. (1998). *Development Economics*, Ch. 5, 10.
- Vollrath, D., 2009. "How important are dual economy effects for aggregate productivity?" *Journal of Development Economics* 88(2): 325-334.

DEVELOPMENT IN OPEN ECONOMIES: RESOURCES, TRADE AND DEVELOPMENT

Building blocks: basic trade models and core theorems

- Corden, W.M. and P.J. Neary (1982). "[Booming sector and de-industrialization in a small open economy](#)," *Economic Journal* 92, pp. 825-848.
- Devarajan, S., Lewis, J.D. and Robinson, S. (1993). "[External shocks, purchasing power parity and the equilibrium real exchange rate](#)". *World Bank Economic Review*, 7, 45-63.
- Dixit, A. and V. Norman (1980): *Theory of International Trade* (Cambridge, Cambridge University Press), [Chapter 2](#).
- Feenstra, R. (2016). *Advanced International Trade: Theory and Evidence* (Princeton, NJ: Princeton University Press), [Chapter 1](#), [Chapter 2](#), and [Chapter 3](#)
- Sachs, J.D. and A.M. Warner (1999). "[The big push, natural resource booms, and growth](#)", *Journal of Development Economics* 59, pp. 43-76.
- van Wijnbergen, S. (1984): "[The Dutch Disease: a disease after all?](#)" *Economic Journal* 94, pp.41-55.
- Warr, P.G. (2006). "[The Gregory Thesis visits the tropics](#)". *The Econ. Record* 82 (257): 177-194.

Broader reading

- Bhagwati, J.N.; A. Panagariya, and T. N. Srinivasan. 1998. *Lectures on International Trade*, 2nd edition. Cambridge, MA: MIT Press, [Chapters 7, 9 and 10](#)

- Cassing, J. H. and P.G. Warr (1985). "[The distributional impact of a resource boom](#)," *Journal of International Economics* 15.
- Corden, W.M. 1984. "Booming sectors and Dutch Disease: Survey and consolidation." *Oxford Economic Papers*
- Gelb, A. (1986). "Adjustment to windfall gains: a comparative analysis of oil-exporting countries", in J.P. Neary and S. van Wijnbergen, eds: *Natural Resources and the Macroeconomy* (Oxford: Blackwell), pp. 54-91.
- Hausmann, R. and R. Rigobon (2002). "[An alternative interpretation of the 'resource curse': theory and policy implications](#)", NBER Working Papers No. 9424.
- Manzano, O. and R. Rigobon (2001), "[Resource curse or debt overhang?](#)" NBER Working Papers No. 8390.
- Mehlum, H.; K. Moene and R. Torvik (2006). "Institutions and the resource curse." *The Economic Journal* 116:1-20.
- Sachs, J.D. and A.M. Warner (2001). "The curse of natural resources", *European Economic Review* 45(4-6): 827-838.
- Sala-i-Martin, X., and A. Subramanian (2003). "[Addressing the natural resource curse: an illustration from Nigeria](#)", NBER Working Paper No. 9804.

CONTEMPORARY DEVELOPMENT CHALLENGES

Globalization and the developing countries

- Eichengreen, B., and Hui Tong. 2006. "[Fear of China](#)." *Journal of Asian Economics* 17: 226–240.
- Harrison, A. (2006). "Globalization and poverty." NBER Working Papers No.12347.
- Lin, J.Y., 2011. "From flying geese and leading dragons: new opportunities and strategies for structural transformation in developing countries." World Bank Policy Research Paper No. 5702.
- McMillan, M., and D. Rodrik. 2017. "[Globalization, structural change and productivity growth](#)." NBER Working Papers No. 17143.
- Pavcnik, N, 2017. [The impact of trade on inequality in developing countries](#). NBER WP 23878.
- Rodrik, D., 2016. Premature deindustrialization. *Journal of Economic Growth* 21(1): 1-33.
- Winters, L., Alan, Neil McCulloch, and Andrew McKay. 2004. [Trade Liberalization and Poverty: The Evidence So Far](#). *Journal of Economic Literature*, 42 (1): 72-115.
- Wood, A. (1997): "Openness and wage inequality in developing countries: the Latin American challenge to East Asian conventional wisdom", *World Bank Economic Review* 11(1): 33-47.
- Zhu, C., and D. Trefler, 2005. "Trade and inequality in developing countries: A general equilibrium analysis." *Journal of International Economics* 65: 21-48

Industrialization and global production systems

- Athukorala, P., and N. Yamashita (2006). "[Production fragmentation and trade integration: East Asia in a global context](#)", *North American Journal of Economics and Finance*, 17(3): 233-256
- Coxhead, I., and M. Li (2008). "[Prospects for skills-based exports in resource-rich developing economies: Indonesia in comparative perspective](#)." *Bulletin of Indonesian Economic Studies* 44(2): 199-228.
- Coxhead, I., and S. Jayasuriya (2010). "The rise of China and India and the commodity boom: economic and environmental implications for low-income countries". *The World Economy* 33(4), April: 525-551.
- Eichengreen, B., and Hui Tong. 2006. "[Fear of China](#)." *Journal of Asian Economics* 17: 226–240.
- Feenstra, R. (2016). *Advanced International Trade: Theory and Evidence* (Princeton, NJ: Princeton University Press), Chapter 4.

- Grossman, G., and E. Rossi-Hansberg (2006). [“The rise of offshoring: it’s not wine for cloth any more.”](#) Manuscript, Princeton University.
- Hanson, G., 2010. [“Why isn’t Mexico rich?”](#) NBER Working Papers No. 16470.
- Hanson, G., 2012. The rise of middle kingdoms: emerging economies in global trade. *Journal of Economic Perspectives* 26(2): 41-64.
- Hausman, R., J. Hwang, and D. Rodrik (2007). [“What you export matters.”](#) *Journal of Economic Growth* 12(1): 1-25.
- Jones, R.W., 2000. *Globalization and the Theory of Input Trade*. Cambridge, MA: MIT Press. Ch. 2.
- Rodrik, D., 2013. [“Unconditional convergence in manufacturing,”](#) *Quarterly Journal of Economics* 128 (1): 165-204.

International financial flows and real economic growth and development

- Diaz-Alejandro, 1983. Goodbye financial repression, hello financial crash. *Journal of Development Economics*.
- Little, I.; W.M. Corden, R.. Cooper and S. Rajapatirana, 1993. *Booms, Crises and Adjustment*.
- Obstfeld, M., 2009: International finance and growth in developing countries: what have we learned? IMF Staff Papers 56(1).
- Gourinchas, P., and M. Obstfeld, 2012. Stories of the twentieth century for the twenty-first. *AEJ: Macroeconomics* 4(1): 226-265.
- Rey, H., 2015 (revised 2018): Dilemma, not trilemma: the global financial cycle and monetary policy independence. NBER WP 21162.

Labor, human capital and migration

- Atkin, D., 2016. Endogenous skill acquisition and export manufacturing in Mexico. *American Economic Review* 106(8): 2046-85.
- Autor, D. H., Dorn, D., Hanson, G.H., & Song, J., 2014. Trade adjustment: Worker-level evidence. *Quarterly Journal of Economics* 129(4), 1799–1860.
- Autor, D.H., Dorn, D., & Hanson, G.H., 2016. The China shock: Learning from labor market adjustment to large changes in trade. *Annual Review of Economics* 8(1), 205-240..
- Chetty, R.; N. Hendren, P. Kline, and E. Saez, 2014. Where is the land of opportunity? The geography of intergenerational mobility in the United States. *Quarterly Journal of Economics* 129(4): 1553-1623.
- Chiquiar, D., 2008. Globalization, regional wage differentials and the Stolper-Samuelson theorem: evidence from Mexico. *Journal of International Economics* 74: 70-93.
- Dix-Carneiro, R., and Kovak, B., 2017. Margins of Labor Market Adjustment to Trade. NBER Working Paper 23595.
- Facchini, Giovanni; Liu, Maggie Y.; Mayda, Anna Maria; Zhou, Minghai, 2018: China's "Great Migration": The Impact of the Reduction in Trade Policy Uncertainty, IZA Discussion Papers, No. 11279.
- Fields, G.S., 2005. [A welfare economic analysis of labor market policies in the Harris-Todaro model.](#) *Journal of Development Economics* 76(1):127-46.
- Jalan, J., and M. Ravallion (2002), [“Geographic poverty traps? A micro model of consumption growth in rural China”](#), *Journal of Applied Econometrics* 17(4).
- Phan, D., and I. Coxhead (2010). Interprovincial migration and inequality during Vietnam’s transition. *Journal of Development Economics* 91(1), January: 100-112.
- Pritchett, L. (2010). [The cliff at the border](#). In Commission on Growth and Development: *The Growth Report*.
- Topalova, P., 2010. Factor immobility and regional impacts of trade liberalization: evidence on poverty from India,” *American Economic Journal: Applied Economics*. Vol. 2, No. 4, pp. 1–41

Zhai, F., and T. W. Hertel (2005). Impacts of the Doha Development Agenda on China: the role of labor markets and complementary education reforms. in T. Hertel and A. Winters, eds, *Poverty & the WTO: Impacts of the Doha Development Agenda* (Washington, DC: World Bank) [Download](#)

Intergenerational transmission of gains from growth and globalization

- Chetty, R., N. Hendren, P. Kline, and E. Saez, 2014. Where is the land of opportunity? The geography of intergenerational mobility in the United States. *Quarterly Journal of Economics* 129(4): 1553-1623.
- Coxhead, Ian and Rashesh Shrestha, 2017. Globalization and school-work choices in an emerging economy: Vietnam. *Asian Economic Papers* 16(2): 1-18.
- Edmonds, E., and N. Pavcnik, 2005. The effect of trade liberalization on child labor. *Journal of International Economics* 65(2): 401-419.
- Edmonds, E., Pavcnik, N. and Topalova, P., 2010. Trade Adjustment and Human Capital Investment: Evidence from Indian Tariff Reforms. *American Economic Journal: Applied Economics*, 2(4), 42–75.
- Solon, G., 1992, Intergenerational income mobility in the United States. *American Economic Review* 82(3): 393-408.
- Solon, G., 2002. Cross-country differences in intergenerational earnings mobility. *Journal of Economic Perspectives* 16(3): 59-66.