ECON 472:
Industrialization under Global Value Chains
Prof. Berhanu Abegaz

Fall 2019	Office:	Tyler Hall 335
TR: 2:00-3:20 (Tyler 121)	Off. Hrs.:	MW: 10-12 or by appt.

DESCRIPTION, LEARNING OBJECTIVES AND REQUIREMENTS

This COLL 400/Capstone seminar explores the interplay between new technologies and radical changes in the patterns of global production and trade, mainly for industrial goods. Since about 1990, a remarkable combination of ICT technologies, deep liberalization, and an ample supply of skilled labor in emerging economies has produced a multipolar and yet tightly integrated global economic order. Manufacturing production is fusing with services but rapidly disintegrating spatially between headquarter economies and factory economies. The research seminar explores the remarkable consequences of technological breakthroughs for catchup industrialization, multilateral governance, and inter-country and intra-country economic inequality.

We will use recently available data sets on industrial activity, employment, and income (see attached table for a description of freely available data and the sources) to conduct country and industry studies at two and three-digit levels. The questions we will explore include: Which is the bigger motive force: technology or trade? How do headquarter economies differ from factory economies? Are capabilities as important as resource endowments in defining comparative advantage? Can garment and apparel manufacturing still serve as a springboard for industrial takeoff as they did for China, Bangladesh, India, and Cambodia? Special economic zones, economic regions, dormitory towns, and platforms: Are they necessary? How relevant are 'nationalist' trade policies to the new globalization? Given the unprecedented rise in inequality, has the time come for Universal Basic Income in developed countries and Universal Poverty Income in developing countries?

TEXTBOOKS: There are four required books (inexpensive paperback versions are available for purchase at the Bookstore or from Amazon) which will give you the background knowledge for identifying research topics. The books are supplemented by mainly non-technical articles or chapters which are available from the course's Blackboard site. Homework assignments and lecture slides are also available from the seminar's Bb site.

The first two books provide you the theoretical framework and historical overview. The other two offer case studies of convergence and divergence. The volume of reading for this seminar is demanding but not onerous unless you engage in last-minute cramming. Here are the books:

1. *The Great Convergence: Information Technology and the New Globalization* by Richard Baldwin (Harvard University Press, 2016).
2. *Industrial Development in Africa: Mapping Industrialization Pathways for a Leaping Leopard* by Berhanu Abegaz (Routledge, 2018).

3. *Global Inequality: A New Approach for the Age of Globalization* by Branko Milanovic (Harvard University Press, 2016).
4. *The Rise and Fall of American Growth: The U.S. Standard of Living since the Civil War* by Robert Gordon (Princeton University Press, 2017).

GRADING: Students are required to formulate an interesting and answerable research question, choose an appropriate theoretical framework to generate competing explanations, and subject the answers to empirical tests based on readily-available economic data. Econ 303, 304, and 308 are pre-requisites.

This 4-credit seminar is structured around the following tasks and objectives:

- I will give you the minimum number of background lectures to get you going. The lectures will be followed by an exam to make sure that you have digested the core ideas and empirical regularities. You are expected to go beyond summarizing and synthesizing what you read; critical reformulations of extant research or raising new questions is what you should be after.
- All along, you should be searching for research topics and hypotheses by focusing on puzzles, popular misunderstandings, or glaring omissions in the literature. The goal of the capstone seminar is to encourage critical inquisitiveness and polish up your research skills.
- Conveying one's ideas in accessible, precise and concise terms is also an important skill. First-round class presentations are in the spirit of a thoughtfully critical review and synthesis of the literature
- The second-round class presentation must focus on the independent research paper: the question to be explored, the quantity and quality of data that will be used to generate evidence, the preliminary findings, and the policy recommendation—ideal policies as well as politically feasible second-best ones.
- Submission of the final research report after incorporating criticisms and constructive comments and suggestions from the class and the instructor.
- Playing the role of an economic advisor by submitting a two-page "Memo to the President" or an "Op-ed piece in the Washington Post" that distills the importance of the question, the credibility of the answer, and the net social benefit of the policy recommendation(s) that emerge from the analysis.

Your grade for the seminar will, therefore, be determined as follows. There will be one in-class test (30%) and two class presentations (20%). The bulk of the remainder [40%] will be based on the quality of the original research paper with a clear research question, an analytical framework, and appropriate evidence. A two-page (maximum of 1000 words) Memo or Op-Ed on the policy implications of the research paper in an accessible language makes up the remainder (5%). Attendance takes up the rest (5%). I will curve the final grade informally by looking at the distribution of the raw scores at the end of the semester. Late submissions and absences carry penalties.

Class Attendance, Honors, and Electronics: Class attendance is mandatory. Consistent class attendance and active class participation are also the most important predictors of the course grade. *Absolutely no electronic devices (laptops, cellphones, etc.) are allowed during lecture hours. The Honor Code will be fully enforced.*

SYLLABUS, ASSIGNMENTS, AND READINGS

Week 1-2: Waves of Industrialization
- What it is and how it is measured
  Abegaz (2018), chs. 1-3.

- Early industrialization
- Late industrialization
- Very-late industrialization
  Abegaz (2018), chs. 4-6.
  Gordon (2016), chs. 1-6, 16-18.

Week 3: Global Value/Supply Chains 1990
- ICT and Digital Technologies
- Containerization and Cargo Jets
- Headquarter Economies vs. Factory Economies
  Gereffi (2017), "Global Value Chains and Economic Development."
  https://gvcc.duke.edu/cggclisting/chapter-1-global-value-chains-and-economic-development/
  Baldwin (2016), entire book

Week 4: Industries and Latecomer Regions
- Textiles, Apparel, and Garments
- Resource Processing
- Service Exports
- Indo-China, South Asia, Africa
  Abegaz (2018), chs. 7-10 (skim).
  Xin Li, et al., "Recent Patterns of Global Production and GVC Participation,"
  GVC Development Report 2019, pp. 9-44.

Week 5: Deindustrializing vs. Industrializing Regions
- Economic Polarization within and between Countries
- Industrialization and the Emergence of a Middle Class in Industrializing Societies
- Deindustrialization and the Decline of the Middle Class in Industrial Societies
- Divergence, Convergence, and Backlash
  Milanovic (2016), entire book.
  E. Blanchard (2019), "Trade wars in the GVC era."
  http://faculty.tuck.dartmouth.edu/emily-blanchard/research-publications

Weeks 6- 7: Student Reactions and Review Presentations

What issues intrigued you and why? Which lines of thinking do you plan to pursue in your research? How do you plan to design your research?

⇨ MID-TERM EXAM (just before Fall Break)

Weeks 8-14: Student Presentation of Research

ClasPresentations I: Literature Review and Research Questions

I will assign 3-4 students to lead class discussions on pre-identified issues from the assigned readings. Presenters are expected to dig deeper than the lectures to deliver thoughtfully critical assessments of the scholarly debate on the subject with an eye on identifying possible research projects. As you synthesize the assigned readings and other relevant literature, start to develop a preliminary proposal which entails:

- A concise statement of and the rationale for the research question
- Identifying what is known and what is not, situated in the extant literature on the topic
- Providing a candid assessment of data to be analyzed and the econometric method to be used
- Deliverable: A one-page, double-spaced, reaction paper focusing on one potentially researchable topic.

Class Presentations II: Research Findings

- A 20-page research paper with an abstract of 150 words, exclusive of peripheral charts and references.
- A two-page distillation of the findings for dissemination to the economically literate public.

Sample Research Topics:

Industrialization under the "new globalization" now encompasses an unprecedented economic integration via trade in goods and long-term investment, but also through large cross-border flows of labor, portfolio investment, modern services, and international public goods. It has given us China and the rest of the BRICS, but also a way out of poverty for the so-called bottom billion.

Consider applying your modeling and econometric skills to research questions around such issues as:
- Leapfrogging through cellphone banking in East Africa
- Solar and other non-fossil energy sources for green development
- Case studies of latching on to the low rungs of the GVCs
- Case studies of climbing the ladder of GVCs
- Originators of new technologies versus commercializes of those technologies
- Born Globals: how some emerging economies are becoming headquarter economies
- The rapid closing of the skill/education gap between North and South
- FDI as a conduit of international trade or as exportation of high-wage jobs
- How footloose are export processing zones and industrial zones?
- Is Baumol's productivity disease of the service sector catching up with India?
- The massive investment demand for infrastructure in Africa
- Does the demographic dividend have high payoffs?

- What is pauperizing the American and the European middle class: trade or technology?
- Globalization: the dissipation of citizenship rent and the backlash against liberalism?
- Multinationals vs. Transnationals: Is Apple or Microsoft an American company?
- How does the fragile global governance system (e.g., Trump's politicization of tariffs and the international payments system) threaten to disrupt the global supply chain?

You may also choose to do a "replication study" of an article published in a reputable journal where the data used is publicly available. You must identify a weakness or a gap in the analysis that you can fill.

Thinking and Writing Like an Economist: Economists must excel in thinking and writing, both of which require *clarity*. You will find below very useful guidelines for topic selection, writing, and presenting in Economics. If you wish to review the use and misuse of economic models (as simplified representations of the most relevant an economic reality in a given context), Dani Rodrik's *Economics Rules* (W.W. Norton, 2015) is highly recommended.

A. Guidelines for Effective Writing in Economics

In a nutshell: *Clarity of writing follows clarity of thought (there are no universal models in economics); catch the attention of the reader in the first few lines and then get straight into your subject! Stuffiness with jargons, arrogance in argumentation, and chattiness tend to turn readers off. To minimize these communication failures, take the time to edit your essay ruthlessly.*

Dudenhefer, Paul, (2009, Duke): "A Guide to Writing in Economics."

https://www.google.com/search?q=writing+tips+economics+harvard&rlz=1C1GGRV_enUS751US751&oq=writing+tips+economics+harvard&aqs=chrome..69i57.6663j0j7&sourceid=chrome&ie=UTF-8

P. Nikolov (2013, Harvard): "Writing Tips for Economics Research Papers."

https://www.google.com/search?q=writing+tips+economics+harvard&rlz=1C1GGRV_enUS751US751&oq=writing+tips+economics+harvard&aqs=chrome..69i57.6663j0j7&sourceid=chrome&ie=UTF-8

B. Guidelines for Topic Selection and Presentations

I. Topic Selection for Research Paper

a) The best way to start your research is to do an EconLit search to come up with a preliminary bibliography, and then read a good book and a good recent journal article on the topic. At this stage, you should be able to identify interesting puzzles to focus your research effort.

b) Select an interesting topic, and well defined to allow you to be as concrete as possible. It could be a common misconception, a conundrum, a puzzle, or an overlooked issue.

c) Be critical in selecting the theoretical or analytical basis for your explanation and policy prescriptions, including the problems of implementation.

d) Remember that the primary objective of the exercise is to learn about the interaction among theory, institutions and development policy.
e) Obtain instructor approval by submitting research questions and bibliography.

II.   Research Papers and Class Presentations

a) Motivate the reader by clearly defining your research question/problem
b) Focus on the main issue and provide a logical structure for your arguments
c) Focus on things you understand/researched well
d) Try to write in the style of professional economists
e) Summarize your main findings
f) Provide adequate citations from credible sources
g) Provide evidence for your theoretical claims
h) Make sure that the discussion is well-balanced and aware of positive versus normative arguments.

III.   Reaction/Response Papers (RPs)

a) You may be asked to prepare RPs or thought pieces based on the readings to facilitate class presentations. These RPs are not intended to be onerous, busy-work, but are designed to get you thinking seriously, critically about the ideas/topics, help you with papers, and stimulate in-class, post-lecture discussion.
b) Here are some questions you should ask as you read articles and chapters: What question is the author attempting to answer? Why is this an important question? What does previous research have to say about the question? What sort of evidence does the author rely on and how good is it? What conclusions does the author reach and what are the implications for further research or policy?
c) RPs shall not just summarize the readings descriptively. Each RP shall respond to a specific, self-generated or instructor-provided, substantive, analytical question based on the readings and lectures, which should appear center page at the beginning of the RP. The RP shall then attempt to answer that question. Generally speaking, RPs should explore critically a particular aspect, theme, thought, controversy, or claim as a dry run for the research paper.
d) Grades for the RPs and presentations are based on substantive and analytical content; and clarity, including focus.

IV. More on Class Presentation (readings and preliminary research findings)

1. <u>Brief Synthesis of the Material Read</u>
   a. What are the basic ideas?
   b. What are the implications for theory in general?
   c. What are the implications for policy?
   d. Relation of this work to others in the field.

2. <u>Detailed Investigation</u>
   a. What specific hypothesis has been formulated explicitly or implicitly?
   b. What assumptions does the author make?
   c. What are the conclusions or derivations? Are they logical and consistent?

3. <u>Empirical Evidence (where applicable)</u>
   a. What is your assessment of the quality and coverage of the data and how well can it help you answer the research question?
   b. How does the author suggest that the theory can be tested?
   c. Can you suggest any other tests?

<ol start="4" style="list-style-type: lower-alpha;">

       d.   What does the empirical evidence suggest concerning the validity of the theory?

       e.   Evaluate the sources of information (data), nature of the tests, and conclusions.

4. Policy Analysis

       a.   Is the implied or stated policy measures conditional on others not explicitly analyzed here?

       b.   What methods and techniques are appropriate for further analysis of the policy implications?

       c.   What assumptions are being made, explicitly or implicitly, about the policy-makers and the policy environment that would affect implementation?

5. Presentation

       a.   Have I stated my central thesis clearly, and concentrated on its explication?

       b.   Have I paid special attention to spelling out the policy lessons?

REFERENCES & DATA SOURCES

Economic Blocs:

United States
European Union (E.U.)
OECD
BRICS (Brazil, Russia, India, China, S. Africa)

Major Actors:

The World Bank and Regional Development Banks
The International Monetary Fund
Multinational/Transnational Corporations
The European Central Bank
WTO and Regional Economic Blocs
International NGOs
Bilateral Aid Agencies
Basel Committee

The table below identifies the major sources of data on industrial activity. After settling on a research question, you should identify the relevant data and start cleaning it up. There will be help with empirical design and STATA from teaching assistants.

Cross-Country Data Sources on Industrial Development

Dataset	Brief description
Groningen Growth & Dev. Centre (GGDC)	The GGDC 10-Sector database provides a long-run internationally comparable dataset on sectoral productivity for Africa, Asia, and Latin America. Source: www.rug.nl/research/ggdc/data/10-sector-database
Key Ind. Labor Market (KILM)	The KILM Database is a comprehensive database of country-level data on 18 key indicators of the labor market from 1980 to the latest available year. Source: www.ilo.org/empelm/what/WCMS_1142/lang-en/index.htm
Global Mat. Flows Database	The Global Material Flows Database comprises data for than 200 countries for 1980-2011, and for more than 300 different materials aggregated into 12 categories of material flows. Source: www.materialflows.net/home
Industrial Pay Inequality Database	The UTIP-UNIDO Industrial Pay Inequality Database provides Theil measures of inequality in wages and earning for 167 countries covering the period, 1963-2008. Source: www.edac.eu/indicators_desc.cfm?v_id=209
World Bank: (WDI) and ES	World Development Indicators (WDI) presents the most comprehensive and up-to-date economic and social data. Enterprise Surveys (ES) provides economic data for 135 countries, 100 indicators, and 130,000 firms since 2005. Sources: http://data.worldbank.org/data-catalog/
World Input-Output DB (WIOD)	WOID provides time series data on input-output tables for forty countries covering the period, 1995-2011. Source: www.wiod.org/new_site/home.htm
World Integrated Trade System (WITS)	WITS database is a compilation of data on trade and tariffs from various relevant databases, mainly from the Comtrade database of the United Nations Statistical Division. Source: http://wits.worldbank.org/about_wits.html
Labor Cont. of Exports (LACEX); Job Cont. Exports (JOCEX)	LACEX was developed by Cale et al. (2015) based on a panel of global input-output tables and exports from the Global Trade Analysis Project (GTAP) and employment data from the ILO. The database measures the contribution of labor to a given country's exports – measured as employees' compensation or wages (LACEX) or the number of jobs (JOCEX). LACEX covers a maximum of 120 countries and JOCEX 88 countries. Source: http://data.worldbank.org/data-catalog/lacex
RPED	The World Bank is undertaking a large cross-country study of manufacturing enterprise development in Africa. Participating countries include Cameroon, Ghana, Kenya, Nigeria, Tanzania, Malawi, Zambia, and Zimbabwe. Source: http://documents.worldbank.org/curated/en/980771468193748295/pdf/568910NWP0RPED10Box353743B01PUBLIC1.pdf
Global Financial Development Database (GFDD)	The Global Financial Development Database is an extensive dataset of financial system characteristics for 203 economies. It contains annual data, starting from 1960 through 2013 for 109 indicators. Source: http://www.worldbank.org/en/publication/gfdr/data/global-financial-development-database.
International Development Statistics (IDS)	IDS are the depository of CRS data on official development assistance from DAC and non-DAC donors, managed by the OECD. Sources: http://www.oecd.org/development/stats/idsonline.htm.
OECD	The Tea database provides data on services, exports, imports, and supply chains related to GVCs. Source: http://data.worldbank.org/data-catalog/export-value-added