Course Background

What public policies promote the growth of the economy? This question is as old as economics itself. The early answer was given by Adam Smith as an understanding of “perfect liberty” (a society of freely contracting agents). During the Great Depression direct intervention by the state was called for. We now examine a new question, “What is the role of entrepreneurship in economic development?” And if one exists what are the policy issues, if any: Acs, Entrepreneurship Growth and Public Policy: Prelude to a Knowledge Spillover Theory of Entrepreneurship, Edward Elgar 2008. This is a collection of my works on the subject over 30 years.

This course focuses on a closer collaboration between entrepreneurship and public policy and studies the economic development through a new lens—the creation and incubation of new knowledge. While the lens has many facets, there are three theoretical fields we focus on: the new growth theory; second the new economic geography; and the new economics of entrepreneurship. This course examines a ‘knowledge spillover theory of entrepreneurship’ as a link between theories of entrepreneurship and theories of growth. Many other interconnections can also be found at the regional level as firms forge networks, clusters and specialized markets. The public policy issues form the foundation of this course.

Before the current depression, the U.S. economy had enjoyed remarkable economic success during the past decades, as measured by the most important economic statistic that matters – the rate of productivity growth, which over the long run, determines the rate of advance in average living standards. After surging at a 2.6 percent annual rate from 1950 to 1973, productivity growth dropped to 1.4 percent from 1973 through 1995. Although the 1.4 percentage point annual decline may seem trivial, compounded over time, it had enormous consequences. At the former rate, living standards would double every 28 years; at the latter rate, this doubling would take almost twice as long, or over 50 years. What accounts for this good fortune so far? Conventional economic wisdom has converged on the view that the “information technology (IT) revolution” – especially rapidly falling prices of computer chips and the products in which they are embodied –
has been key. As measured by the conventional statistics, there seems to be much truth in this [Oliner and Sichel, 2002].

But a deeper change in the structure of the American economy itself – a decades-long transition from managerial to entrepreneurial capitalism -- also seems to have played an important role in the acceleration of productivity growth. This transition was perhaps first articulated by Zoltan J. Acs (1984) in *The changing Structure of the U.S. Economy*, that markets, new technology and entrepreneurship were at the heart of a transition from managerial to entrepreneurial capitalism. The full flowering of this process has recently been told by David Audretsch in *The Entrepreneurial Society* (2007), and Carl Schramm in *The Entrepreneurial Imperative* (2006a). These three books push against the same thing: The Managed Economy.

Audretsch and Schramm describe in detail this economy of the 1950s, carefully documenting the interaction between labor, big business and government. In “Our Lazarus Moment” and “The Deluge”, Schramm and Audretsch, respectively, describe the moment of the tipping point for the years of transition in the United States. In a remarkable way, both of these books come to similar conclusions about the nature of the new American Society. However, they do not see its future in the same way. Audretsch believes that the rest of the world learned from the American model, thereby threatening its own comparative advantage. He notes: “America had in ten year transformed itself from a self-doubting society to one of self –celebration. America had it, and the rest of the world did not…..Having spent considerable time in Europe and Asia observing recent efforts to create their versions of an entrepreneurial society, ‘I wondered, What will the United States do when the rest of the world catches up?’” (Audretsch, 2007: 192)

Carl Schramm has an answer for Audretsch: Far from fearing an entrepreneurial transformation around the globe, future of the American experiment actually depends on the rest of the word emulating it! “For the United States to continue its global leadership, it must help the world see clearly the breadth and depth of our economic evolution…It is in American’s interest to see our system replicated all over the world. We must believe that in flourishing entrepreneurial economies the widening distribution of wealth and the creation of new jobs will naturally help lead to the spread of democracy….It is imperative that we—everyone everywhere—go into this entrepreneurial future together” (Schramm, 2006a: 176, emphasis added).

Four distinct features of our increasingly entrepreneurial capitalism are noteworthy (Acs and Armington, 2006; Audretsch, Kalback and Leaman, 2006; Baumol, Litan and Schramm, 2007):

- **Firm structure is more dynamic.** Coming out of World War II, the U.S. economy was dominated by large firms, often in oligopolies (industries characterized by only a few firms). Turnover among the largest firms in the economy was limited, new firms played a minor role. In the last several decades, this has changed dramatically. New firms offering new products and services – in information technology, biotechnology, retailing, and foreign entrants in the
traditional industries (autos and steel, to name a few) – have been a main, if not the main drivers, of economic growth.

--Markets and individual firms are replacing bureaucracies (inside and outside the private sector). A hallmark of entrepreneurial firms is that they have relatively flat management structures that can rapidly change direction in response to market demands, in contrast to large firms, where management is hierarchal and more bureaucratic and decisions take longer to be made. In the managerial economy, there was an implicit compact between “big labor, big business and big government.” [Galbraith, 1967]. That compact, if it ever existed, clearly is now gone. Labor’s share of the workforce has fallen dramatically, big business is in flux (with constant changes in the rankings of America’s leading firms), and more of government at all sectors is being contracted out to the private sector.

--Multisided Markets are replacing many traditional markets in the economy. Multisided markets or platforms are companies that help different groups of users find each other. Multisided platforms create value by reducing transaction costs and making markets more efficient. They also raise several sorts of issues in anti trust, competition and regulation.

--Innovation is very different in managerial and entrepreneurial settings. New firms, led by risk-taking entrepreneurs, are disproportionately responsible for “radical”, or “breakthrough” technologies, though larger, managerial firms are typically needed to refine and mass-produce and market these breakthroughs [Baumol, 1993]. The innovations that now characterize modern life -- the automobile, the telephone, the airplane, air conditioning, the personal computer, most computer software, and search engines for the Internet – all were developed and commercialized by entrepreneurs. Because radical innovations tend to lead to faster overall growth than incremental improvements, it is no coincidence that the IT revolution that statistically has accounted for the significant acceleration in U.S. productivity growth over the last decade was largely sparked by entrepreneurial companies (Acs and Audretsch, 1989).

Along with innovation was the technological revolution in information and communications technologies. The digital revolution started in the 1950 with the invention of the transistor and the microprocessor in the 1970s helped shape and transform the way much of the world works.

--Social issues on how to close the model are paramount. In the managed economy the model was closed with the government. The government through taxation could and would tax entrepreneurial wealth and redistribute it to society. This of course discouraged entrepreneurship. In socialist countries the activity of wealth creation by private individuals might in fact be illegal so the issue does not emerge. In oligarchies entry into the wealth creation and distribution is limited to a certain class of individuals. Entrepreneurial capitalism represents a special case where the creation of wealth and the reconstitution of it are governed by
individual initiative (economic, political and social freedom) where the individual is not constrained to create wealth but is constrained on what he or she can do with it. This so-called American model of wealth reconstitution sits at the heart of the social question.

How did this transformation transpire? Some historical context is useful. Economic growth and public policy is a question as old as economics itself. It dates back to the Mercantilist debates in the 17th century. However, the introduction of entrepreneurship into this debate is a relatively new topic. At bottom, any society that wishes to encourage entrepreneurship must make it rewarding and easy to do. For the most part, the United States over the years has developed laws and institutions that effectively do that: a legal system that protects rights of contract and property (including intellectual property), state and local registration systems that make it easy to form a business, a tax system that has generally moved to lower marginal tax rates (thus enhancing rewards from both employment and entrepreneurial activity), and laws that have facilitated the growth of a financial system that generally backs the formation and growth of new ventures (Schramm, 2004).

Several federal policy initiatives in the United States, adopted during Democratic and Republican administrations over the past three decades, have helped support the shift from a managerial to an entrepreneurial economy (Acs, 1984 Chapter 10):

--The removal of legal barriers to entry and price controls in a number of key industries, transportation and communications in particular.

--Successive Executive Orders requiring executive branch agencies at least to study the costs and benefits of introducing new regulations before adopting them, and legislation requiring agencies to tailor their regulations to the “the size and the resources of the affected business” (with special regulatory flexibility for small businesses seeking to raise capital).

--Various tax reforms that have had the effect of enhancing the rewards from entrepreneurship, including cuts in the capital gains tax rate (from 49 percent prior to 1977 to its current 15 percent) and reductions in the top individual marginal tax rate (from 70 percent prior to 1981 to a rate that currently is about 38 percent).

--Legal changes that have allowed pension funds to finance the formation and growth of new firms, by investing in venture capital partnerships.

--Federal legislation aimed at accelerating the commercialization of innovations, in universities (through the Bayh-Dole Act of 1980, which granted universities exclusive control over inventions funded by the federal government) and in small
business (by earmarking 1.25 percent of federal R&D funds for small business, under the Small Business Innovation Development Act of 1982).

For all these reasons, policy makers at all levels of government not only should have a strong interest in promoting entrepreneurship directly, but also should take into account the impact their decisions on a wide range of issues are likely to have on entrepreneurial activity. In effect, we are interested in two different, but related questions: “What should entrepreneurship policy look like?” and “What does policy look like in an entrepreneurial economy?”

For much of the time that the managerial economy existed governments tried to support the small and medium sector of the economy. However, much of this was to promote democracy and not efficiency. In other words, SME policy was less about productivity growth and more about political pluralism (Acs and Audretsch, 2002). See Storey (2003) for a full treatment of these policies.

During the 1990s a string of initiatives was carried out that started to focus attention on individuals instead of firms. The first careful treatment of the distinction between SME policy and entrepreneurship policy was by Lundstrom and Stevenson (2005). However, much of this was directed at disadvantaged individuals so in effect the result was more of the same, bringing the disenfranchised into the economic main stream. However, it was also recognized that much of the entrepreneurial activity in the economy that affected productivity growth was carried out by the ‘best and the brightest.’ Two books that deal with this are Hart (2003) who focuses on a regional high-technology perspective and Holtz-Eakin and Rosen (2004) who take a broader view.

All of these approaches however miss the essential point, that there is “no such thing” as entrepreneurship policy per say, only policy in an entrepreneurial economy. This overarching view was the subject of a Kauffman Foundation policy paper “Roadmap for an Entrepreneurial Economy” (Kauffman, 2006). A key question is, How can policy makers maintain, and ideally accelerate, the continuing transition toward a more entrepreneurial economy? We now turn to this question.

The world is now in a global transformation. This course also examines the larger question of how entrepreneurship and economic development is progressing on a global scale: globalization. This course puts the entrepreneurship debate into a global context from the lens of economic development. It explores the role of productive, unproductive and destructive entrepreneurship, and the role of public policy. It also explores the role of social entrepreneurship as a mechanism to bring social change to millions and millions of people in the world.
Course Description

The Phenomenon: Entrepreneurship and Economic Development are two fascinating topics in and of themselves but when combined they become explosive. Using them to understand globalization is even more fascinating. First, what is economic development? It is about the level of and the quality of life. This topic is usually studied at the country level, and mostly in countries that are less developed. So the unit of analysis is the country. However, it can be any economy, a continent, like Africa, a city like Baltimore, or a region like Southern Italy.

Second, what is entrepreneurship? Entrepreneurship is about how people change their level of development. It can be studies at the cognitive level (psychology) where the unit of analysis is smaller than the person. It can be studies at the level of the individual (social Psychology). It can be studied at the level of the organization or firm. It can also be studies at the level of the country but this is rather a new area of research. If you want to get a good focus on this you can pick up the, *Handbook of Entrepreneurship Research*, by Acs and Audretsch (2010) Springer Publishers. It is a great reference book. Also available in electronic form for $24.95 through book store.


The History: We are going to pull together entrepreneurship and development at the unit of the economy mostly the country level. As a start I would like to get us all on the same page. Pick up what I think is the most relevant book for us, *Why Nations Fail*, by Acemoglu and Robinson (2012). I like this book because it puts the blame for poverty on the lack of good institutions and not geography or the weather. And it does not advocate more aid. We will read this throughout the course. If you have already read the book in another course so much the better off you will be.

http://www.amazon.com/Why-Nations-Fail-Origins-Prosperity/dp/0307719219/ref=sr_1_fkmr0_1?s=books&ie=UTF8&qid=1357508757&sr=1-1-fkmr0&keywords=dwhy+nations+fail

The Theory: The knowledge spillover theory of entrepreneurship (KSTE) is a promising new field that has been initiated linking endogenous growth theory to knowledge spillovers and entrepreneurship. Please read, Ghio, Guerini, Lehmann and Rossi-Lamastra, The Emergence of the knowledge spillover theory of entrepreneurship, *Small Business Economics*, 44(1), 1-18. This theory is distinct from all other theories of entrepreneurship in that it focuses on spillovers.
The Data: In order to get some sense of what is happening we need data to study this dual complex phenomenon. In law school and business school we would use cases to understand the problems. By the end of your studies you would have been through scores of cases and would know how to react in any situation. However, the world has moved in the direction of indexes as a way to deal with complex phenomenon. I have developed one of these tools, *The Global EntrepreneurshipIndex*, 2017 (GEI) for short focuses on institutions and people. You can download it from the GEDI web site.

http://cepp.gmu.edu/

The Story: Finally we need a story and for that we are going to rely on Evans and Schmalensee on Matchmakers.

Required Text:

Entrepreneurship:


Entrepreneurial Capitalism: (pick one)


The new Economics of Multisided Platforms


(Resource website) http://matchmakereconomics.com/
Requirements:

M. A. students pick a successful multisided platform company and pick one that failed and write a comparison of why one succeeded and one failed. The focus for you is on the second half of the reading in this course mainly the role of Matchmakers.

PhD students are required to write a scholarly paper that can be submitted for publication. Try to pick an area where you have some prior expertise. Read one of the three books, AA, AKL or BLS. Each has a particular on what is an entrepreneurial economy. Three policy books follow H, HER, and LS. Read one of them. The paper must be journal quality, original in idea, flawless in its logic. Twenty five pages double spaces, 12 point type.

Students will lead class discussion.

Part I Analytical Overview


Part II The Existence of Entrepreneurial Opportunity


**Part III The Discovery of Entrepreneurial Opportunity**


**Part IV Opportunity and the Nature of Exploitation**


**Part V. Knowledge Spillover Theory of Entrepreneurship**


**Part IV: Entrepreneurship and Economic Development**

108-120.


**VII. Digital Technology and the Ecosystem**


Esteban, Acs, Sanders and Szerb, “Productivity and Growth: The relevance of the National System of Entrepreneurship,” FIRES Project, University of Utrecht, September 2017 online.


China’s Digital Economy: A leading global force, McKinsey and Company
http://www.mckinsey.com/global-themes/china/chinas-digital-economy-a-leading-global-force?cid=other-eml-alt-mgi-mgi-oth-1708&hllkid=751b73b9a9674e89a9790d85e75d240e&hctky=2569028&hdpid=e31341e3-14e7-43da-a2b7-9a6011f5c12e
VIII. Introduction and Basic Concepts

Matchmakers

Chapter 1: How a Matchmaker Took the Friction out of Restaurant Reservations

Chapter 3: The Technologies Behind the Explosive Growth of Matchmakers

Other reading or listening


Andrew Rachleff and Sara Rosenthal, “OpenTable,” Case E418, (Stanford Graduate School of Business, 2011).
https://www.gsb.stanford.edu/faculty-research/case-studies/opentable

IX. Economic Principles for Matchmakers

Matchmakers

Chapter 2: How One-Sided Analysis Led Many Dot-coms Astray

Other reading or listening:

Jean Tirole, Video lecture on two-sided markets, 2013.


http://www.hbs.edu/faculty/Pages/item.aspx?num=38219

X. How Multi-Sided Platforms Create Value

Matchmakers
Chapter 4: How Multisided Platforms Create Value by Finding and Reducing Transactions Costs

Other reading or listening:


XI. Getting off the Ground: Ignition and Critical Mass

Matchmakers

Chapter 5: Multisided Platforms Must Secure Critical Mass, Or Else

Other reading or listening:


http://www.hbs.edu/faculty/Profile%20Files/Hagiu_Andrei_CV%202010072015_d0babdc3-ed78-4aec-b240-d0791260b4f2.pdf


Pricing for Profitability and Growth

Matchmakers

Chapter 6: How Balancing Prices Drives Value and Profits

Other Reading or Listening

http://ir.wexinc.com/phoenix.zhtml?c=186699&p=irol-sec

XII. Shaping the Matchmaker’s Ecosystem

Matchmakers

Chapter 7: Building a Platform and Ecosystem that Can Create Value

Other reading or listening:


XIII. Designing the Platform

Matchmakers

Chapter 8: Building Platforms to Maximize Activity and Value

Other reading or listening:


Session 8. Rules and Enforcement
Matchmakers

Governing Bad Behavior by Platform Participants

Other reading or listening:


XIV. Evaluating Platform Pioneers

Chapter 10: Making Smart Bets on New Matchmakers

Other reading or listening:

XV. The Transformation of Payments

Chapter 11: How a Matchmaker Leapfrogged Banking and Brought Financial Inclusion to an Impoverished Country

Other reading or listening:

David S. Evans and Richard Schmalensee, Paying with Plastic, 2nd ed. (Cambridge, MA: MIT Press, 2005), Chapters 1, 3, and 6
The Transformation of Retail

Matchmakers

Chapter 12: How Multisided Platforms Are Transforming Retail

Other reading or listening:


Matchmakers Uber Alles?

Matchmakers

Chapter 13: What History Teaches Us About the Future of Matchmakers

Other reading or listening:


Plagiarism
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