overview

why economics?

Stiglitz & Romer
readers respond

economics & information
a historical account

economics, information, & development
why economics?

information age gurus?
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Charles Hamlin
William Harding
Daniel Crissinger
Roy Young
Eugene Mayer
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Marriner Eccles
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"politically the nation's identity was established by the government; economically it was vested in the central bank"

--Polanyi
economics & the public sphere

econopundits

New York Times: Paul Krugman

New York Times: “the economic scene”

New Yorker: Malcolm Gladwell

New Yorker: James Surowieki (The Wisdom of Crowds)

econoblogging:

Brad deLong, Tyler Cowan, Matthew Yglesias, Marginal Revolution, Crooked Timber ...
economic argument & contrarian glee

Steven Levitt & Stephen Dubner,
Freakonomics, 2006

Superfreakonomics, 2009
wisdom about crowds?

"Economics has come nearer than any other social science to an answer to that central question of all social sciences, how the combination of fragments of knowledge existing in different minds can bring about results which, if they were to be brought about deliberately, would require a knowledge on the part of the directing mind which no single person can possess."

--Hayek, "Economics and Knowledge," 1937
"Economics is far more versatile than its critics believe. It is a method of analysis and not just a field of study. The method is to combine two core assumptions—individual optimization and equilibrium—with various sets of specific assumptions adapted to different fields of application. The method is applicable not only to the market system but also the social and political environment within which this system is embedded. Social and psychological insights can be encapsulated in the specification of interdependent preferences, which hold the key to modelling all kinds of institutional behavior in rational terms."

--Buckley & Casson. "Economics as an imperialist social science" 1993
neither irony nor shame?

"Economics is not only a social science, it is a genuine science ... refutable implications. ... By almost any market test, economics is the premier social science. The field attracts the most students, enjoys the attention of policymakers and journalists, and gains notice, both positive and negative, from other scientists. In large part, the success of economics derives from its rigor and relevance as well as from its generality. The economic toolbox can be used to address a large variety of problems drawn from a wide range of topics."

--E.P. Lazear, "Economic Imperialism," 2000
attractiveness

broad explanatory power

robust modelling
"the competitive model virtually made economics a branch of engineering" -- Stiglitz

whiggish history
- Mandeville's "harlot & highwayman"
- progress: rising height, weight, gdp, equality

pareto efficiency

de-centralized, self-regulating systems
-information the key ingredient
a field in step

political economy to economics
law and economics

academic consensus

conceptual consensus
markets, preferences, equilibrium & rationality

modelling consensus
"do the math"

repelling monsters
the decline of "high-development theory"
2008 -- end of empire?

a field in crisis?
freshwater vs saltwater

old rebels
Stiglitz, new Keynesians

new rebels
Greenspan?
Posner??

return of the repressed?
marxists
behaviorists
Samuelson
Richardson?
forgotten monsters

MEMOIRS
OF
EXTRAORDINARY POPULAR DELUSIONS
AND THE
Madness of Crowds.

By CHARLES MACKAY, LL.D.
Author of "Rosa," "The Salamander," etc

1852
back in step?

"The ideas of economists and political philosophers, both when they are right and when they are wrong, are more powerful than is commonly understood. Indeed the world is ruled by little else. Practical men, who believe themselves to be quite exempt from any intellectual influences, are usually the slaves of some defunct economist."

--Keynes

"The ideas of the ruling class are in every class the ruling ideas"

--Marx
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an appalling vista...

[dissent from methodological individualism] "implies that the behavior of men is directed by mysterious forces that defy analysis and description."  --Ludwig von Mises, The Ultimate Foundation of Economic Science, 1962

"Many resource-based theorists reject formal modelling altogether, and adopt the nihilistic stance that in a complex world any model of the firm will distort more than it illuminates."

-- Mark Casson, Information and Organization, 1997

"The costs of rejecting normality ... are substantial"

Fama, 1970
re-recantation?

“But the notion that somehow my views on regulation were predominant and effective at influencing the Congress is something you may have perceived. But it didn’t look that way from my point of view.”

--Alan Greenspan, testimony, 4/7/2010

"Today’s competitive markets, whether we seek to recognise it or not, are driven by an international version of Adam Smith’s “invisible hand” that is unredeemably opaque. With notably rare exceptions (2008, for example), the global “invisible hand” has created relatively stable exchange rates, interest rates, prices, and wage rates."

--Alan Greenspan, FT, 3/30/2011
**information in economics**

Is that what we mean by *information*?

Is it something we can speak to?

Education

Insurance

Development
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"Systems in many respects resemble machines. A machine is a little system, created to perform, as well as to connect together in reality, those different movements and effects which the artist has occasion for. A system is an imaginary machine invented to connect together in fancy those different movements and effects which are in reality performed."

--Adam Smith, *Astronomical Enquiries*
"When I first saw the plan and superstructure of your very ingenious and very learned Treatise on the Wealth of Nations, it gave me the compleat idea of ... A System, that might fix some first principles in the most important of sciences, the knowledge of the human community and its operations. That might become *principia* to the knowledge of political economy as Mathematicks are to Mechanics, Astronomy, and the other Sciences."

--Thomas Pownall, *Letter...to Adam Smith*, 1776
no state regulation

*The Road to Serfdom*, 1944

*The Fatal Conceit*, 1988

knowledge & information

“Economics and Knowledge,” 1937

“The Use of Knowledge in Society,” 1945
"Clearly there is here a problem of the division of knowledge which is quite analogous to, and at least as important as, the problem of the division of labour. ... instead of showing what bits of information the different persons must possess in order to bring about the result, we fall in effect back on the assumption that everybody knows everything."

--Hayek, “Economics and Knowledge,” 1937
"the so called "data", from which we set out in this sort of analysis, are (apart from his tastes) all facts given to the person in question, the things as they are known to (or believed by) him to exist. ... any change which leads him to alter his plan, disrupts the equilibrium relation between his actions.
"'data' ... [as] the objective real facts, as the observing economist is supposed to know [or] ... the subjective sense, as things known to the persons whose behaviour we try to explain."

--Hayek, 1937
"[price is an] "index ... in which all the relevant information is concentrated...

"prices can act to coördinate the separate actions of different people

".... The whole acts as one .... because .... individual fields of vision overlap so that through many intermediaries the relevant information is communicated

"equilibrium analysis ... seems to have so extraordinarily little to say about the institutions, such as the press, the purpose of which is to communicate knowledge. ... a peculiar blindness to the rôle played in real life by such institutions as advertising. ... That an economist of [Prof S] standing should thus have fallen into a trap which the ambiguity of the term "datum" sets to the unwary."

--Hayek, 1945
advertisement and information

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<tr>
<td>Chambers</td>
<td>ADVERTISEMENT: an Intelligence or Information, given to Persons</td>
</tr>
<tr>
<td>Bailey</td>
<td>ADVERTISEMENT: Advice, intelligence, Information, Warning</td>
</tr>
<tr>
<td>Johnson</td>
<td>ADVERTISEMENT 2: Intelligence, information; 3 Notice of anything published in a paper of intelligence</td>
</tr>
<tr>
<td>Wesley</td>
<td>ADVERTISE: to inform APPRIZE: to inform</td>
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"it is neither necessary nor useful to attribute to advertising the function of changing tastes ... advertising affects consumption not by changing tastes, but by changing price"

George J. Stigler & Gary S. Becker "De Gustibus Non Est Disputandum," 1977
machine dreams

Babbage to Weiner

*Cybernetics, or Control and Communication in the Animal and the Machine*, 1948

von Neumann & Morgenstern

*(Theory of Games, 1944)*

"perfect information"
“A market in which prices always "fully reflect" available information is called efficient ...

"Three relevant information subsets:

"**weak form**: the information set is just historical prices ...

**semi-strong form**: in which the ... prices efficiently adjust to other information that is obviously publicly available ...

"**strong form** ... groups have monopolistic access to any information relevant for price formation."

-- Eugene Fama,

"Efficient Capital Markets," 1970
less principled?

"information as that which is being communicated becomes identical with 'knowledge' in the sense of that which is known"

--Fritz Machlup, The Production and Distribution of Knowledge, 1963
"One should hardly have to tell academicians that information is a valuable resource: knowledge is power"

information, search, uncertainty, advertising, signalling

-- George Stigler,

"The Economics of Information," 1961
"As the market grows in these dimensions, there will appear a set of firms which specialize in collecting and selling information. They may take the form of trade journals or specialized brokers ... there is a strong tendency towards monopoly ... a 'standard' source for trade information".

--Stigler,

"The Economics of Information," 1961
moreover

"perfect information ... free, complete, instantaneous, and universally available ... [is] one of the defining features of the perfect market ...

"at the same time, both the perfect and the actual market structure ... depend on information being a commodity, ... costly, partial, and deliberately restricted"

--James Boyle, 

Shamans, Software & Spleen, 1996
"I will think rather of information as a general descriptive term for an economically interesting category of goods which has not hitherto been accorded much attention by economic theorists....information is like a commodity ... But ... only to a limited extent"

--Arrow, 1973
"When there is uncertainty, there is usually the possibility of reducing it by the acquisition of information. Indeed, information is merely the negative measure of uncertainty. ...

--Kenneth Arrow

"Information & Economic Behavior," 1973
"Economy arises only if the signals transmitted are summaries of the information received... the costs of transmission are much lower than those of acquisition, and it is possible that joining the observers into a single organization can represent a net economy... Once learned, however, it is cheaper to reuse the same system than to learn a new one... If external conditions change, an originally optimal communication system may no longer be the one that would be chosen... Eventually the communication system may be very inefficient at handling signals, and the firm may vanish." -- Arrow
more problems?

“There is an incentive for sellers to market poor quality merchandise ...

The difficulty of distinguishing good quality from bad is inherent in the business world.

An asymmetry in available information has developed: for the sellers now have more knowledge about the quality of a car than the buyers ... Gresham’s law has made a modified reappearance."

Why I Am Leaving Goldman Sachs

By GREG SMITH
Published: March 14, 2012

TODAY is my last day at Goldman Sachs. After almost 12 years at the firm — first as a summer intern while at Stanford, then in New York for 10 years, and now in London — I believe I have worked here long enough to understand the trajectory of its culture, its people and its identity. And I can honestly say that the environment now is as toxic and destructive as I have ever seen it.

To put the problem in the simplest terms, the interests of the client continue to be sidelined in the way the firm operates and thinks about making money. Goldman Sachs is one of the world’s largest and most important investment banks and it is too integral to global finance to continue to act this way. The firm has veered so far from the place I joined right out of college that I can no longer in good conscience say that I identify with what it stands for.

It might sound surprising to a skeptical public, but culture was always a vital part of Goldman Sachs’s success. It revolved around teamwork, integrity, a spirit of humility, and always doing right by our clients. The culture was the secret sauce that made this place great and allowed us to earn our clients’ trust for 143 years. It wasn’t just about making money...
information plugs a gap?

"I was struck by the imperfections of information ... asymmetries ... between those governing and those governed.

"peculiar implications of the model ... it seemed not to address issues such as incentives and motivation. But much of the research was directed not at these big gaps."

--Stiglitz
what do we mean by full, im/perfect, in/complete, or a/symmetrical information?
and how do we perfect, complete, or make full or symmetrical?

"it is hard to imagine what a world with perfect information would be like"

--Stiglitz
"While there is a single way in which information is perfect, there are an infinite number of ways in which information can be imperfect."

Stiglitz
"The transcripts of the 2006 meetings, released after a standard five-year delay, clearly show some of the nation’s pre-eminent economic minds did not fully understand the basic mechanics of the economy that they were charged with shepherding. The problem was not a lack of information; it was a lack of comprehension, born in part of their deep confidence in economic forecasting models that turned out to be broken."
economic information?
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"somewhere in the world a new opportunity for the use of some raw material, say tin, has arisen ..."—Hayek, 1945

**divisions of**

- commodities
- labor
- knowledge
"human capital .. could be studied using the economic tools developed for objects"

"Must economic theory recognize a different kind of good--ideas--if it is to explain .. growth?... If there are only object gaps, the implications for poor countries are much more pessimistic than if there are also idea gaps"

--Paul Romer
"Idea gaps, in contrast are relatively easy to solve. ... an important fraction of worldwide poverty may be due to an idea gap that can be reduced at relatively low cost. ... the world already possess the knowledge needed to provide a decent standard of living for everyone on Earth ... crucial pieces of specialized, highly trained human capital can be put to work domestically by inviting in managers and technicians."

--Romer
the object gap disappears?

"Access... through unimpeded flows of the capital goods that are produced in industrialized nations."

..."absorption capacity ..."
it's just information

Grandfather: Well, I finally finished my doctoral thesis.
Woman: Way to go, Gramps.

Grandfather: Did my research at Indiana University.
Woman: Indiana?

Grandfather: Yup. IBM took the school's library...and digitized it. So I could access it over the Internet.

She cocks her ear to take this all in.

Grandfather: You know...It's a great time to be alive.

Tag: IBM. Solutions for a small planet.
kinds of distance?

- geographical
  - extension courses

- social
  - correspondence degrees

the Open University
The mechanical faculty of Lancashire is said to be due to the influence of Norman smiths who were settled at Warrington by Hugo de Lupus in William the Conqueror's time. And the greater part of England's manufacturing industry before the era of cotton and steam had its course directed by settlements of Flemish and other artisans; many of which were made under the immediate direction of Plantagenet and Tudor kings. These immigrants taught us how to weave woollen and worsted stuffs, .... They taught us how to cure herrings, how to manufacture silk, how to make lace, glass, and paper, and to provide for many other of our wants.

--Alfred Marshall, Principles of Economics, 1920 [1890]
When an industry has thus chosen a locality for itself, it is likely to stay there long: so great are the advantages which people following the same skilled trade get from near neighbourhood to one another. The mysteries of the trade become no mysteries; but are as it were in the air, and children learn many of them unconsciously. Good work is rightly appreciated, inventions and improvements in machinery, in processes and the general organization of the business have their merits promptly discussed: if one man starts a new idea, it is taken up by others and combined with suggestions of their own; and thus it becomes the source of further new ideas. And presently subsidiary trades grow up in the neighbourhood, supplying it with implements and materials, organizing its traffic, and in many ways conducing to the economy of its material.

-- Marshall
Every cheapening of the means of communication, every new facility for the free interchange of ideas between distant places alters the action of the forces which tend to localize industries. Speaking generally we must say that a lowering of tariffs, or of freights for the transport of goods, tends to make each locality buy more largely from a distance what it requires; and thus tends to concentrate particular industries in special localities: but on the other hand everything that increases people's readiness to migrate from one place to another tends to bring skilled artisans to ply their crafts near to the consumers who will purchase their wares.

--Marshall
mobility

The Great Transformation

im/mobility
commodities
finance
people?

ideas, ethics

nationally (19c)
disequilibrium?

economic discourse

communication theory

information/knowledge

just plain information