

# Left Field Observations on The Information Revolution in Economics

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# Outline

- Revolutionary Leader and Foot Soldier
- Expected Utility Analysis
- Radical Uncertainty and Behavioral Economics
- Keynesian Interventionism or Burkean Conservatism?

# Revolutionary Leader and Foot Soldier (1)

- No question that there has been an Information Revolution in Economics.
- No question that Joe Stiglitz is a revolutionary leader. Stiglitz, Rothschild-Stiglitz, Stiglitz-Weiss, Shapiro-Stiglitz, Grossman-Stiglitz, Greenwald-Stiglitz, Newbery-Stiglitz, etc etc.

# Revolutionary Leader and Foot Soldier (2)

- No question that development economics is closely entwined with the information revolution. The development context provided the spur for the theorizing and conceptualizing of Stiglitz, Akerlof, and others. And the information revolution in turn has implications for development economics and development policy.
  - Share cropping and agrarian relations
  - Credit rationing, moneylenders, microfinance
  - Asymmetric information and efficiency wages
  - Migration models
  - Commodity Price Stabilization
  - Free trade and uncertainty
  - Etc etc

# Revolutionary Leader and Foot Soldier (3)

- But what can you say after Joe Stiglitz has given his account of the Information Revolution in Economics?
- A bit like critiquing Fidel Castro's account of the Cuban Revolution, or Eisenhower's account of the D-Day landings.
- Particularly difficult when you agree with the revolution and the revolutionary on everything, and consider yourself to have been a foot soldier, having fought in the "risk taking and inequality" detachment of the revolutionary brigades.

# Revolutionary Leader and Foot Soldier (4)

- So, what to do? To make commentary somewhat interesting, I will come at the revolution from Left Field and pose some methodological questions for myself, for Joe and for all of us to ponder.

# Expected Utility Analysis (1)

- The core analytical tool in the information revolution armory has been Expected Utility (EU) Analysis.
- As we all know, questions have been raised about the independence axiom which undergirds the Expected Utility representation of preference orderings.
- It is this axiom which allows the representation to be separable in a specific way between the utility of an outcome with certainty and the probability of that outcome.
- But individuals do not appear to behave according to this axiom.

# Expected Utility Analysis (2)

- At one level, it is remarkable that so many features of the real world, like credit rationing or insurance market failures, can be explained with models in which agents are assumed to behave in a manner in which they do not behave in practice.
- And it may not matter methodologically, so long as the predictions of the models are not falsified by observations.
- But it does raise the question: how exactly would the iconic results of the classic models in the revolution survive without EU?



# Expected Utility Analysis (3)

- In all of the well known exercises which establish the iconic results of the imperfect information revolution, we use EU.
- When we show that a pooling equilibrium can be broken by a separating insurance contract, and a separating equilibrium can be broken by a pooling contract, we use EU comparisons. When we show that credit rationing is an equilibrium for lenders, we use EU. And so on.
- Question: Could we construct these equilibria, or show non-existence of equilibrium, if agents did not behave according to EU?

# Expected Utility Analysis (4)

- My instinct is that we could. In the insurance context, for example, non-EU preferences might allow a wider range of contract offers which could break an existing equilibrium.
- But the candidate equilibrium would first have to be described in a non-EU frame.
- [Note: Not enough to argue that EU works locally as a linearization—many of the results require global comparisons].

# Radical Uncertainty and Behavioral Economics (1)

- Keynes, 1937
- “By "uncertain" knowledge, let me explain, I do not mean merely to distinguish what is known for certain from what is only probable. The game of roulette is not subject, in this sense, to uncertainty....The sense in which I am using the term is that in which the prospect of a European war is uncertain, or the price of copper and the rate of interest twenty years hence..... About these matters there is no scientific basis on which to form any calculable probability whatever. We simply do not know.”

# Radical Uncertainty and Behavioral Economics (2)

- “How do we manage in such circumstances to behave in a manner which saves our faces as rational, economic men? We have devised for the purpose a variety of techniques, of which much the most important are the three following:.....(1).....(2).....(3) Knowing that our own individual judgment is worthless, we endeavor to fall back on the judgment of the rest of the world which is perhaps better informed.”

# Radical Uncertainty and Behavioral Economics

## (3)

- “Now a practical theory of the future based on these three principles has certain marked characteristics. In particular, being based on so flimsy a foundation, it is subject to sudden and violent changes.....At all times the vague panic fears and equally vague and unreasoned hopes are not really lulled, and lie but a little way below the surface.”

# Radical Uncertainty and Behavioral Economics

## (4)

- These “behavioral considerations”, as they would now be called, are not present in Rothschild-Stiglitz, Stiglitz-Weiss, Grossman-Stiglitz, etc etc. In all of those models agents are rational choice EU maximizers.
- So, questions.
- Does it matter that the models which describe so well outcomes in actual markets have models of individual behavior which are so far removed from reality?
- How different would the outcomes of those models be if agents in them followed the precepts of recent behavioral economics rather than rational choice EU analysis?
- Would it matter for policy?

# Keynesian Interventionism or Burkean Conservatism?

(1)

- Does imperfect information, particularly of the radical uncertainty variety (“We simply do not know”), make one tend towards Keynesian interventionism or Burkean conservatism?

# Keynesian Interventionism or Burkean Conservatism?

(2)

- “Burke ever held, and held rightly, that it can seldom be right . . . to sacrifice a present benefit for a doubtful advantage in the future. . . .; we should be very chary of sacrificing large numbers of people for the sake of a contingent end, however advantageous that may appear. . . . We can never know enough to make the chance worth taking. . . .”
- “There is this further consideration . . . it is not sufficient that the state of affairs which we seek to promote should be better than the state of affairs which preceded it; it must be sufficiently better to make up for the evils of the transition.”

Keynes (1904)



# Keynesian Interventionism or Burkean Conservatism?

(3)

- “But this *long run* is a misleading guide to current affairs. *In the long run we are all dead.*” (Keynes, 1923).
  - “Keynes would have rejected the claim of today’s austerity champions that short-term pain, in the form of budget cuts, is the price we need to pay for long-term economic growth. The pain is real, he would say, while the benefit is conjecture.” (Skidelsky, 2013)
- Also, “Burke’s Timidity on Embarking on War” (Keynes, 1904)

# Keynesian Interventionism or Burkean Conservatism?

(4)

- So far, so good.
- But from Burke's prudence principle also flowed an institutional conservatism.
- "But the age of chivalry is gone. That of sophisters, economists, and calculators has succeeded; and the glory of Europe is extinguished for ever."

*Reflections on the Revolution in France*

# Keynesian Interventionism or Burkean Conservatism?

(4)

- You see, Sir, that in this enlightened age I am bold enough to confess that we [the English]...instead of casting away all our old prejudices, we cherish them... and, to take more shame on ourselves, we cherish them because they are prejudices; and the longer they have lasted, and the more generally they have prevailed, the more we cherish them.

*Reflections on the Revolution in France*

# Keynesian Interventionism or Burkean Conservatism?

(5)

- “Decision makers suffer from switcher's curse if they forget the reason that they maintained incumbent policies in the past and if they naively compare rival and incumbent policies with no bias for incumbent policies. I find that conservatism emerges as a heuristic to avoid switcher's curse. The longer a process or policy has been in place, the more conservative one should be. On the other hand, the more conservative were past decision makers, the more progressive one should be today.”

Aaron Edlin “Conservatism and the Switcher’s Curse”, 2015

# Keynesian Interventionism or Burkean Conservatism?

(6)

- “We can never know enough to make the chance worth taking, and the fact that cataclysms in the past have sometimes inaugurated lasting benefits is no argument for cataclysms in general. These fellows, says Burke, have ‘glorified in making a Revolution, as if revolutions were good things in themselves’.”

Keynes (1904)

- Institutional conservatism was also deeply ingrained in Keynes, who wanted to save capitalism, not end it. Actually, what Keynes really wanted was to save the world of late Victorian and Edwardian England, which came to an end in 1914.

# Keynesian Interventionism or Burkean Conservatism?

(7)

- So imperfect information, radical uncertainty, can be the basis for either Keynesian Interventionism or Burkean Conservatism or, in Keynes's mind, both!
- In any event, so far as Joe Stiglitz is concerned, to paraphrase Keynes on Burke, "This fellow has glorified in making a revolution, as if a revolution was a good thing in itself."
- No question that the Information Revolution has indeed been a good thing in itself.
- As a foot soldier in the Information Revolution, I salute our leader!

Thank You!