The Power of Ideas: 
Milton Friedman’s Empirical Methodology

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Milton Friedman and the Power of Ideas: 
Celebrating the Friedman Centennial 
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The ultimate goal of a positive science is the development of a “theory” or “hypothesis” that yields valid and meaningful (i.e., not truistic) predictions about phenomena not yet observed. Such a theory is, in general, a complex intermixture of two elements. In part, it is a “language” designed to promote “systematic and organized methods of reasoning.” In part, it is a body of substantive hypotheses designed to abstract essential features of complex reality. —Friedman, 1953 (Methodology of Positive Economics)
The ultimate goal of science in any field is a theory—an integrated “explanation” of observed phenomena that can be used to make valid predictions about phenomena not yet observed. Many kinds of work can contribute to this ultimate goal and are essential for its attainment: the collection of observations about the phenomena in question; the organization and arrangement of observations and the extraction of empirical generalizations from them; the development of improved methods of measuring or analyzing observations; the formulation of partial or complete theories to integrate existing evidence.

—Friedman 1950 (Wesley Clair Mitchell as an Economic Theorist)
There is of course no sharp line between the empirical scientist and the theorist. We are dealing with a continuum, with mixtures in all proportions, not with a dichotomy.

“The most reckless and treacherous of all theorists is he who professes to let facts and figures speak for themselves.” (Marshall, 1885)

And, one might add,

“The most reckless and treacherous of all empirical workers is he who formulates theories to explain observations that are the product of careless and inaccurate empirical work.”

—Friedman 1950 (Wesley Clair Mitchell as an Economic Theorist)
“You cannot be sure that you are right unless you understand the arguments against your views better than your opponents do.”
The two stages of constructing hypotheses and testing their validity are related in two different respects. In the first place, the particular facts that enter at each stage are partly an accident of the collection of data and the knowledge of the particular investigator. The facts that serve as a test of the implications of a hypothesis might equally well have been among the raw material used to construct it, and conversely. In the second place, the process never begins from scratch; the so-called “initial stage” itself always involves comparison of the implications of an earlier set of hypotheses with observation; the contradiction of these implications is the stimulus to the construction of new hypotheses or revision of old ones. So the two methodologically distinct stages are always proceeding jointly.
Response to Tobin (1974):
Two Contrasting Styles of Economic Theory

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Two Contrasting Styles of Economic Theory

- From a Marshallian approach theory is (quoting Marshall) "an engine for the discovery of concrete truths."
- From a Walrasian approach abstractness, generality, and mathematical elegance have in some measure become ends in themselves, criteria by which to judge economic theory.
The fallacious notion on which I have placed so much emphasis, that hypotheses can be tested by the ‘realism’ of their assumptions independently of the accuracy of their predictions, has had far-reaching consequences in economics. The desire for descriptive realism which this belief so greatly strengthened indirectly fostered mathematical economics with its emphasis on Walrasian general equilibrium analysis as an escape from the ceteris paribus of partial equilibrium analysis: ‘it encouraged emphasis on the arithmetical rather than the economic considerations in all branches of economic analysis.’” —(Friedman, 1952)
From a letter to Friedman by E.B. Wilson commending him for his review of a book by Oscar Lange (1944)

Cleverness is highly admired even though meaningless.
—E.B. Wilson, 1946
Friedman’s Examples of the Best Examples of Economic Science Circa 1946

4. Jacob Viner, *Canada’s Balance of International Indebtedness 1900-1913* (1924)
Friedman suggested that Wilson might also consider

M. Friedman and S. Kuznets, *Income from Independent Professional Practice* (1945), Chapters 3 and 4
Excluded because there is no reverse influence of the empirical work on the theoretical structure, Schultz took the theory as fixed and given and tried to measure what he thought were the essential functions in the theory. He imposed extremely high standards of care and thoroughness in the measurement process—but nowhere attempted what seems to me the fundamentally important task of reformulating the theory so it would generalize the observable data; He always tried to wrench the data into a pre-existing theoretical scheme, no matter how much of a wrench was required.
What Makes Chicago Economics Distinctive?

“There’s no doubt that Chicago was distinctive and has been ever since. The real distinction was not making price theory the focal point of the graduate curriculum. That isn’t the real distinction at all. The fundamental distinction is treating economics as a serious subject versus treating it as a branch of mathematics and treating it as a scientific subject as opposed to an aesthetic subject, if I might put it in that way . . . The fundamental difference between Chicago at that time and let’s say Harvard was that at Chicago, economics was a serious subject to be used in discussing real problems and you could get some knowledge and some answers from it.”

―(Letter from Friedman to Hammond, 1992)
If we are to preserve our heritage, we must continue to insist that intellectual quality and intellectual quality alone be the basis of appointments to the faculty... The objective pursuit of knowledge—to science in the broadest sense.
The Culture of Chicago Economics

Controversies among faculty members, mostly on an intellectual basis, helped to make the department an exciting place to study, preserved an atmosphere of a search for the truth, and developed the tradition that what mattered in intellectual discourse was only the cogency of an argument, not the diplomacy with which it was stated, or the seniority or professional standing of the person who stated it.
Three Ground Rules for Chicago Economics

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- The third ground rule is that Chicago economics demands that scholars move beyond selective and self-serving appeals to “stylized facts” to “illustrate” theories and instead engages and promotes the serious scientific task of careful and creative analyses of data, linking theory and evidence. Chicago values the hard empirical work that produces convincing evidence and rigorous economic theorizing that produces lasting contributions to important problems.

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