

Economics by the Numbers

Economics is usually divided into positive and normative economics. Most methodological discussions have involved the methodology inappropriate for positive economics.

Elsewhere (Colander 1992) I have argued that most economists' work does not fall under positive economics, but instead falls under the methodological heading, the art of economics. This argument follows from J.N. Keynes (1891) methodological discussion which Friedman cites as his source for the normative/positive distinctions. In this paper I outline my view of the appropriate methodology for the art of economics and its relationship to the teaching of economics.

The art of economics covers the application of insights of positive economics to the goals that have been determined in normative economics.

Keynes' discussion of the art of economics was almost *Fruyuberdicm*—almost everything goes—it could be loose, non economic in character, but did not provide the benchmarks by which to judge applied work.

But just because work is loose and includes non-economic factors does not mean that anything goes and that the work should not be subject to methodological rules. If anything there is more need for methodological...

As an application of this, let's consider Graff analysis of tariff policy. What are the two central issues in tariff policy? Perhaps the potential retaliation of other countries—and the optimal tariff would change significantly if another country retaliates. It was not meant to . . .

The Art of Economics and Turf Toe

Perhaps the most distinctive aspect of Friedman's methodology, and the one that provoked the most discussion was the F-twist. That a theory should not be judged by the realism of its assumptions, but instead by its predictive accuracy. Whether this is appropriate to positive economics is debateable, but it is not appropriate to the art of economics, because the art of economics cannot be formally tested. This, more than any thing else, caused a contradiction in Friedman's practice of the art.

Politics and Friedman's. . .

Most of Friedman's policy conclusions followed from his vision of government—a sense of how government worked; price controls, licensing, discarding home trying is policy more all inappropriate policy, not because positive theory let to it, but

Conclusion, there is a wonderful irony in Friedman's work—he was an artist, claiming to be a scientist. He played a beautiful tune but those who came. . .

Estimating the Demand Elasticity of Money

rules in the art of economics because what one is doing is so ill deferred.

Rule #1: Do not violate the law of significant digits.

I list this rule first because it is the one I believe that is most often violated. Failure to follow this rule does not make the research wrong, simply irrelevant. Let me give an example from violating the law of significant digits. Say you are multiplying these numbers, 2.04271×4.0446 where $3 < y < 4$. One could carry out the multiplication of the first two

numbers to the 10th decimal and then multiplying the result by an antimode of, say, 3.5.

The problem here is not the answer arrived at by that process is wrong; it is simply inefficient and much of the work that went into it did not improve the accuracy of the result because that result will be no more accurate than the least significant digit.

proxies and statistical test

Seldom does one have the precise measure

Rule #2: Be objective. Use the Reasonable Person criteria to judge policy

- State your views of institutions
- Use reasonable person criteria; \$20 bill method and policy relevance?
- state normative views that you are implementing and why those normative views are worth achieving. Example: pareto optimality not very important, efficiency, distributional consequences, not more ???

The goals that one discusses policy in relation to are determined in normative economics; they are not the economists own goals; still since the art is so messy and one does not have formalization to help keep ones values out of the analysis, one must be even more careful to be open about ones views—of the value of existing institutions, of the way in which government works,

Rule #3: Use the best economic theory available

- knowing alternate models to decide what is best
- example IS/LM, dynamic feedback, rational expectations
- theory of the firm

Rule #4: Take in all dimensions of the problem

- effect on institutions
- judge what's important
- find out what individuals really want; normative goals—consumption

bias, fairness

Rule #5: Use whatever empirical work that sheds light

- formal statistical tests

Rule #6: Present only those empirical tests that are convincing to you.

Rule #6a: Do not be falsely scientific

Rule #6b: When empirical results are ambiguous as they always inevitably are, say so, discuss sensitively

Rule #7: Do not see your argument as final—one part in the political process

Rule #8: Break a methodological rule whenever reasoned common sense suggests that it should be broken.

Conclusion

The methodological rules are stated as firm fules. In presenting them so, I was following Strunk and White's rules of writing. Understaing is better promoted when one is firm and wrong, than when one is wishy-washy and

right. Clear controversy is the fodder of understanding, and in the art of economics, one is trying to promote understanding. But clear controversial statements are precisely the type of statements that are often wrong, and can be shown to be wrong, and scholars, like all people, seem to have a natural proclivity