SITUATIONAL ECONOMICS

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Abstract

This paper argues that the various theories of economics have the potential to add value when they are applied to the appropriate situation, yet educational institutions each seem overly committed to only a single theory. The resulting intense debates between economists are destructive and should be replaced with attempts to combine multiple theories in situations where they are most appropriate. An econometric example demonstrates that combining the valuable information and relationships in different theories can improve overall understanding. Consequently, economics education should teach a broad range of theories, identifying the specific situations in which the assumptions of each theory, or combination, best apply.

Key Words: macroeconomic debates, schools of thought, economic assumptions

JEL Classification: B41, A22

Introduction

An individual studying higher level economic theory will likely be impressed with the beauty and elegance of the proofs, with the mathematical underpinnings, and with the strength and quantity of rational argument. But, is this the light or the shadow? While the depth of the work and the quality of thought clearly are capable of contributing much to understanding the human social experience, there is often an unnoticed elephant in the middle of the room. When one expert's adamant opinion cannot be reconciled with another's, to the point that they won't even talk to each other, is this a search for truth or simply practitioners committed to cults of dogma that focus their eyesight inward. Keynes said of Marxism that it was, "not only scientifically erroneous but without interest or application for the modern world" (Hardcastle 1973). Marx was also full of disparagement as he called the marginalism of his time "vulgar" economics. Does today's economist have to pick between exclusive clubs?

Nature of the Problem

While everyone with a casual exposure to economics understands the variety of economic views and has heard the constant jokes about economic disagreements, the problem extends far beyond jokes. Is this a surface rebellion, as teenagers who must express views different than their parents to show their independence and get attention, or is it a fundamental irreconcilable difference like a religious difference? Milton Friedman suggested that the reports of the disagreement are overblown. He explained that most of the disagreement is over policy not economic theory (Friedman 1968) and is famous for saying that "we are all Keynesians now." Even if this were true during the 1960s, it is not true today. David Prychitko (1998) explains, "The disagreements have grown stronger, the debates more grand. Economists no longer argue simply over the slopes of the curves....the entire equilibrium-based model is open to serious reexamination and criticism." James Tobin, a Keynesian economist, won the Nobel Memorial Prize in Economic Science in 1981 and Robert Lucas, a proponent of rational expectations, won

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the same prize in 1995. Arjo Klamer (1983) tells us that "James Tobin and Robert Lucas taken alone are both reasonable men, but they cannot talk reasonably with each other."

Consequences of the Problem

There are three reasons to argue and disagree: one may think the other person is in the wrong; one may think that one's own position is right; or both. As simple as this sounds, it leads to two different results.

The first is to tear down your opponents' argument and the second is to build and expand your own. A casual review of the literature shows a large amount of focus on tearing down rather than building up. This author's recent review of the top five ranked economic journals found almost 20% of the articles attacked a theory. Are more convinced of the fallacies of our antagonist than in the benefits of our own theories? In the world of theory, just as in the physical world, it is easier to break and destroy than to create and build.

A good example of tearing down rather than building and finding common ground is the Cambridge capital controversy. The controversy was primarily a theoretical and mathematical debate over the role of capital during the 1960s. The debate arose between Paul Samuelson and Robert Solow of Cambridge, Massachusetts in the U.S., and Joan Robinson and Piero Sraffa of Cambridge University in the U.K. After years of arguments and attacks, there was agreement that Robinson and Sraffa had undermined the critical neoclassical assumptions (Burmeister 2000). They had shown that the neoclassical assumptions about capital were circular and too restrictive for the modern world. These same unrealistic assumptions, however, are required for many economic models and this prevented the Robinson and Sraffa camp from developing effective alternatives.

After all the attacks, the general mainstream theory went on as if nothing had happened. Today, the ideas of the Solow capital based growth model are still the centerpiece of most modern growth models. Bliss (2005) summarizes:

...what one might call the existential aspect of capital theory has not attracted much interest in the past 25 years. A small band of 'true believers' has kept up the assault on capital theory orthodoxy until today... If one asks the question: what new idea has come out of Anglo-Italian thinking in the past 20 years?, one creates an embarrassing social situation. This is because it is not clear that anything new has come out of the old, bitter debates. Meanwhile mainstream theorizing has taken different directions. Interest has shifted from general equilibrium style (high-dimension) models to simple, mainly one-good models...Can the old concerns about capital be taken out, dusted down and addressed to contemporary models? If that could be done, one would hope that its contribution could be more constructive than the mutually assured destruction approach that marred some of the 1960s debates.It reflects badly on economists and their keenness of intellect that this was not always obvious to everyone.

This example demonstrates the lack of results from all the effort spent attacking opposing theories. If the same efforts were directed toward supporting theories and finding common ground, the result could lead to improved new theories. This would reflect better on economists.

A New Analogy

The world is a large, complex place that is always changing. In an attempt at a joke, a college essay question that was a little too difficult was sarcastically stated as: "Explain the

universe; use the back of the page if necessary." Economic questions that model actual occurrences in the world do not model the whole. While Ockham's razor reminds us there is logic in eliminating any unnecessary assumptions, it also produces a model fit only for a specific situation.

Blinder and Baumol's (2009) popular principles book explains the difference between the stylized abstract of economic models and the real world in terms of a map. This is actually a good analogy because a map is fit for a purpose. A political map does not layout geography. A topographical map may not show roads, etc. The map is a simplified representation of only part of the real world. It is easy to criticize a map by simply pointing out what it does not show; a political map does not show hills and valleys, for example. Economic theories are similarly easy to criticize in a world filled with billions of individual people, thousands of cultures, religions, institutions, endowments, etc. What exactly are we demanding from our economic models?

Economists can fall into the trap of touching what is within arms reach rather than standing back and seeing the whole. In the parable of the blind men and the elephant, each of the blind men describes a different part of the elephant and each vehemently disagrees with the others on the proper description of an elephant. Is not this the best parallel with today's economic schools of thought?

Which school of thought is correct? Many can be, but each for its own appropriate situation. Some will complain that saying many are correct is weak - an evasion or avoidance - that unless we at least say who is *most* right we are not communicating anything meaningful. Which of the blind men is most right about the elephant? It all depends on what we are talking about: the elephant's side, leg or trunk!

Situational Economics

Economists have been following the principle "if the only tool you have is a hammer, everything seems to be a nail." If we only use one theory we tend to use it for all analyses. It would be better if the theory used actually fit the specific and historical context. The agent decisions made by tribal members in primitive settings are quite different from the agent decisions made by stock traders on today's exchange. There is a time and place, a culture, a set of incentives, a set of institutions and power relationships that give rise to each of the theories and are properly represented by it.

No reasonable person will deny that under normal situations as the price of an item increases we will buy less of it. This is an appropriate application of neoclassical theory. No one would deny the dominating role of institutions in a financial crisis, hence the need for institutionalist models. The role of class struggle is helpful in studying many political economic battles, especially in developing economies, hence a use for Marxist thought. And while Marx's analysis may be a more appropriate description for 19th century England than for a modern social democracy, there are still times when historical determinism and class struggle are the best tools of analysis.

Here is an example. We live in the midst of major unemployment issues in the western economies. What is the cause and what is the solution? Classical economists explain the problem as "wages are too high." Marxist economists remind us of the producer's desire for a "reserve army of labor" to drive down wages (this can be related to immigration issues). Institutionalists will talk about unemployment stemming from licensing restrictions, and the impact of government and union rules. While one theory may be "most" correct on average, ignoring the other theories likely leads to missing important parts of the problem.

Finding Value in Alternative Approaches

There is a way to illustrate that there is value in alternative theories. This comes from the forecasting technique of combining forecasts. This technique consists of creating a forecast using the previous forecast's results as independent inputs into a new regression. This is not an averaging or weighting of the forecasts, but instead pulls the significant knowledge implicitly included in each individual forecast and uses it to build a combined forecast. Given a selection of forecasts, the very best forecast can often be improved upon by combining it with a forecast that is less accurate.

For example, a good regression based on a time series might miss some of the value that is included in a forecast based on a causal relationship. Even though one forecast may be less accurate than another, the knowledge embedded in the less accurate forecast can be harvested to improve the overall regression. Any time a particular forecast is ignored because it is not the "best" forecast, it is likely that valuable independent information contained in the discarded forecast has been lost.

The information lost may be of two types (Wilson and Keating, 2009, 403):

- 1. Some of the variables included in the discarded forecast may not be included in the "best" forecast.
- 2. The discarded forecast may make use of a type of relationship ignored by the "best" forecast.

To relate this approach to our discussion of alternative economic theories we simply obtain a variety of forecasts and see if the combination of forecasts is better than the best individual forecast.

A very simple test can be constructed from Real GDP forecasts available on the Congressional Budget Office website. This collection of forecasts shows the average growth for the next two years. The first forecast in this series is from the Administration, and is prepared by the Council of Economic Advisors, the Treasury Department and the Office of Management and Budget. The second forecast is from the Congressional Budget Office (CBO) and the third is an average of 20 Blue Chip private business economists. This data are shown in Table 1. The time period begins with the earliest Blue Chip forecast available and ends just before 9-11-2001 and the following wars.

A common way of measuring forecast accuracy is to use mean absolute percentage error and a common way of recognizing a goodness of fit is R² (Wilson and Keating, 2009, 35). Using these techniques, the forecasts are shown to have different levels of accuracy, as shown in Table 2. It appears that the Blue Chip forecast and the Congressional Budget Office were more accurate than the Administration forecast during this period of time. It could be argued that the Administration forecast approach was biased due to politics and, therefore, should be ignored. However, there may be valuable information in the Administration forecast that the others did not pick up. Can information in the "worst" forecast improve on the "best"?

				Blue
Year	ACTUAL	ADMIN	CBO	Chip
1982-1983	1.2	2.7	2.1	2.0
1983-1984	5.7	2.6	3.4	3.5
1984-1985	5.4	4.7	4.7	4.3
1985-1986	3.5	3.9	3.3	3.2
1986-1987	3.2	3.7	3.1	3.0
1987-1988	3.7	3.3	2.9	2.8
1988-1989	3.9	3.0	2.4	2.1
1989-1990	2.8	3.2	2.5	2.2
1990-1991	0.8	2.8	2.0	1.9
1991-1992	1.5	1.4	1.6	1.2
1992-1993	3.1	2.2	2.6	2.3
1993-1994	3.5	2.9	2.9	3.0
1994-1995	3.3	2.9	2.8	2.8
1995-1996	3.1	2.6	2.4	2.6
1996-1997	4.1	2.2	1.9	2.1
1997-1998	4.4	2.1	2.1	2.2
1998-1999	4.6	2.2	2.3	2.4
1999-2000	4.5	2.2	2.0	2.3

Table 1: Real GNP Two Year Average Growth

	MAPE	\mathbb{R}^2
Administration	47.3%	5.1%
CBO	41.2%	28.6%
Blue Chip	36.3%	42.2%

Table 2: Forecast Accuracy

The Blue Chip and the CBO forecasts are actually quite similar and using a standard two sample mean comparison test there is only a 20% chance that they are not the same (by comparison there is an 80% chance that the Blue Chip forecast is statistically different from the Administration forecast.) A correlation matrix shows that the Blue Chip and CBO forecasts have a 95% correlation. Given the similarity and correlation between the Blue Chip and CBO forecast, parsimony would recommend using only one of them. In an initial combined regression, the Blue Chip forecast comes up with significant coefficients and the CBO forecast does not. For these reasons the combined forecast will be prepared using the Blue Chip forecast and not the CBO forecast.

A regression run using the Blue Chip and Administration forecasts as independent variables against the dependent variable of actual values provides the results shown in table 3.

R Squared 61.3% F stat (2, 15) 11.87 F Probability .001

Independent Variable	Coefficient	T Statistic	T probability
Intercept	1.078	1.27	.222
Administration	-1.181	2.72	.016
Blue Chip	2.236	4.67	.000

Table 3: Combined Regression Results

This regression's R squared, shows us that the equation explains 61% of the change in the dependent variable versus average. It shows an F statistic with a probability of only .001 that the equation is not significant. And the coefficients on both the independent variables (forecasts) are also significant at a 95% level. This regression provides a good fit and significant values, but does it make for a more accurate forecast?

	MAPE	\mathbb{R}^2
COMBINED	29.9%	61.3%
Administration	47.3%	5.1%
Blue Chip	36.3%	42.2%

Table 4: Combined Forecast Accuracy versus Individual Forecast

Table 4 shows that the combined forecast improved both MAPE and R² over even the best individual forecast. I would interpret this by saying that even though one could argue the theories and approaches used by the Blue Chip economist were "better" than those of the Administration, still the Administration forecast had information to add to the overall outlook that was not included in the Blue Chip approach.

To obtain the "best" understanding possible, multiple theories should be reviewed and included if the situation warrants. This is no different than saying neoclassical theory perhaps explains best the movement of prices in commodity markets, but additional understanding of the price movement can be obtained by recognizing the value of institutional thought relative to these same markets.

The Way Forward

The question should not be asked if a Classical or Keynesian view is correct. We should instead ask in what situations and for what purpose should a Classical model be used, and when will Keynesian tools be most helpful, or how can Marxian thought be applied to our current analysis and in what situations should it be avoided. Just like the elephant uses his trunk, legs and side for different tasks, so are the different economic theories most relevant depending on the situation. Each theory can be of value and each should be applied depending on the situation.

The way forward for an economist is to place effort, discussion and research around broadening and combining views rather than focusing on narrow and deeper theoretical development. This must begin in the graduate schools and in the pedagogy. But in fact the opposite has happened. Sutter and Pjesky (2007) pointed out that graduate schools have become

narrower and more technical in focus. A fundamental epiphany of sorts must take place in many of our leading thinkers. First they must acknowledge that the various theories are based on differing sets of facts not just personal interpretations. Second, they must acknowledge that the theories are not simply self-serving, but honest attempts to interpret the world around us. With this internal change we can approach the problem more broadly.

First teach the major theories. Over time some theories will not perform as well and will be set aside. This is a natural occurrence and happens routinely within economics. Malthus predicted the living standard would deteriorate to a sustenance level and starvation, but this prediction is no longer accepted. Also fixed exchange rates gave way to flexible exchange rates, both in theory and in practice.

Second begin every analysis with an examination of the situation to determine which theories' assumptions best apply. Are we looking at a competitive market? Are there social traditions and rules that may dominate?

Third instead of appending and adjusting pet theories, shift to a theory which has assumptions more consistent with the situation. A good example of this is the efficiency wage theory. Because neoclassical wage theory cannot explain long-term unemployment and different wages paid for the same job, appendages such as "efficiency wage theory" have been added to explain the observed facts. Because there are many other theories in the Institutional and Marxist camps that have no trouble explaining this observed reality, would it not be cleaner to rely on these alternate theories (if the assumptions appropriately apply) rather than create addons?

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