The Big Picture

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Macro theorists have understandably experimented with a variety of paradigms in the attempt to explain the periodic instability of modern highly-specialized economies. Contrasting two conflicting paradigms has been a recurrent theme of the GEM Project Blog. The first is mainstream macro theory, recognizably motivated by rational behavior and organized by general market equilibrium. Optimization, equilibrium, and market centricity have been the core tenets of economics for a long time. The second draws from deep experience practicing stabilization-relevant macroeconomics, especially the need to be attentive to the range of critical evidence that has accumulated since the Second Industrial Revolution, to fundamentally challenge consensus thinking. The upstart model is also rooted in rationality and general equilibrium but drops the near universal assumption that price-mediated exchange is wholly restricted to the marketplace. The GEM Project recognizes the need to generalize optimizing exchange from the marketplace to workplaces restricted by costly, asymmetric employer-employee information. That generalization is intuitive and, most critically, a necessary condition of stabilization-relevant macro theory.

That is, in a nutshell, the Project's case for reconstructing mainstream macroeconomics, especially when the problem set at hand concerns aggregate instability and involves advising policymakers. It is the big picture. The remainder of this post looks more closely at the choice between the mainstream and GEM paradigms. Does it really matter? If so, how much?

Correct paradigm. If the proper standard for stabilization-useful macro models is the capacity to capture the cyclical behavior of modern highly-specialized economies – circumstances that actually exist throughout the world – then the generalized-exchange theory is the hands-down winner. Simple observation informs us that a large share of economic exchange occurs inside bureaucratic firms, providing a powerful companion venue to the marketplace.

Does the decision-making in the marketplace and workplace venues differ significantly? Consider the Project's keystone example. In many modern firms, wage determination is inherently restricted by costly asymmetric information. Adequately trained economists learn early in their careers that such circumstances preclude efficient labor pricing in the labor market.

The GEM Project carefully analyzes this crucial limitation of the marketplace. It defines, from the perspective of establishment j, a measure of labor input ($\acute{E}_j$) for which the production function is well defined. $\acute{E}_j$ cannot be measured in the labor market and is linked to worker hours paid for (H_j) by a scalar $\acute{Z}_j$, which captures modal on-the-job behavior (OJB):

$\acute{Z}_j = \acute{E}_j / H_j$, such that $\acute{Z}_j \geq 0$.

Formally, there exists, given technology, a subset $\mathbf{Ţ}_\mathbf{j}$ of the Cartesian product of the sets to which $\acute{E}_j$ and X_j (production) belong such that every element $\acute{E}_j$ and every element X_j are paired only once. The 1-1 mapping of $\acute{\mathbf{E}}_\mathbf{j}$ onto $\mathbf{X}_\mathbf{j}$ implies that the sets are equivalent. Variable $\acute{Z}_j$ introduces nonequivalence of $\mathbf{X}_\mathbf{j}$ and $\mathbf{H}_\mathbf{j}$. Rejecting $\mathbf{X}_\mathbf{j} \sim \mathbf{H}_\mathbf{j}$ is destructive for textbook descriptions of labor pricing and use in modern economies.

At one extreme, characterized by perfect workplace information, the firm exercises effective worker oversight. It controls and optimizes $\acute{Z}_j$, confronting a problem set involving rest pauses and other working conditions. Things get more interesting once scale and specialization compromise the symmetry of workplace information. Agency problems shift a degree of $\acute{Z}_j$ control from the employer to employees. Worker optimization on the job is now subject to a problem set more complex than just working conditions. Variably cooperative worker conduct results from the less restricted pursuit of employee self-interest, inviting management methods of indirect control (including wage incentives) into the optimization process.

How correct? The workplace venue enables the derivation (from axiomatic assumptions) of meaningful wage rigidity and its capacity to rationally suppress wage recontracting. The market-place venue cannot support the suppression of wage recontracting and therefore cannot support the existence of involuntary job loss in recessions, It cannot support rational causality from nominal demand disturbances to evidence-consistent behavior of employment, output, and income.

Does it matter? Generalized-exchange modeling explains an extraordinary range of crucial evidence produced by recessions and depression. Market-centric modeling explains remarkably little. But our assessment must go beyond that. It must make clear that modern mainstream wage theory is irreparably flawed, fundamentally contaminating the remainder of stabilization theory. Its advice to policymakers, if taken seriously, would produce mistakes that would be – think of the circumstances of 2008 – unimaginably costly.

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