

# Helping a Great Economist: Edmund Phelps

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In his extraordinary body of work, Edmund Phelps was fearless in his determination to introduce labor pricing that is both micro-coherent and stabilization-relevant into modern economies. Overall, his macroeconomics reflect a grand, cheerful quest for answers to important questions. A decade ago, Phelps (2009, p.109) described his initial (undergraduate) contact with the study of economics: "I kept failing to understand the relationship of microeconomics to macroeconomics. I like to joke that I went to graduate school to get to the bottom of this relationship. However, after four or five years of graduate school, I realized that I still didn't have the answer, and so I decided: very well, I'm going to have to try to solve this problem myself." It is easy to root for Phelps in that search. The familiarity of his ultimate lack of success makes his story especially disappointing. He never grasped that in highly specialized economies arbitrarily restricting his model-building to marketplace exchange implies that optimization and equilibrium, the most fundamental tenets of economic theory, cannot be stabilization-relevant.

Except for being hung up on market-centricity, Phelps had unusually good instincts about where interesting models are hiding. He understood that usable macroeconomics requires scraping Keynes's Second Classical Postulate. His island parable (the archipelago economy), where arbitrarily geographic isolation of auction labor markets complicated the equilibration of marginal disutility of work and the market wage, helped set the stage for the GEM Project's powerful generalization of optimizing exchange from the marketplace to information-constrained workplaces.

## The Idea

Phelps's major work is *Structural Slumps*, published in 1994, in which he used existing analyses of the cost and structure of information in the attempt to microfound macro instability. In particular, he attempted to construct an equilibrium theory of involuntary unemployment – the great Keynesian quest. Rereading *Slumps*, I am struck by how close Phelps came to that Holy Grail. His search went wrong with the convenient use of Shapiro-Stiglitz shirking theory to suppress rational wage recontracting.

Phelps (1994, p.12) summarized shirking theory's idea of optimizing behavior: "Continuous monitoring of every employee would be prohibitively expensive for the firm. The suggested solution is to motivate employees to shirk with reduced frequency by the same means that it motivates employees to quit with reduced frequency: by offering the employee incentive pay. By giving the employee more to lose in the event of dismissal, the firm will reason, the threat (certain or uncertain) of dismissal in the event the employee is caught shirking is made a stronger deterrent for the employee. Up to a point, then, raising the wage will generally gain more in output per man-hour than it will lose in wages per man-hour, with the result that the wage cost of producing a given output is decreased on balance." Phelps notably posits unbundled  $\dot{Z}_j$ , calling attention to a debilitating problem with shirking-class workplace modeling. Absent nonintuitive constraints, worker utility that is simply decreasing in  $\dot{Z}_j$  restricts workplace behavior insufficiently to support the derivation of unbundled  $\dot{Z}_j$ , and the existence of meaningful wage rigidity, from employer-employee optimization. As a result, any interesting results from the shirking-model class are always assumed.

For many good theorists the promise of efficiency wages was strong. From Phelps when asked which of his ideas he is most proud: "I would have to say that the incentive wage idea is the most important. It laid the foundation for his thinking about unemployment as an involuntary phenomenon, rather than just the result of having to be on the boat between one island and another before you could get into the labor market in that new place. I thought that was a very important breakthrough, and it became even more important when Steven Salop, who had been an undergraduate student of mine at Penn, pointed out that I could have written that paper without money. He proceeded to set out a nonmonetary theory of the incentive wage and involuntary unemployment (Salop, 1979). This was followed by the paper by Shapiro and Stiglitz (1984) which was a shirking model of a nonmonetary type to get a nonmonetary theory of involuntary unemployment." (Vane and Mulhearn (2009), p.116)

## GEM Helping Hand

The most useful helping hand available from the GEM Project is to substitute the morale-centric branch of efficiency-wage theory (readily available when Phelps was writing *Slumps* in Solow 1976, 1990 and Annable,

1977, 1980, 1984) for his focus on the Shapiro-Stiglitz shirking branch. Not only does the Project's intuitive generalization of rational exchange from the marketplace to information-challenged workplaces microfound meaningful wage rigidity, it accommodates worker preferences that are consistent with available evidence (unlike shirking behavior) and would have further enriched *Structural Slumps* with microfounded chronic wage rents and a model of rational employee on-the-job behavior when direct OJB supervision is inadequate. *Slumps* would have become a foundational work in modern macroeconomics.

### Is the Game Worth the Candle?

Rescuing *Structural Slumps* from its disappointingly short shelf-life is surely candle-worthy. Cumulative score: Worth it: 16 (Lewis, Solow, Harris-Todaro, Bernanke, Lucas, Samuelson, Kerr *et al*, Okun, Hicks, Sraffa, Hayek, Keynes, Burns, Robinson, Modigliani, Phelps). Not worth it: 0. As the score builds, keep in mind the major objection of mainstream theorists to generalized-exchange macroeconomics: Adding a second (workplace) venue of rational exchange is too much work; its benefits are not worth the effort. Is that rationale looking more and more foolish?

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