

# Meta-Externalities: Pigou and Coase

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This post takes an admittedly wonkish look at the nature and consequences of externalities in coherent general equilibrium macroeconomics. My particular interest here is *meta-externalities*, the under-appreciated macro application of the textbook literature long associated with the pioneering work of A.C. Pigou (1920). Externalities are important, especially in that they motivate rational government interventions in market economies. Meta-externalities' particular significance is their justification of the discretionary government management of aggregate demand.

*Pigou.* Generalized-exchange modeling powerfully enriches Pigou's work on externalities, which itself enriched earlier work by Sedgwick and Marshall. Most relevant to macro theorists are production externalities, through which optimizing firm behavior induces market inefficiencies. From David Kreps (1990, p.289): "The idea in a production externality is that a firm, by its choice of a production plan changes the feasible set of production plans for other firms." In the present context, production plans are understood to rationally govern the pricing and use of scarce resources. To Pigou, economists have a moral responsibility to identify negative externalities and design government interventions that ameliorate their effects.

The GEM Project reworking of coherent mainstream macroeconomics identifies the meta-externality class of mismatched private and social costs. Profit and utility maximization in large establishments rationally motivates meaningful wage rigidity (MWR) that translates nominal demand disturbances into same-direction changes in production, employment, income, and profit. Adverse shifts in total spending broadly upset production plans, imposing periodic, widespread involuntary job loss and underutilized capital on specialized economies. In Pigou's language, the private net costs of continuous, general decision-rule equilibrium are intermittently much less than the social cost of recession or, worse, depression. The mismatch provides a neoclassical justification for the discretionary management of aggregate demand.

In the GEM narrative, large establishments created by the Second Industrial Revolution rationally suppress wage recontracting. Such suppression follows from the generalization of optimizing exchange from the marketplace to the specialized workplace. Once ubiquitous evidence is used to inform worker preferences and to model intra-firm behavior as continuous-equilibrium phenomena, involuntary job loss and its associated market failures clearly reflect powerful meta-externalities that imply the need for aggregate-demand intervention. Once macro externality rooted in optimizing MWR passes one last test, coherent macro theory becomes stabilization-relevant and the fruitful process of synthesizing competitive-market and Keynesian modeling, with their respective incentives and externalities, can begin in earnest.

*Coase.* The final test is posed by the Coase theorem. So named by George Stigler, the elegant theorem resulted from Ronald Coase's characteristic close look at Pigou's general problem of economic efficiency in the context of externalities. Here's where things get wonkish. He demonstrates that, if trade in an externality is feasible and transaction costs for the exchange sufficiently low, bargaining can produce a Pareto efficient outcome that is independent of the initial allocation of property. In practice, feasibility and transaction-cost obstacles to efficient bargaining as well as poorly defined property rights typically prevent Coasian bargaining. Practical problems were well described in the 1960 paper ("The Problem of Social Cost") in which Coase originally proposed the theorem.

Nevertheless, the Coase theorem has become an important standard for the modern analyses of government intervention in market economies. It is perhaps too elegant not to exert an outsized influence on academic thinking, producing an ever-growing literature. But the feasibility and transaction-cost problem set looms so obviously large with respect to meta-externalities that few economists take them seriously. Add in the huge cost of instability and meta-externality is understood to provide justification for government intervention in total nominal spending.

*Conclusion.* A powerful feature of GEM meta-externality is its practical immunity to rejection by the Coase Theorem. Parties involved in continuous-equilibrium market failure, centrally featuring rational nonmarket labor pricing that suppresses wage recontracting, cannot bargain macro instability into a Pareto-optimal outcome. Stabilization authorities, confronted with the periodic faltering aggregate spending, must intervene in order to

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