

Book Review

A Microanalytic Assessment of “The Share Economy”

The Share Economy: Conquering Stagflation. By Martin L. Weitzman.* Cambridge: Harvard University Press, 1984. Pp. vi, 167. \$15.00.

Oliver E. Williamson†

Martin Weitzman has written a serious book about the chronic problem of stagflation that has plagued the United States economy for the past twenty years. As discussed below, I have grave reservations both about the underlying microeconomic model on which Weitzman relies and about the basic policy proposal that he advances. Neither, in my judgment, is sufficiently microanalytic to come to terms with the fundamentals of contracting in the labor market—the key market in Weitzman’s analysis of stagflation. Of books that work within the firm-as-production-function tradition,¹ however, Weitzman’s treatment of stagflation is the best of its kind. It has justifiably attracted wide attention and received high praise.

Weitzman traces the macroeconomic problem of stagflation to a microeconomic flaw in the private sector of the economy—the fixed-wage labor contract. Because firms and labor strike wage bargains of a fixed rather than variable wage kind, variations in demand for a firm’s product give rise to a fluctuating level of employment (at a fixed wage), rather than a stable level of employment (at an adjusted wage). Weitzman maintains that shifting from a fixed to a variable wage system—where “a worker’s compensation is directly and automatically adjusted by some index of the firm’s well-being,” such as product price, revenue per worker,

* Professor of Economics, Massachusetts Institute of Technology.

† Gordon B. Tweedy Professor of Economics of Law and Organization, Yale University.

1. See *infra* text accompanying notes 16–17.

or profit per worker²—would result in a full employment economy in which all of the major actors (labor, capital, consumers) would be better off.

Under current wage contracts, “the average cost of labor to the firm (what each worker is paid) is constant and therefore *equals* the marginal cost of hiring one additional unit of labor.”³ Under the share system, by contrast, “the marginal cost of labor is strictly *less* than the average cost of labor.”⁴ The resulting added incentives for employment under the “share system [cause] excess demand for labor, which [produces an] assault on unemployment, stagnant output, and the tendency of prices to rise.”⁵ Because improved employee morale and other benefits are also claimed,⁶ Weitzman is required to explain why such a system has not been voluntarily adopted on a widespread basis.

Weitzman argues that the failure of voluntary adoption is explained by two factors: Capitalism is still young and has not yet evolved superior contracting forms, and there are incentive defects in the system. Inasmuch as some firms do have profit sharing plans akin to those favored by Weitzman, however, incentive defects are evidently the key issue.

Defects of two kinds are noted. First, individual firms are not able to appropriate the macroeconomic benefits of added employment stability; that is, a positive externality exists. Second, and related, individual firms have a cartel-like incentive to defect from participation in a share system—if “one share firm converts to a wage contract paying the prevailing level of compensation, it loses nothing and gains the added short-run flexibility of being able to lay off workers freely when its business is bad and take on more of them when business is good.”⁷ Accordingly, widespread voluntary adoption of a share system cannot be expected. Compulsion or added incentives are needed.

Weitzman eschews compulsion and favors moral suasion and “strong

2. M. WEITZMAN, *THE SHARE ECONOMY: CONQUERING STAGFLATION* 82-83 (1984) [hereinafter cited by page number only].

3. P. 85 (emphasis in original).

4. *Id.* (emphasis in original). “The analytic essence of a share contract is that if workers are laid off or quit, the remaining employees are paid more, whereas if new workers are hired, all employees are paid less.” P. 83. Hiring more workers will decrease each worker’s pay because the additional output “will tend to depress [the product] price, lower revenue per worker, and decrease profit per worker.” *Id.*

5. P. 144.

6. In his concluding chapter, Weitzman summarizes in order of ascending importance the three types of benefits that he expects a share system to produce. First, it “can boost employee morale, increase worker participation, improve labor-management relations, foster a sense of partnership, raise productivity, and so forth.” P. 142. Second, by making wages “more sensitive to economic conditions [and therefore] more quickly responsive to aggregate [macroeconomic] policy [a share system] will help to stabilize employment . . . over the business cycle.” Pp. 143-44 (footnote omitted). The final benefit is the creation of an excess demand for labor. *See supra* text accompanying notes 3-5.

7. P. 126.

The Share Economy

tax incentives.”⁸ He recommends, with reference to the latter, that the “earned income of employees of private corporations whose shares are publicly traded be divided into two subcategories—wage income and share income—which are taxed differently. Wage income . . . is taxed as usual at ordinary rates. But a tax break is given to share income”⁹ Widespread adoption of flexible wage payment plans will presumably relieve the microeconomic defect that induces individual firms to respond to economic disturbances by reducing output and employment. The cumulative decline that results in plant closings and loss of business confidence, a condition that “tends to replicate itself [and that] lies behind every drawn-out recession,”¹⁰ is thereby broken.

This is an intriguing proposal. Weitzman motivates the argument with care and argues its merits with passion. I nevertheless doubt that the proposal should be implemented. The microeconomic foundations on which he builds make limited and questionable contact with the contractual phenomena of interest. Also, and related, Weitzman’s conception of labor as a uniquely redeployable factor of production can be disputed. Finally, some serious contractual failures that would attend the implementation of his proposal receive only passing remarks, while others go unmentioned altogether.

I. MICROECONOMIC FOUNDATIONS

The great accomplishment of the Keynesian Revolution is that “[r]eally deep depressions are a thing of the past, preventable by timely fiscal and monetary policy.”¹¹ But, from a “micro-macro” perspective, the standard Keynesian macro model rests on naive microeconomic foundations.¹² It has not, for this reason, been a successful vehicle for fine-tuning the economy.¹³ The rational expectations school has made this point repeatedly and has attempted to supply micro foundations of a more basic kind.¹⁴

8. P. 129.

9. P. 130.

10. P. 48.

11. P. 56.

12. See R. BARRO, *MACROECONOMICS* 15, 507 (1984); Lucas & Sargent, *After Keynesian Macroeconomics*, in *AFTER THE PHILLIPS CURVE: PERSISTENCE OF HIGH INFLATION AND HIGH UNEMPLOYMENT* 54 (Fed. Reserve Bank Boston, Conference Ser. No. 19, 1978) (noting Keynesian macroeconomics’ lack of foundations in microeconomic theory).

13. Weitzman concludes that Keynesian stabilization policy has turned “into a treacherous game that has ended up badly off the mark many times.” P. 56.

14. See, e.g., Grossman, *An Introduction to the Theory of Rational Expectations Under Asymmetric Information*, 48 *REV. ECON. STUD.* 541, 543 (1981) (describing rational expectations equilibrium); Lucas & Sargent, *supra* note 12, at 54–56 (arguing that Keynesian model has failed both empirically and theoretically).

The implicit contracting approach to the wage bargain originates with this tradition.¹⁵

Weitzman acknowledges the rational expectations/implicit contracting approach but regards it as defective. He chooses instead to use the model of "monopolistic competition" as the microeconomic foundation on which to base his analysis. He thus examines the price, output, and employment decisions of the monopolistically competitive firm under two wage regimes: fixed wage and share wage systems.

The model of monopolistic competition on which Weitzman relies has its origins in the 1930's.¹⁶ Firms operate on downward sloping demand curves; given fixed investment, output is expressed as a function of labor; labor is regarded as a homogeneous input. The "labor contract," under these circumstances, is of a simple rather than complex kind. It merely entails agreement on the wage.

This model of the firm belongs to the family of models within the firm-as-production-function tradition.¹⁷ Albeit instructive for certain purposes, it is opaque for others. It has been of limited help in trying to understand the modern corporation, the principal institution with which Weitzman is concerned. Indeed, it has sometimes been misleading. For example, the firm-as-production-function construction was centrally implicated in anti-trust misconceptions of vertical integration, vertical market restrictions, and conglomerate organization in the 1960's.¹⁸

The principal alternative view of the firm (which has led to a reconceptualization of much of antitrust) is to characterize the firm as a governance structure. This is consonant with Ronald Coase's insight that firm and market are alternative modes of organization, the choice between which is based in large part on an assessment of comparative transaction costs.¹⁹ More generally, the problem of economic organization is cast as one of assessing *alternative modes of contracting*. The analytical appara-

15. See Azariadis & Stiglitz, *Implicit Contracts and Fixed-Price Equilibria*, 98 Q.J. ECON. 1, 2-3 (Supp. 1983) (describing how Keynesian rigid-wage assumption can stem from rational wage insurance embedded in "implicit [labor] contracts" instead of irrational "money illusion"); Hart, *Optimal Labour Contracts Under Asymmetric Information: An Introduction*, 50 REV. ECON. STUD. 3, 4 (1983) (describing microanalytic theory of efficient unemployment).

16. See E. CHAMBERLIN, *THE THEORY OF MONOPOLISTIC COMPETITION* (1933); J. ROBINSON, *THE ECONOMICS OF IMPERFECT COMPETITION* (2d ed. 1969).

17. For critical discussions of this tradition, see O. WILLIAMSON, *THE ECONOMIC INSTITUTIONS OF CAPITALISM: FIRMS, MARKETS, RELATIONAL CONTRACTING* 86-88 (1985) and Coase, *Industrial Organization: A Proposal for Research*, in NATIONAL BUREAU OF ECONOMIC RESEARCH, *FIFTIETH ANNIVERSARY COLLOQUIUM III: POLICY ISSUES AND RESEARCH OPPORTUNITIES IN INDUSTRIAL ORGANIZATION* 59, 62-64 (V. Fuchs ed. 1972).

18. The firm-as-production-function construction interpreted firm and market organization in technological terms. Any effort by the firm to extend its reach beyond its "natural" technological boundaries was held to have monopolistic purpose and effect. See O. WILLIAMSON, *supra* note 17, at 382-83.

19. Coase, *supra* note 17, at 63-64.

tus of monopolistic competition simply fails to make contact with issues of economic organization of this more general comparative contracting kind.

I submit that monopolistic competition is similarly unsuited to serve as the microanalytic underpinning for a study of stagflation. Some of the reasons for this will be evident from my discussion below of labor organization and of market failure.

II. LABOR

Weitzman regards labor as a “unique” factor of production.²⁰ This is because “aggregate labor” is much more easily redeployable than “aggregate capital.” Thus, according to Weitzman, a “coalminer and a fruitpicker are infinitely closer substitutes than the products they handle. Rolled sheet and I-beams . . . are virtually inconvertible in use.”²¹

Although redeployability plays a crucial role in the study of contract, Weitzman uses the term in a technological rather than in an organizational manner. The fact that hammers are not physically interchangeable with hand saws does not, from an economic (as contrasted with a technological) viewpoint, imply that each is nonredeployable. To the contrary, both hammers and hand saws are very general purpose construction instruments that can be used on a wide variety of projects by a large number of different users without loss of productive value.

As a matter of economics, the degree to which an asset is redeployable turns on whether the asset takes on idiosyncratic value in its current use and by its current user. Hammers and hand saws, under this definition, are highly redeployable. Fruitpickers and coalminers are too—provided there are many orchards and coal mines. Were orchards and coal mining to be legally monopolized, however, neither type of labor could secure alternative employment without loss of productive value. This is especially true of miners, who have acquired employment skills that are specialized to coal mining.

Thus, although redeployability is a key issue in studying economic organization, the issue to be evaluated is the degree to which an asset's value is contingent on continued employment by its current user. That sheet steel and I-beams are noninterchangeable is of little import if both are supported by markets with many parties demanding such products. Similarly, although airplanes have only scrap value if retired from flying, the secondhand market for airplanes is a very good one—which is to say that one who has invested in an airplane and wants to recover his investment will find many willing buyers. By contrast, a die that has been formed to

20. Pp. 28–29.

21. P. 28.

press automobile body panels of a specialized design can only be used for scrap if body panel orders are discontinued. In addition to general business risk, therefore, the owner of such a die experiences "asset specificity" hazards.

This contractual concept of redeployability discloses that labor and other forms of investment can be assessed in a symmetrical way. *Ceteris paribus*, labor that is highly specialized to a particular employer is at greater risk than is labor of a general purpose kind. And suppliers who have made investments in support of the requirements of a particular buyer are at greater risk than are those whose investments can be redeployed easily across the needs of many buyers. The core lesson of contracting, moreover, that applies to all forms of asset specialization, is the same: Specialize your assets only upon making due allowance for idiosyncratic risk.

Simple and complex contracting responses to idiosyncratic risk can be distinguished.²² The simple response is to assign an *ex ante* risk premium. Prices thus bear the burden of adjustment. The complex response is to create *ex post* termination penalties and design governance structure safeguards. The latter is an intertemporal response; it operates over the period of the contract and even reaches beyond to include contract renewal.

These distinctions are nowhere admitted or addressed by Weitzman. That is because no differential labor contracting hazards appear in a model where all labor is fungible. Simple (price mediated) rather than complex (governance structure) contracting thus rules. Accordingly, the only relevant labor contract choice is how to set the price term—fixed wage or share.

Much more complex contracting issues arise, however, when asset specificity considerations are introduced. Where labor is specialized to the needs of a firm, both the firm and the worker have a *mutual* interest in crafting a contract with strong continuity properties. The resulting labor contracts go well beyond a wage agreement to include intertemporal incentive features (e.g., benefits are nonvested in the event of voluntary quits; severance penalties must be paid for fires) and complex governance structures (e.g., arbitration to resolve grievances in accordance with internal due process, rather than permitting relations to fracture; restricted ports of entry to protect incumbents; well defined job ladders; layoff rules).

Several things are noteworthy in this regard. First, only some labor contracts are embedded in complex governance structures of these kinds.

22. For further discussion of these issues, see Williamson, *Credible Commitments: Using Hostages to Support Exchange*, 73 AM. ECON. REV. 519 (1983).

The mutual confidence in the contracting process that results from such governance structures is the source of added value only in the context of firm-specific human capital. Second, labor is not unique in this respect. Intermediate product market suppliers of goods and services that are asked to make specialized investments in support of a particular buyer will similarly contract on superior terms if these supply contracts are embedded in protective governance structures. Third, and of special relevance to the issue of stagflation, full flexibility of wages and prices poses a serious threat to the integrity of contracts that are supported by durable investments in firm-specific assets. Accordingly, adjustments to changing economic circumstances are concentrated more on quantity than on wages or prices; because quantity variation is less subject to strategic manipulation, it has superior credibility properties.²³

Examining the microanalytic details of contract thus discloses that: (1) labor is not a uniquely fungible resource but, like other types of inputs, displays varying degrees of fungibility; (2) contracting practices and governance structures are selectively attuned to the underlying needs of the parties to safeguard transactions; and (3) quasi-rigid wages and prices are not an accidental or myopic outcome but (often, if not always) are a carefully bargained-for result. The world of contract, thus described, is very different from what Weitzman contemplates, and this divergence has pervasive ramifications.

In particular, Weitzman's proposal that variable wage contracts supplant fixed wage contracts makes no provision for the functional purposes served by contractual mechanics. If confidence in the contracting process is impaired by Weitzman's proposal, then adaptive responses will attend its implementation. Less investment in specialized human and physical capital will be made in a regime where *ex post* trading hazards are greater, *ceteris paribus*. Also, Weitzman's proposal is apt to be adopted in a selective and incomplete way.

Moreover, even if Weitzman's policy proposals would fully remedy stagflation in economies where monopolistic competition with fungible labor is the rule—and it is not obvious that such economies would be beset by stagflation—what economies approximate this condition? How applicable are Weitzman's proposals outside of this contracting context? What tradeoffs are posed if actual contracting practices in the United States and other Western economies are closer to the scenario that I describe than

23. Because price adjustments have a "zero-sum" quality—that is, one party's loss is translated into an equal gain for its trading partner—there is a continuous risk that one's trading partner will strategically alter the price term to its advantage. Quantity adjustments, by contrast, are not of a "zero-sum" nature, and therefore there is less reason to suspect that one's trading partner will exhibit such strategic behavior. See Wachter & Williamson, *Obligational Markets and the Mechanics of Inflation*, 9 *BELL J. ECON.* 549, 555 (1978).

they are to that described by Weitzman? Understanding the microanalytics of contracting is not, therefore, merely a gloss; it goes to core issues. Resolution of these matters is sorely needed before implementation can proceed with confidence. Although Weitzman makes reference to "experimental" implementation,²⁴ careful microanalytic assessment of current contracting practices should help to resolve some of these matters directly.

III. INSTITUTIONAL FAILURES

There once was a time when a showing of "market failure" was thought to be sufficient for public policy intervention. This view was sharply criticized by Ronald Coase, who observed that:

the main question . . . is how alternative arrangements will actually work in practice. . . . It is no accident that in the literature . . . we find a category "market failure" but no category "government failure." Until we realize that we are choosing between social arrangements which are all more or less failures, we are not likely to make much headway.²⁵

The lesson here is that intervention is warranted only upon a showing of expected net gains—which requires that the costs as well as the prospective benefits of the proposed reform be evaluated. A proposed remedy may have to be modified or even rejected if, upon scrutiny, the defects are sufficiently severe.

Comparative institutional analysis is thus needed. Weitzman is not, however, persuaded that a shift from one contracting regime to another requires an assessment of microanalytic contracting details. Like those who, without examining the details and associated disabilities of the implied contracts, argued that rate of return regulation could be supplanted by franchise bidding for natural monopolies,²⁶ Weitzman asserts that problems of his contractual reforms are minor and manageable. Microanalytic assessment of franchise bidding disclosed, however, that deregulation could be implemented with net gains only in carefully delimited circumstances—mainly, in fact, in circumstances where assets are

24. P. 145.

25. Coase, *The Regulated Industries—Discussion*, 54 AM. ECON. REV. (PAPERS AND PROCEEDINGS) 194, 195 (1964).

26. The efficacy of franchise bidding for natural monopoly was proposed by Demsetz, *Why Regulate Utilities?*, 11 J.L. & ECON. 55, 63 (1968), endorsed by G. STIGLER, *THE ORGANIZATION OF INDUSTRY* 18-19 (1968), and elaborated by Posner, *The Appropriate Scope of Regulation in the Cable Television Industry*, 3 BELL J. ECON. 98, 113-16 (1972).

The Share Economy

highly redeployable.²⁷ I submit that the same is true of Weitzman's proposal.

To be sure, Weitzman does acknowledge problems. His list, however, is incomplete. And the basis for his sanguine views of the problems to which he does admit is not evident from his brief discussion. In his own words, he mainly deals with the problems "in passing."²⁸

Thus, although Weitzman acknowledges that the share system will be superior to the wage system only if "new workers are welcome to join a share firm,"²⁹ he neglects to explain how such an attitude change will materialize. Because welcome participation has been difficult to maintain in worker cooperatives,³⁰ why should skeptics believe that it will be easier here? Although Weitzman provides that "both union and management must forswear any restrictive hiring practices,"³¹ he describes no enforcement mechanics.

In an effort to limit the misstatement of profits or revenues by firms, another potential abuse of the share system, Weitzman proposes that it be restricted to firms with publicly held securities. Since "such firms are already required to regularly publish information about sales and earnings by fairly well-established accounting criteria, . . . they are unlikely to be tempted to manipulate [that information]."³² The profound limitations of securities regulation and other capital market controls to control misrepresentation are ignored, however, and the difficulty of insulating the system against entry by firms with manipulative intent goes unremarked.

As the study of economic and political organization has repeatedly shown, the cost of good intentions can be great.³³ Incumbents may be high-minded and the weight of moral suasion may be considerable, but promises of good behavior are often compromised even by incumbents. Furthermore, the potential for manipulation invites manipulative successor managements, because they can extract greater economic and political value, *ceteris paribus*. Weitzman thus has a severe but undischarged burden of identifying possible distortions in the system, ascertaining whether

27. See O. WILLIAMSON, *supra* note 17, at 327, 340-41; Williamson, *Franchise Bidding for Natural Monopolies—in General and with Respect to CATV*, 7 BELL J. ECON. 73, 102 (1976).

28. P. 145.

29. P. 110.

30. See O. WILLIAMSON, *supra* note 17, at 265-68; Aldrich & Stern, *Resource Mobilization and the Creation of US Producer's Cooperatives, 1835-1935*, 4 ECON. & INDUS. DEMOCRACY 371, 376, 387 (1983).

31. P. 133.

32. P. 130.

33. Charles Morris's recent book on prevailing political attitudes in the 1960's, with special reference to the John Lindsay administration, is illustrative. C. MORRIS, *THE COST OF GOOD INTENTIONS: NEW YORK CITY AND THE LIBERAL EXPERIMENT, 1960-75* (1980).

these can be checked and at what cost, and displaying the net benefits in a compelling way.

Lest there be any question of potential misrepresentation of the share economy proposal here, readers are encouraged to examine R.C.O. Matthews' review of Weitzman.³⁴ Matthews' critique operates at a microanalytic level of analysis that raises core contracting issues. His brief discussion, moreover, is merely suggestive. He does not, for example, consider the problems of implementing Weitzman's proposal to index wages according to some "directly and automatically adjusted . . . index of well-being," of which product price, profit per worker, and revenue per worker are the leading candidates.³⁵

Direct and automatic adjustment features are needed to avoid manipulation of such indices. Commodity markets aside, however, what companies can use prices in this way? Because price is easily manipulable elsewhere (consider, for example, differences in credit, service, delivery, quality, and list versus transaction prices, to name a few), most companies will evidently index on the basis of profits per worker. But how many firms are sufficiently specialized to make profit a reliable measure? Clearly a broad measure of profitability is poorly suited for wage adjustment purposes in a diversified firm, yet divisional profit reporting is notoriously manipulable (and is apt to be the source of recurrent controversy even if unmanipulated). Although the use of firm revenues for wage adjustment would eliminate some potential for manipulation, revenues are, as Weitzman admits, a less "true" measure of a firm's economic condition.³⁶ If the subset of firms for which *direct, automatic, reliable, and uncontested* price or profit adjustments can be made is small, what are the other candidates for indexing?

Note that all of my concerns—the adequacy of the microeconomic foundations, the treatment of labor as a unique and fungible resource, and the contracting disabilities of the proposed reform—turn on the relevant microeconomic level of detail. Those who believe that Weitzman has struck the right balance will regard my objections as minor or misplaced.

Suppose, arguendo, that each of my concerns is conceded and that an alternative basis for addressing stagflation is sought. The two main options are to invoke the rational expectations/implicit contracting approach or to develop the stagflation ramifications of a transaction cost economics approach to economic organization. The first of these is already well ad-

34. Matthews, Book Review, 23 J. ECON. LITERATURE 658 (1985).

35. Pp. 82, 83.

36. P. 137.

The Share Economy

vanced and has attracted numerous supporters.³⁷ The second is much less fully developed.

Arthur Okun's approach to stagflation, in his posthumously published book, *Prices and Quantities*,³⁸ was in the transaction cost spirit in which the institutions of contract are held to be important. Michael Wachter and I have also addressed some of the macro ramifications of complex "obligational" contracting.³⁹ A much more concerted effort is needed, however, to assess the powers and limits of this approach. Micro-macro is and remains an important but elusive issue.

37. See *supra* notes 14–15 and accompanying text.

38. A. OKUN, *PRICES AND QUANTITIES: A MACROECONOMIC ANALYSIS* (1981).

39. Wachter & Williamson, *supra* note 23, at 558–65.

