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Consumer Surplus as the Appropriate Standard for Antitrust Enforcement

Russell Pittman

In antitrust enforcement, in the context of cost-benefit analysis, neoclassical economics may be interpreted as arguing for the use of a total welfare standard whose implementation treats transfers as welfare-neutral. Several recent papers call for antitrust agencies to move in the direction of this version of a total welfare standard for enforcement. However, as Oliver Williamson noted in his 1968 paper, horizontal mergers typically result in transfers that may greatly exceed in magnitude any deadweight loss or efficiency gain, so that a decision to ignore transfers may be quite important. In this paper, I argue that such transfers are likely overall to be quite regressive, and thus that a consumer surplus standard rather than a total welfare standard may be appropriate for antitrust. Two common arguments against this standard—that most mergers are in markets for intermediate goods, and that a consumer welfare standard implies a tolerance for monopsony—are examined and found wanting. I argue in addition that, even if a total welfare standard is used, both the finance literature on merger outcomes and the structure of the U.S. enforcement agencies suggest that the use of a consumer surplus standard by the agencies is more likely to achieve that goal.

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I. Introduction

The discussion of the proper welfare standard for antitrust enforcement—with a focus on merger analysis—continues. The *Horizontal Merger Guidelines* of the U.S. agencies spell out an enforcement standard that is arguably close to a consumer surplus standard, focusing on the effect of a merger on the prices paid by customers and emphasizing the desirability of efficiencies that lower marginal costs and thus are likely to have a direct impact on post-merger prices.[1] However, recent papers by Ken Heyer and Dennis Carlton argue forcefully for the orthodox standard of neoclassical economics, total welfare: consumer surplus plus producer surplus, with transfers canceling each other out.[2] Ross and Winter also argue for total surplus, but at least in part because they believe that accounting for transfers by adding additional weight to changes in consumer surplus would generally not change things much—assuming that the weight chosen is appropriate.[3]

On the other hand, other recent papers—for example, by Lyons in 2002,[4] Neven and Röller in 2005,[5] and Fridolfsson in 2007[6]—more or less accept total welfare as the outcome standard for enforcement but suggest that, given various factors in the process of merger investigation and enforcement, a total-welfare-maximizing outcome might be more likely to result from an agency's use of consumer surplus rather than total welfare as its own standard.[7] In their 2006 paper, Farrell and Katz conclude a detailed discussion of both perspectives with a divided judgment between total versus consumer surplus as a standard—as we

1 U.S. Department of Justice & Federal Trade Commission, Commentary on the Horizontal Merger Guidelines (March 2006).

2 Ken Heyer, *Welfare Standards and Merger Analysis: Why Not the Best?*, 2(2) Competition Pol'y Int'l 29-54 (2006) and Dennis W. Carlton, *Does Antitrust Need to be Modernized?*, 21(3) J. Econ. Persp. (Summer 2007).

3 Thomas W. Ross & Ralph A. Winter, *The Efficiency Defense in Merger Law: Economic Foundations and Recent Canadian Developments*, 72 Antitrust L. J. 471-503 (2005).

4 Bruce R. Lyons, Could Politicians Be More Right than Economists? A Theory of Merger Standards (University of East Anglia, Centre for Competition and Regulation Working Paper CCR 02-1, May 2002).

5 Damien J. Neven & Lars-Hendrik Röller, *Consumer surplus vs. welfare standard in a political economy model of merger control*, 23 Int'l J. Indus. Org. 829-48 (2005).

6 Sven-Olof Fridolfsson, *A Consumer Surplus Defense in Merger Control*, *in* The Political Economy of Antitrust (Contributions to Economic Analysis, vol. 282) (Vivek Ghosal and John Stennek, eds., 2007).

7 As Kaplow and Shapiro summarize the argument: "[The enforcement agencies'] adopting a consumer welfare standard may induce firms to undertake deals that obtain potential synergies while causing less harm to competition, leading to even higher total welfare than would a total welfare standard." Louis Kaplow & Carl Shapiro, Antitrust (Nat'l Bureau of Econ. Research, Working Paper No. 12867, January 2007). *See also* Duarte Brito & Margarida Catalão-Lopes, Mergers and Acquisitions: The Industrial Organization Perspective (2006).

"muddle along until we understand more"—though they also join Foer in his 2006 paper in urging continued focus on the process of competition as an equally important end and standard in itself.[8]

The current paper presents one factor that arguably supports consumer surplus rather than total welfare as the outcome standard and follows with two factors supporting the argument that, even if one prefers total welfare as the outcome standard, a consumer surplus standard on the part of the enforcement agency is the best way to get there. In particular, I will argue that:

- it is both appropriate and workable to include distribution factors in the general (but not the specific) analysis of mergers;
- both the industrial organization and, especially, the finance literature cast some doubt on the tempting economists' assumption that because firms themselves propose mergers, we may assume that these mergers will increase at least the producer surplus portion of total welfare; and
- if the enforcement agency pursues total welfare as its standard, the outcome of the process in the United States and other countries is likely to be significantly biased in favor of producer surplus rather than total welfare.

II. The Welfare Outcome of Mergers: Must We Really Ignore Distribution?

"Who are you gonna believe? Me, or your lyin' eyes?"

—Richard Pryor

In the paper most often cited in support of total surplus as the standard for antitrust enforcement, Oliver Williamson points out that "the income redistribution which occurs [as a result of a merger] is usually large relative to the size of the deadweight loss."[9] Thus, notes Williamson, "attaching even a slight weight to income distribution effects can sometimes influence the overall valuation significantly."[10] Orley Ashenfelter and Daniel Hosken examine the impacts of five recent consummated mergers in large consumer goods markets and find that "the

8 Joseph Farrell & Michael L. Katz, *The Economics of Welfare Standards in Antitrust*, 2(2) COMPETITION POL'Y INT'L 3-28 (2006). *See also* Albert A. Foer, *The goals of antitrust: thoughts on consumer welfare in the US*, *in* HANDBOOK OF RESEARCH IN TRANS-ATLANTIC ANTITRUST (Philip Marsden, ed., 2006).

9 Oliver E. Williamson, *Economies as an Antitrust Defense: The Welfare Tradeoff*, 58 AM. ECON. REV. 18-36 (1968), *reprinted in* 1(1) COMPETITION POL'Y INT'L (Spring 2005).

10 *Id*. at 28.

implied transfer from consumers to manufacturers is substantial."[11] My own analysis of one proposed U.S. rail merger may serve as a further example.[12] In the proposed merger of the Santa Fe and Southern Pacific Railroads in the mid-1980's, I estimated that transfers from shippers to the merged railroad would be anywhere from two to five times the value of the direct welfare loss, depending on the assumptions made regarding certain demand and cost parameters.[13] And yet the use of total welfare as a merger standard, combined with the refusal of mainstream neoclassical economics to consider assigning differing values for the marginal utility of income at different income levels, forces us to ignore these sometimes large transfers of income and wealth as beyond our concerns or specialized expertise.[14]

Must we really be so detached from these transfers? After all, it is difficult to ignore the rather plain evidence that, on average, firm owners are better off than final consumers—especially the owners of firms large enough to be subject to agency merger review—and that pure transfers from final consumers to owners, which are ignored as the total welfare standard is generally applied but included in a consumer surplus standard, are overwhelmingly likely to be regressive.[15] And there is some empirical support for the intuitively appealing notion that the marginal utility of income declines with income (i.e., that the Frisch parameter varies inversely with expenditure). Indeed this result is one of the factors behind Creedy's and Dixon's finding that market power for particular goods imposes a relative burden on consumers that also varies inversely with income.[16]

11 Orley Ashenfelter & Daniel Hosken, The Effects of Mergers on Consumer Prices: Evidence from Five Selected Case Studies (May 2007) (unpublished paper, Princeton University and Federal Trade Commission), at 4.

12 Russell W. Pittman, *Railroads and Competition: The Santa Fe/Southern Pacific Merger Proposal*, 39 J. Indus. Econ. 25-46 (1990).

13 *Id*. at 36-37.

14 *See, e.g.*, Richard A. Musgrave, The Theory of Public Finance (1959); Arnold C. Harberger, *Three Basic Postulates for Applied Welfare Economics: An Interpretive Essay*, 9 J. Econ. Literature 785 (1971); and Louis Kaplow, *On the (Ir)Relevance of Distribution and Labor Supply Distortion to Government Policy*, 18 J. Econ. Persp. 159 (2004).

15 This is not the place for an exploration of the legislative intent behind the Sherman and Clayton Acts, but Scherer's point regarding the former seems reasonable: "I believe ... Congress was concerned at least as much with income distribution effects (which were well-understood in 1890) as with efficiency effects (which were not) ..." F.M. Scherer, *The Posnerian Harvest: Separating Wheat from Chaff (review of Richard Posner, Antitrust Law: An Economic Perspective)*, 86 Yale L.J. 974-1002 (1977) (book review), at 979.

16 John Creedy & Robert Dixon, *The Relative Burden of Monopoly on Households with Different Incomes*, 65 Economica 285-93 (1998) and John Creedy & Robert Dixon, *The Distributional Impacts of Monopoly*, 38 Austl. Econ. Papers 223-37 (1999).

Regarding owners versus consumers broadly, the aggregate pattern of ownership of corporate assets in the United States is not much in dispute—and it certainly does not appear to be changing in the direction of less inequality. Using data from the most recent *Survey of Consumer Finances* from the Federal Reserve Board, Bucks and co-authors report that "ownership of any type of bond is notably concentrated among the highest tiers of the income and wealth distribution," and that "[t]he direct ownership of publicly traded stocks is more widespread than the direct ownership of bonds, but, as with bonds, it is also concentrated among high-income and high-wealth families."[17]

Kennickell elaborates in a 2006 paper:

> "In 2004, slightly more than one-third of total net worth was held by the wealthiest one percent of families. … The next-wealthiest nine percent of families held 36.1 percent of total wealth. … Families in the bottom half of wealth distribution … held only 2.5 percent of total wealth."[18]

In other words, we can be pretty confident that, as a general matter, transfers of income and wealth to the owners of large firms from individual customers are transfers from the less to the more well-off.

Farrell and Katz (and others) would not, I think, dispute such points.[19] However, they argue against an enforcement agency's taking distributional considerations into account in merger analysis with what may be summarized as four points:

1. It would be very difficult to learn enough to take distribution into account in particular merger cases.

2. "[O]wners and workers of firms are people too," so that it is not clear why one should favor one group of people as consumers over another as producers. Furthermore, for some products like luxury goods, it is

17 Brian K. Bucks, Arthur B. Kennickell, & Kevin B. Moore, *Recent Changes in U.S. Family Finances: Evidence from the 2001 and 2004 Survey of Consumer Finances*, 92 Fed. Reserve Bulletin A2 (2006).

18 Kennickell further notes that, while the first two of these figures have been stable in recent years, the share held by families in the bottom half "is significantly [below] … the … estimates for 1995, 1998, and 2001." Furthermore, "African Americans overall are 23.3 percentage points less likely to have direct or indirect holdings of publicly traded stocks than all families; Hispanics are 28.3 percent less likely." Arthur B. Kennickell, Currents and Undercurrents: Changes in the Distribution of Wealth, 1989-2004 (August 2006) (unpublished paper, Federal Reserve Board), at 10, 35.

19 Farrell & Katz (2006), *supra* note 8.

very likely the case that customers are better off than workers (though not necessarily better off than owners).

3. Many—perhaps most—mergers involve intermediate goods, whose sellers and buyers are both firms. "We are aware of no evidence that the wealth distribution of shareholders varies systematically according to a firm's place in the value chain."

4. Finally, there is a logical "division of labor among public policies: if antitrust enforcement and some other public policies focus on total surplus, other public policies can redistribute that surplus in accord with notions of fairness."[20] (In fact, the argument for this kind of division of labor goes back at least to William Musgrave's paper published in 1959).[21]

The first point is a strong one, but it clearly argues only against efforts to analyze the distributional consequences of individual merger proposals; it does not relate to the proposal in this paper to consider distributional concerns more generally. Farrell and Katz, in fact, point out—though they are arguing a different point—that "in the face of transactions costs, it is desirable to implement policies that work well on average (rather than exactly case by case) even when one has strong distributional preferences."[22] And, of course, antitrust enforcers (and courts) use similar reasoning every day in their per se prohibition of cartel agreements—though no one denies that there are situations (such as countervailing power against a monopolist) where the formation of a cartel may improve welfare. Those situations are considered insufficiently important to outweigh the strong presumption that, in general, cartels harm welfare such that detailed examination of every cartel agreement would impose investigative and adjudicative costs exceeding their social value.

Why, then, should we not conduct merger investigations as if most transfers from customers to owners are regressive, rather than treating them as benign by assumption? It is true, as Farrell and Katz note, that a good deal of merger activity takes place in markets for intermediate goods. It may be that we can say nothing about the progressivity or regressivity of transfers between different groups of owners, but that is not the end of the story. Most of us teach our students that cost increases—in this case, merger-induced transfers—generally get passed along. They may or may not get passed along 100 percent, but under most circumstances a significant portion is passed along. In their valuable 2000 paper that (among many other things) reviews the literature on this topic in the taxation and international trade arenas, Röller et al. suggest as a summary result "that

20 *Id*. at 11, 12.

21 MUSGRAVE (1959), *supra* note 14.

22 Farrell & Katz (2006), *supra* note 8, at 11 n. 21.

pass-on roughly varies between 30% and 70%," depending of course on a variety of circumstances.[23] Generally, the (derived) demand curves for intermediate inputs are likely to be inelastic—purchasers will be relatively unresponsive to price increases so long as their competitors face the same increases. Thus, pass-on in this context should be at the high end of that range.[24] Heyer notes that:

> "[w]here final demand is inelastic and pass-through is likely to be nearly complete, intermediate goods customers may (correctly) believe that they will not be very much harmed by even a substantial post-merger increase in the price of what they buy. Final consumers, of course, are unambiguously harmed."[25]

It seems fully appropriate, then, to treat transfers to sellers from purchasers of intermediate goods as indirect, but real, transfers to sellers of intermediate goods from the final consumers of the goods that embody those intermediate goods.

In turn, this issue leads to a response to arguments that "if only consumers matter, then a buying cartel should be perfectly legal and indeed should be encouraged."[26] This may be true regarding buying cartels formed by final consumers, but it does not apply in the vast majority of merger cases that involve intermediate goods. As Schwartz noted, if a monopsonist lacks market power when it sells, then the monopsony has no impact on downstream customers and the entire harm from the monopsony is the upstream welfare loss. If the monopsonist has

23 Lars-Hendrik Röller, Johan Stennek, & Frank Verboven, Efficiency Gains from Mergers (Research Institute of Industrial Economics, Working Paper #543, 2000). *See also* the theoretical discussion in Jeremy I. Bulow & Paul Pfleiderer, *A Note on the Effect of Cost Changes on Prices*, 91 J. Political Econ. 182-85 (1983).

24 Indeed it is the relative inelasticity of the derived demand curve for the intermediate product that yields the common outcome of merger-induced transfers far exceeding merger-induced deadweight welfare losses.

25 *See* Heyer (2006), *supra* note 2, at 48.

26 Carlton (2007), *supra* note 2. *See* Heyer (2006), *supra* note 2, at 41 n. 28:

> It is worth noting that literal application of a pure consumer welfare standard . . . would appear to immunize consumer buyer groups that exert efficiency-reducing monopsony power over sellers. I suspect that many supporters of a consumer welfare standard for sellers would be uncomfortable applying its logic equally to the buyer side of the market.

See also Kaplow & Shapiro (2007), *supra* note 7, at 88 ("If only consumer welfare mattered, increases in buyer power through horizontal mergers and otherwise might be praised, not condemned.").

market power when it sells, then the low monopsony price that it pays for inputs is not passed along to its customers and so on downstream. On the contrary, it is the output reduction and associated welfare loss that are passed on, so that final consumers suffer rather than benefit.[27] It is only in the case of a buying cartel among final consumers that the arguments in this section would seem to imply approval rather than disapproval of monopsony. In this case, if the sellers possess market power then the cartel would not be condemned unambiguously even under a total welfare standard. In general, then, arguments for consumer surplus as a merger standard that are based on the ultimate effects of mergers on final consumers—as in this section of this paper—do not imply a tolerance for monopsony.

We may conclude, then, that the transfers from customers to owners that result from some horizontal mergers are typically regressive, and that such transfers are likely to be passed along to final customers to a significant degree even if they originate in intermediate goods markets. I do not consider here the Schumpeterian argument that, on balance, market power is a good thing, because monopoly profits are a necessary incentive to innovation and the "creative destruction" that is capitalism at its most productive, except to note the strong theoretical and empirical argument that this effect is weakened or even reversed at a sufficiently high level of market power.[28]

We may conclude, then, that the transfers from customers to owners that result from some horizontal mergers are typically regressive, and that such transfers are likely to be passed along to final customers to a significant degree even if they originate in intermediate goods markets.

I would argue, however, that it does not seem very satisfying or comforting to note that whenever total welfare increases, income redistribution policies could make everyone better off as a result[29]—if in fact they do not. The compensation principle[30] does not pay the rent. One may be happier when changes in government policies reduce the disparities of income and wealth within the United

27 Correspondingly, as Schwartz points out, we do not expect suppliers to monopolists to benefit from the high monopoly prices charged to the customers of the monopolist; rather, the suppliers suffer from the monopolistic output reduction. Marius Schwartz, Buyer Power Concerns and the Aetna-Prudential Merger, Presentation at the 4th Annual Health Care Antitrust Forum, Northwestern University School of Law, Chicago (October 20, 1999).

28 *See, e.g.*, Richard J. Gilbert, New Antitrust Laws for the "New Economy"?, Testimony before the Antitrust Modernization Commission, Washington, DC (November 8, 2005).

29 *See* Kaplow (2004), *supra* note 14, at 172.

30 W. Kip Viscusi, John M. Vernon, & Joseph E. Harrington, Jr., Economics of Regulation and Antitrust (MIT Press 4th ed., 2005).

States (not to mention the world), but until that happens it seems quite reasonable to argue that those making and enforcing other public policies, like antitrust enforcement, should, to the degree manageable, take into account the distributional implications of their actions. This would seem to argue in favor of a standard for merger and other antitrust enforcement focusing on consumer surplus rather than total welfare, as the latter is generally applied—that is, in favor of a merger standard centered on the effect of the merger on (quality-adjusted) price.

Ross and Winter point out that, while in the Williamsonian tradeoff a total welfare standard implies a weighting of increases in producer surplus equal to the weighting of increases in consumer surplus and a consumer surplus standard implies a weight of zero for producer surplus, one can imagine intermediate weighting schemes as well.[31] They argue, however, that antitrust should give no greater priority to income redistribution than other government policies do, and that, based on their analysis, the policies of the Canadian government—the focus of their case study—favor redistribution only on behalf of the very poorest members of society, as opposed to generally from the richer half (for example) to the poorer half. When they translate this policy into the weighting of transfers from consumers to producers generally, it does not much change the equal weighting scheme implied by a total welfare standard.[32]

The main problem with this line of thinking may be that the introduction of a weighting between zero and one for producer surplus reduces the predictability of enforcement by allowing enforcer discretion in the choice of weights.[33] Ross and Winter report some success in Canada with a methodology of solving for the weight which would cause an enforcement decision to change and then considering whether that weight seems reasonable, but that strategy certainly does not eliminate the problem. The more comprehensive answer from the Ross and Winter paper—that a proper weight for producer surplus would not be all that different from one, anyway—seems completely specific to the authors' analysis of broader Canadian distribution policies.[34] I know of no comparable analysis for the United States or other countries.

The *Horizontal Merger Guidelines* of the U.S. Department of Justice (DOJ) and U.S. Federal Trade Commission (FTC) use a standard that is close to a consumer surplus standard—favoring, for example, the inclusion of efficiencies into the analysis when said efficiencies are likely to be "sufficient to reverse the merger's

31 Ross & Winter (2005), *supra* note 3, at 475.

32 *Id*. at 491.

33 I thank Dennis Carlton for suggesting this point to me.

34 Ross & Winter (2005), *supra* note 3, at 488-91.

potential to harm consumers in the relevant market, e.g., by preventing price increases in that market."[35]

However, they make at least a nod in the direction of total surplus in the stated willingness of the agencies to consider, "in their discretion," significant efficiencies that are not likely to be passed along in the form of lower prices for the affected product, including both efficiencies in different markets and savings in fixed costs. In the latter case, the agencies note that "consumers may benefit from [these reductions in fixed costs] over the longer term even if not immediately."[36] In his 2007 paper, Carlton bases his case for total welfare on the longer term benefits of cost savings, especially as these lead to technological improvements.[37]

It may be worth noting here that Williamson himself expresses some reservations about ignoring distributional concerns—though, to be sure, in the end he does come down in favor of doing just that. He begins by making the "division-of-labor" in government policy argument himself, suggesting that "income distribution objectives ... [fall] more clearly within the province of taxation, expenditure, and transfer payment activities."[38] Nevertheless, he also argues that:

> "[t]he transfer involved could be regarded unfavorably not merely because it redistributes income in an undesirable way (increases the degree of inequality in the size distribution of income), but also because it produces social discontent. This latter has serious efficiency implications that the ... [traditional] analysis does not take explicitly into account."[39]

35 U.S. Department of Justice and Federal Trade Commission, Revised Section 4 Horizontal Merger Guidelines (April 8, 1997).

36 U.S. Department of Justice & Federal Trade Commission, Commentary on the Horizontal Merger Guidelines § 4 (March 2006).

37 Carlton (2007), *supra* note 2, at 3-4.

38 Williamson (1968), *supra* note 9, at 28.

39 *Id*. at 28. *See also* Dani Rodrik, *The Rush to Free Trade in the Developing World: Why So Late? Why Now? Will It Last?*, Voting for Reform: Democracy, Political Liberalization, and Economic Adjustment, *in* (S. Haggard and S.B. Webb, eds., 1994) (discussing the issue of transfers versus efficiency gains in the context of development and the liberalization of trade policies). I thank Jim Leitzel for suggesting this paper to me.

He concludes this portion of his paper with the observation that "distinguishing social from private costs in this respect may . . . be the most fundamental reason for treating claims of private efficiency gains skeptically."[40]

III. How Much Deference Should One Give to the Assumption That Mergers Are (at Least) Privately Profitable?

"Assume a virtue, if you have it not."

—William Shakespeare,
The Tragedy of Hamlet

The economist's natural reaction to a proposed merger goes something like the following—if a company proposes a takeover, or two companies propose a merger, then we can assume that this transaction will be at least privately profitable.[41] This assumption will not, of course, turn out to be correct every time, but given information asymmetries and private incentives, we can assume that it will be profitable more often than not, and certainly more often than if the government second-guessed such private decision-making. Enforcers, then, should examine the likely effects of the merger on customers, but with the assumption that the fact of the merger itself implies a positive effect on at least the producer surplus portion of total welfare.

Unfortunately, the support from the empirical literature for this set of benign assumptions about merger motivations and outcomes is not particularly strong. There is, by now, a fairly extensive literature examining merger outcomes that includes a smaller industrial organization literature that relies mostly on accounting data and a much larger finance literature that relies mostly on stock market data. A surprisingly large number of studies in both areas come to the following conclusions:

- The stockholders of acquiring firms on average do not benefit, or do not benefit much, from mergers.

40 Williamson (1968), *supra* note 9, at 28.

41 Heyer (2006), *supra* note 2, at 38 ("Certainly the merging firms believe that they will be better off, as evidenced by the fact that they have chosen to merge, presumably, voluntarily."). *See also* Joseph Farrell, Michael L. Katz, & Carl Shapiro, *Horizontal Mergers: An Equilibrium Analysis*, 80 Am. Econ. Rev. 107-26 (1990) ("Since any proposed merger is presumably privately profitable, it will also raise welfare if it has a positive external effect [i.e., on consumers and on nonparticipant firms].") and Kaplow & Shapiro (2007), *supra* note 7, at 83 ("The law implicitly presumes mergers to be advantageous to some degree. . . . Setting the threshold of anticompetitive effects significantly above zero may be rationalized by the view that mergers typically generate some synergies, so they should not be prohibited unless the reduction in competition is sufficiently great.").

- The stockholders of acquired firms tend to enjoy significant gains from mergers.
- The balance of these two forces is probably a small overall efficiency gain from mergers, though even this is uncertain.
- These patterns vary, to some degree systematically, with the types of merger transactions.

The first result alone should give us pause concerning deference to the forecasts and incentives of acquiring firms. Presumably, even if the net effect ends up positive, it was not the intention of (the stockholders of) the acquiring firm to hand over most or all of the value of this gain to (the stockholders of) the acquired firm. And yet this seems to be the dominant empirical finding.

Among the studies reporting this outcome are those by Mandelker, Varaiya and Ferris, Bruner, and Moeller et al.[42] Dissenting voices include Andrade et al. and Kaplan.[43] Andrade et al. express well the problems raised by these findings:

> "A . . . challenge to the claim that mergers create value stems from the finding that all of the gains from mergers seem to accrue to the target firm shareholders. We would like to believe that in an efficient economy, . . . mergers would happen for the right reasons, and that their effects would be, on average, as expected by the parties during negotiations. However, the fact that mergers do not seem to benefit acquirers provides reason to worry about this analysis."[44]

42 Gershon Mandelker, *Risk and Return: The Case of Merging Firms*, 1 J. Fin. Econ. 303 (1974); Nikhil P. Varaiya & Kenneth R. Ferris, *Overpaying in Corporate Takeovers: The Winner's Curse*, 43 Fin. Analysts J. 64-70 (1987); Robert F. Bruner, *Does M&A Pay? A Survey of Evidence for the Decision-Maker*, J. App. Fin. 46-68 (2002); and Sara Moeller, Frederik Schlingemann, & René Stulz, *Wealth Destruction on a Massive Scale? A Study of Acquiring-Firm Returns in the Recent Merger Wave*, 60 J. FIN. 757-82 (2005). *See also* Scherer (1977), *supra* note 15; David J. Ravenscraft & F.M. Scherer, Mergers, Sell-offs, and Economic Efficiency (1987), and F.M. Scherer, *A New Retrospective on Mergers*, 28 Rev. Indus. Org. 327-41 (2006). A recent business column in the *New York Times* cites "the adage that half of all deals destroy value." Andrew Ross Sorkin, *Dealbook: They're All No. 1, but Are They Worth It?*, N.Y. Times, August 5, 2007.

43 Gregor Andrade, Mark Mitchell, & Erik Stafford, *New Evidence and Perspectives on Mergers*, 15 J. Econ. Persp. 103-20 (2001) and Steven N. Kaplan, Mergers and Acquisitions: A Financial Economics Perspective, Presentation at the Antitrust Modernization Commission Economist's Roundtable on Merger Enforcement (January 19, 2006).

44 *See* Andrade et al., *supra* note 43, at 118.

The first, third, and fourth results together raise the obvious question, why would firms engage in mergers—perhaps particular types of mergers—that on average fail to increase profits? One answer may be the same as the answer to the classic microeconomic question as to why rational consumers would buy both lottery tickets and insurance—even if lottery tickets are on average a losing proposition, the small possibility of a very high return may act as an incentive for participation. Correspondingly, the parties may have been betting on the small possibility of a transformationally successful outcome, as, for example, in the AOL/Time Warner and Daimler-Benz/Chrysler combinations, which both turned out badly.

A number of more specific explanations have been proposed in the literature and found to have empirical support, many relying on the classic problem of the separation of ownership and control that goes back to Berle and Means.[45] Roll suggests a hubris hypothesis, with managers (and, possibly, their shareholders) overestimating the degree to which they can improve the operations of acquired assets.[46] Shleifer and Vishny suggest an empire building hypothesis, noting that the remuneration of top managers is more closely related to the size of the assets that they manage than the return that those assets earn.[47] Gorton et al. note the empirical regularity that larger firms are less often acquired, and suggest a motive of acquiring a smaller competitor in order to make the firm too large to be easily acquired by a larger competitor.[48] Fridolfsson and Stennek suggest a motive of acquiring the assets of a smaller competitor before one's competitors can acquire those assets.[49]

The fact that returns to mergers vary systematically with characteristics of the transaction seems to support these or related hypotheses. Gondhalekar et al. show that free cash flow in the acquiring firm is associated with overpaying for the acquired firm, while Bargeron et al. show that publicly held firms are more likely

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45 ADOLPH A. BERLE & GARDINER C. MEANS, THE MODERN CORPORATION AND PRIVATE PROPERTY (1932).

46 Richard Roll, *The Hubris Hypothesis of Corporate Takeovers*, 59 J. BUS. 197-216 (1986).

47 Andrei Shleifer & Robert W. Vishny, *Value Maximization and the Acquisition Process*, 2 J. ECON. PERSP. 7-20 (1988).

48 GARY GORTON, MATTHIAS KAHL, & RICHARD ROSEN, EAT OR BE EATEN: A THEORY OF MERGERS AND MERGER WAVES (Nat'l Bureau of Econ. Research, Working Paper No. 11364, May 2005).

49 Incidentally, this theory suggests a weakness in the common assumption that a decline in the stock price of competitors following a merger announcement indicates that the merger will result in efficiencies. Fridolfsson and Stennek argue that this effect may simply reflect the market's reaction to the failure of the competitors to successfully purchase the acquired firm themselves. *See* Sven-Olof Fridolfsson & Johan Stennek, *Why Mergers Reduce Profits and Raise Share Prices—A Theory of Preemptive Mergers*, 3 J. EUR. ECON. ASS'N 1083-104 (2005) and Sven-Olof Fridolfsson & Johan Stennek, INDUSTRY CONCENTRATION AND WELFARE – ON THE USE OF STOCK MARKET EVIDENCE FROM HORIZONTAL MERGERS (Centre for Econ. Pol'y Research, Discussion Paper No. 5977, December 2006).

to overpay than privately held firms.[50] Andrade et al. show that acquirers who issue stock to finance an acquisition lose money on average, though they argue that this is largely due to the information disclosed by the issuance of the stock rather than to the acquisition itself.[51] (Amihud et al. suggest that this difference in returns to stock-financed acquisitions may be limited to those firms with low managerial ownership.)[52] Rau and Vermaelen show that acquirers that are glamour firms (or low book-to-market firms) systematically lose money with their acquisitions, in contrast to value (high book-to-market) acquirers that systematically gain.[53] Porter cites the strategy literature as demonstrating that "smaller, focused acquisitions are more likely to improve productivity than mergers among leaders."[54] Other studies have found a "negative correlation between acquirer announcement returns and both acquirer size ... and the size of the merger transaction ... as well as ... worse acquirer returns in defensive acquisitions."[55]

Again, the idea here is decidedly not that enforcement agencies should second-guess the decisions of firms to merge. If firms do not forecast the profitability outcomes of mergers well, enforcement agencies would do much worse. Nor is the point that enforcement agencies should be systematically more inclined to challenge those types of acquisitions that have been shown, on average, not to create value for the acquired firms—though it might be worth considering such a policy, especially if its likely effect, on average, were to discourage deals that reflect the furtherance of manager utility rather than the increase of shareholder value.

THE IDEA IS THAT, IF FIRMS DO NOT IN FACT FORECAST THE PROFITABILITY OUTCOMES OF MERGERS WELL, THEN THE AGENCIES SHOULD NOT ADOPT THE DEFAULT ASSUMPTION THAT A MERGER WOULD ENHANCE THE PRODUCER SURPLUS PORTION OF TOTAL WELFARE SIMPLY BECAUSE THE FIRMS HAVE PROPOSED IT.

50 Vijay B. Gondhalekar, R. Raymond Sant, & Stephen P. Ferris, *The Price of Corporate Acquisition: Determinants of Cash Takeover Premia*, 11 Applied Econ. Letters 735-39 (2004) and Leonce Bargeron, Frederik Schlingemann, Rene M. Stulz, & Chad Zutter, Why Do Private Acquirers Pay So Little Compared to Public Acquirers? (Nat'l Bureau of Econ. Research, Working Paper No. 13061, April 2007).

51 *See* Andrade et al., *supra* note 43, at 111.

52 Yakov Amihud, Baruch Lev, & Nickolaos G. Travlos, *Corporate Control and the Choice of Investment Financing: The Case of Corporate Acquisitions*, 45 J. Fin. 603-16 (1990).

53 P. Raghavendra Rau & Theo Vermaelen, *Glamour, Value, and the Post-Acquisition Performance of Acquiring Firms*, 49 J. Fin. Econ. 223-53 (1998).

54 Michael Porter, *Competition and Antitrust: A Productivity-Based Approach*, *in* Unique Value: Competition Based on Innovation Creating Unique Value (Charles Weller, ed., 2005).

55 *See* Gorton et al., *supra* note 48, at 31.

Rather, the idea is that, if firms do not in fact forecast the profitability outcomes of mergers well—even as to the sign of the effects—then the agencies should not adopt the default assumption that a merger would enhance the producer surplus portion of total welfare simply because the firms have proposed it. Nor should the agencies put much stock in the existence or magnitude of efficiencies claimed by merging parties in their negotiations with the agencies. As Porter summarizes, "[w]e cannot assume that a merger will be efficient and profitable just because companies propose it."[56] And this leads us to the conclusion that if the analysis of the impact of a merger on competition and consumer surplus is what agencies and courts do best, that analysis is what they should rely on in deciding whether to challenge a merger.

IV. Is a Total Surplus Agency Goal the Best Way to Achieve a Total Surplus Process Outcome?

"By indirections find directions out."

—William Shakespeare,
The Tragedy of Hamlet

As noted earlier in this paper, there is a growing literature that examines the issue of the best standard for antitrust enforcement in the context of the process of enforcement—in particular, in merger enforcement, the clear and clearly relevant facts that:

a) firms choose which mergers to propose; and

b) agencies (and courts) are in some ways at a significant information disadvantage as compared to the merging firms.

Among the most important papers, Besanko's and Spulber's 1993 paper and Lyons' 2002 paper—both ably discussed by Farrell and Katz in their 2006 paper[57]—emphasize the incentives of the firms to choose among merger possibilities on the criteria of producer surplus only, so that a corresponding bias on behalf of consumer surplus at the enforcement agencies may be the most likely strategy to achieve an outcome favoring both producer and consumer surplus.[58] Fridolfsson explicitly outlines a scenario in which a consumer surplus bias at the

56 Porter (2005), *supra* note 54, at 19.

57 David Besanko & Daniel F. Spulber, *Contested Mergers and Equilibrium Antitrust Policy*, 9 J.L. ECON. & ORG. (1993) and Lyons (2002), *supra* note 4 (*discussed in* Farrell & Katz (2006), *supra* note 8).

58 There may be some parallel between the advantage of the firms in proposing the merger and the advantage gained by the member of a committee or legislature who controls the agenda. *See, e.g.*, DENNIS MUELLER, PUBLIC CHOICE III (2003).

agencies leads firms to consider alternative merger partners or strategies that they would have not considered otherwise.[59]

Unfortunately the existing literature on the topic of how the U.S. antitrust agencies choose which mergers to challenge—as well as other enforcement actions—is not very satisfying. Masson and Reynolds point out the methodological flaws in the literature of the pre-*Guidelines* period[60] and one of my own papers argues that the more recent literature claiming to demonstrate significant political influences on micro-level enforcement decisions of the agencies is badly flawed.[61] More recently, Baker and Shapiro present data suggesting that the U.S. agencies—and the DOJ's Antitrust Division in particular—have been considerably less likely to challenge mergers under the George W. Bush administration than under the Clinton and George H.W. Bush administrations.[62] In a forthcoming book, Stephen Martin has compiled data on total antitrust cases brought by the DOJ that show a similar pattern.[63]

But consider two potentially simpler issues:

(1) the internal structure of an enforcement agency; and

(2) the fact that, for the most part, and for most of the past quarter century, the heads of the agencies have sought to act as neutral judges rather than as aggressive prosecutors.

I believe that these two factors act to bias the decisions of the agencies against merger challenges and other enforcement actions—which may suggest, as with Besanko and Spulber and Lyons, that some countervailing bias, such as a focus on consumer surplus rather than total welfare, is appropriate even if the object is an outcome maximizing total welfare. I will focus here on the DOJ's Antitrust Division.

Within the Antitrust Division there are sections of lawyers organized either by economic sector (e.g., the Telecommunications and Media Enforcement Section, the Transportation, Energy, and Agriculture Section), by type of investigation and violation (e.g., the National Criminal Enforcement Section), or by

59 *See* Fridolfsson (2007), *supra* note 6, at 287-302.

60 Robert T. Masson & Robert J. Reynolds, *Statistical Studies of Antitrust Enforcement: A Critique*, PAPERS & PROCEEDINGS OF THE AM. STATISTICAL ASS'N part 1 (1977).

61 Russell W. Pittman, *Antitrust and the Political Process*, *in* EMPIRICAL STUDIES IN INDUSTRIAL ORGANIZATION: ESSAYS IN HONOR OF LEONARD W. WEISS (David B. Audretsch & John J. Siegfried, eds., 1992).

62 Jonathan B. Baker & Carl Shapiro, Reinvigorating Horizontal Merger Enforcement, Presentation at the Kirkpatrick Conference on Conservative Economic Influence on U.S. Antitrust Policy, Georgetown University Law School (April 2007).

63 STEPHEN MARTIN, INDUSTRIAL ORGANIZATION IN CONTEXT (2008) (forthcoming).

geography (e.g., the seven field offices). These "legal sections" are in turn supported by three economic sections—groups of economists who work with the lawyers as part of investigative teams but who report their analyses and recommendations to their own (economist) section chiefs.

Section chiefs of legal and economic sections report to Deputy Assistant Attorneys General (deputies), who are assisted by directors of operations. Deputies report to the Assistant Attorney General for Antitrust (AAG), who makes the enforcement decisions. Lawyers, economists, and section chiefs are career staff, while Deputies and the AAG are political appointees.

AN ARGUMENT TO CHALLENGE A PROPOSED MERGER IS, BY ITS NATURE, A SOMEWHAT FRAIL CREATURE WITHIN THE ANTITRUST DIVISION JUNGLE.

An argument to challenge a proposed merger is, by its nature, a somewhat frail creature within the Antitrust Division jungle. A judgment by both the legal and economic staffs that a proposed merger should not be challenged is rarely overruled by the two section chiefs involved. A judgment by both the legal and economic section chiefs that a proposed merger should not be challenged is rarely overruled by the legal and economic deputies. And a judgment by both the legal and economic deputies that a proposed merger should not be challenged is rarely overruled by the AAG. For the most part, no challenge is the default outcome.

Public choice economists and students of bureaucracy will respond that Antitrust Division lawyers are not random draws from the population. Lawyers who apply for work at the Antitrust Division are more likely to believe in its mission than those who do not. (Though, in fact, the majority of new Division attorneys have applied for a position at only the Department of Justice rather than a particular Division. Still, one could argue (a) there is a general pro-enforcement bias on the part of applicants to the Department; and (b) there remains the issue of which young attorneys offered jobs by the Division choose to accept.) Furthermore, Division lawyers arguably advance their careers and increase their human capital by getting a case into a courtroom. (I suggest elsewhere that it is difficult to argue seriously that Division economists—and, for that matter, FTC economists—are biased in favor of challenging mergers.)[64]

However, I would maintain that this (arguable) bias at the staff level is far outweighed by the notable lack of bias (arguably) at the section chief level and (reliably) at the deputy and AAG levels. This is a point apparently not much addressed in the literature. Two papers by Coate demonstrate the importance of perceived objective factors such as market concentration and entry barriers in leading to FTC merger challenges. These findings seem consistent with a lack of

64 Russell W. Pittman, *Review of Antitrust Policy and Interest Group Politics, by William F. Shughart, II*, 7 REV. INDUS. ORG. 91-95 (1992) (book review).

bias at the decision-making level of the sister agency of the Antitrust Division.[65] In related literature, Glaeser et al. suggest that both public interest and career furtherance are factors in certain decisions of federal drug enforcers.[66] This seems consistent with Posner's observation that the "aspirations for higher office or well-paying private employment" of the heads of administrative agencies "are enhanced if they earn a reputation for efficiency."[67]

I think most experienced observers would agree that at the Antitrust Division, not only both deputies—legal and economic—but also AAGs typically think and reach decisions in the mode of adjudicators rather than prosecutors. If they decide to go to federal district court to challenge a merger, they want to win the challenge, but they challenge only those mergers that they believe, on the merits, should be challenged.

Note what all of this means for the outcome of the Division's decision-making process. Even if Division attorneys are biased towards a merger challenge—even if Division attorneys and legal section chiefs together are biased toward a merger challenge—they are certainly no more biased than the lawyers of the merging companies that are biased against a challenge. (The rare formal and organized complaint by a competitor of the merging companies does not change this larger picture.)

But if, as I argue, the deputies and the AAG are not biased, this means that a recommendation to challenge at the staff level that is a close call on the merits has only about a 50 percent chance of making it past the deputies, and then only a 25 percent (50 percent multiplied by 50 percent) chance of making it past the AAG to an actual challenge. An unbiased federal district court judge reduces the chances of the merger being successfully blocked to 12.5 percent. (50 percent multiplied by 25 percent). (The reader can do the math regarding appeals.)

The broader point is a straightforward one. If deputies, the AAG, and the judiciary constitute three sequential decision makers seeking to maximize total welfare, and if there is little appeal from a first or second level decision not to challenge but a strong appeal to a decision at any level to challenge, then the system is going to be biased in the direction of not blocking mergers, including mergers that would reduce total welfare. Some may argue that this laissez-faire sort of bias

65 Malcolm B. Coate, Richard S. Higgins, & Fred S. McChesney, *Bureaucracy and Politics in FTC Merger Challenges*, 33 J.L. & Econ. 363-482 (1990) and Malcolm B. Coate, Twenty Years of Federal Trade Commission Merger Enforcement Activity (1985-2004) (Potomac Working Paper in Law and Economics 05-02, October 2005). *See also* the discussion by Leary, arguing for an intertemporal continuity of basic enforcement decisions at the two agencies. Thomas B. Leary, *The Essential Stability of Merger Policy in the United States*, 70 Antitrust L.J. 105 (2002).

66 Edward L. Glaeser, Daniel P. Kessler, & Anne Morrison Piehl, *What Do Prosecutors Maximize? An Analysis of the Federalization of Drug Crimes*, 2 Am.L. & Econ. Rev. 259-90 (2000).

67 Richard A. Posner, Economic Analysis of Law 643 (Aspen 6th ed., 2003).

is appropriate. Others may reply, as Porter does, that existing accounting and tax conventions already provide artificial incentives for mergers.[68] In any case, if the desired outcome is one that maximizes total welfare, the analysis in this section suggests—in the same spirit as Besanko and Spulber and Lyons—that the best process to achieve that goal is more likely one where the enforcer seeks to add to the mix a bias in favor of consumer surplus. This is of course a fortiori the case if, as I have argued previously, the desired outcome should be one of the maximization of consumer surplus rather than total welfare as traditionally applied.

V. Conclusion

Mergers have a significant impact on the U.S. economy. When mergers are horizontal, they may reduce competition in such a way as to transfer large sums of money to the merged firm (and its competitors) from their customers. Conventional neoclassical economics treats these transfers as welfare-neutral, but I have argued that as a whole they are quite likely to be regressive and thus (arguably) welfare-harmful. This does not mean that enforcement agencies and courts should seek a detailed analysis of the distributional consequences of each horizontal merger. It does suggest, however, that enforcers and courts may assume that, on balance, such transfers are harmful rather than neutral (or "potentially" neutral), and use a consumer surplus standard in evaluating mergers, seeking to block those likely to result in price increases to customers. Two common arguments against this standard—that most mergers are in markets for intermediate goods, and that a consumer welfare standard implies a tolerance for monopsony—do not seem to withstand closer scrutiny. Note that this does not mean that estimates of efficiencies must always be ignored—a consumer surplus standard inherently includes any marginal cost reductions that are passed along to customers.

As noted above, the *Horizontal Merger Guidelines* of the DOJ and FTC elaborate an enforcement standard that is arguably close to a consumer surplus standard, focusing on the effect of a merger on the prices paid by customers, emphasizing the desirability of efficiencies lowering marginal costs so that they may have a direct impact on post-merger prices, and examining claims of efficiencies presented by the merging firms with great care. Thus, the argument in this paper is not really for a change in the status quo, and I do not argue strongly against the taking account of efficiencies in limited circumstances that is favored by the *Guidelines* and the recent *Commentary* thereto. However, several recent papers have called for the adoption of a total welfare standard rather than (close to) a consumer surplus standard, emphasizing in part the desirability of treating transfers as welfare neutral. It is this proposed change that would, all else being equal,

68 Porter (2005), *supra* note 54.

lead to less stringent U.S. merger enforcement against which I am specifically arguing.

Furthermore, it is clear from the finance literature that acquiring firms are poor predictors of the impacts of mergers on their shareholders. On average, acquiring firms in certain categories—and perhaps acquiring firms in general—do not benefit from the deals, though of course the managers who instigated the deals may benefit. This suggests strongly that, on average, the estimates of efficiencies prepared for the agencies by the acquiring firms are not to be trusted, even if the firms themselves believe them. (As noted above, Williamson urged skepticism regarding these estimates, especially the degree to which they reflect public rather than private efficiencies.) And this means that even agencies seeking to maximize total welfare should focus on the impact of the merger on customers, without trying to factor in the inherently unreliable company forecasts of cost reductions, except perhaps in very special circumstances.

Finally, the structure of the DOJ's Antitrust Division—and, I suspect, the FTC—is biased against merger challenges. At each level, a recommendation not to challenge is likely to prevail, while a recommendation to challenge faces a strong appeal from the parties in front of generally neutral top agency management. Under these circumstances, an attempt by the agencies to maximize total welfare will lead to too few merger challenges. A decision rule that seeks to maximize consumer surplus is more likely to lead to decisions to challenge at a level maximizing total welfare.