

**Merger Efficiencies and the Problem of Static Welfare Analysis**

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## **Executive Summary**

This comment discusses the role of efficiencies in merger review in the U.S. courts and in U.S. federal agencies and attempts to determine whether efficiencies are given adequate consideration. In doing so, the comment first attempts to categorize the various efficiencies that are sought and can be achieved through merger. Second, it discusses relevant welfare standards and addresses whether a particular welfare standard should be used at the exclusion of others. Third, it summarizes economic models that have been developed to analyze mergers and the extent to which those models consider economic efficiency. Fourth, it focuses on the degree to which federal courts and agencies consider efficiencies and the barriers that often prevent efficiencies from being considered. Finally, it offers concluding thoughts and recommendations.

## I Introduction

The role of efficiencies in merger analysis has been a controversial topic in antitrust law. Some have argued that mergers are often unsuccessful at producing efficiencies after the merging parties insist that it is potential efficiencies that induced them to merge.<sup>1</sup> However, the studies relied upon by such critics often examine post-merger profit margins as the metric of success of mergers in creating efficiencies, but there is an alternative plausible explanation for the failure of the merger to increase profit margins: the efficiencies could have been achieved and passed on to consumers rather than kept by the firm to increase profits. Even if efficiencies are not achieved, it does not mean that they should not be an important consideration. For a firm that faces stiff competition from rivals, mergers can be an attempt to level the playing field. Similarly, investment in research and development can be viewed as an attempt to level the competitive playing field and can be subject to the same risk of failure as a merger. Yet, it would be disingenuous to suggest that because research and development sometimes fails, companies should refrain from investing in such endeavors.

Likewise, mergers should not be discouraged merely because they do not always result in efficiencies, and as with research and development, it would be disingenuous to say that efficiencies are never a worthy and attainable goal that should be considered in merger analysis. Therefore, the issue is not whether they should be considered, but the extent to which they should be considered. This paper addresses that issue.<sup>2</sup>

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<sup>1</sup> Craig W. Conrath & Nicholas A. Widnell, *Efficiency Claims in Merger Analysis: Hostility or Humility?*, 7 *Geo. Mason L. Rev.* 685, 699-701 (1999).

<sup>2</sup> However, this paper does not take a position on whether changes should be implemented by Congress, the United States Courts, or the FTC and the DOJ.

Part II attempts to categorize the various efficiencies that can be achieved through merger. Part III discusses relevant welfare standards and addresses whether a particular welfare standard should be used at the exclusion of others. Part IV summarizes economic models that have been developed to analyze mergers and the extent to which those models consider efficiencies. Finally, Part V focuses on the extent to which federal courts and agencies consider efficiencies and the barriers that often prevent efficiencies from being considered.

## **II Efficiencies That Be Can Achieved Through Mergers**

In general, the term “economic efficiency” does not merely refer to a situation where costs are minimized. Instead, it refers to any number of situations that tend to increase the economic value of societal assets.<sup>3</sup> Efficiencies can be defined by using four general descriptive categories: allocative efficiency, productive efficiency, dynamic efficiency, and transactional efficiency.<sup>4</sup>

### **A) Allocative Efficiency**

Allocative efficiency refers to situations where societal resources are committed to their highest valued uses. This occurs when output is expanded so that the marginal cost of producing a good or a service equals the market price paid by consumers. Marginal cost includes both the direct costs associated with producing the good or service and the opportunity cost of using resources to produce that good or service. The inclusion of opportunity cost in the marginal cost calculation is essential, since it measures the utility of using resources for producing a good or service relative to the

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<sup>3</sup> Mark N. Berry, *Efficiencies and Horizontal Mergers: In Search of a Defense*, 33 San Diego L. Rev. 515, 532 (1996).

<sup>4</sup> William J. Kolasky & Andrew R. Dick, *The Merger Guidelines and the Integration of Efficiencies into Antitrust Review of Horizontal Mergers*, 71 Antitrust L. J. 207, 208 (2003).

utility of using them to produce other goods or services. Thus, where market price exceeds marginal cost, resources are not allocated to their highest valued use, and firms should utilize those resources to expand output until the opportunity cost of doing so equals consumers' marginal value of the good or service being produced.

By definition, a market that is competitive provides consumers with multiple places to which they can turn to satisfy their demands. Thus, in a competitive market individual firms face a perfectly elastic demand curve and cannot increase price above marginal cost without losing all of their sales. In this instance, firms are said to lack market power. As a result, allocative efficiency is most likely to occur in competitive markets than in markets where a firm has market power, which arises when there are few alternatives to satisfy consumer demand and the firm faces an inelastic demand curve. To the extent that they increase a market power, mergers discourage allocative efficiency. However, there are situations where a merger promotes allocative efficiency. One such example is a vertical merger where a manufacturer and a distributor both have market power prior to the merger. This can cause "double markup" because the distributor's price to the consumer will reflect both its own market power and the increased marginal cost facing the distributor as a result of the manufacturer's monopoly price.<sup>5</sup> If the two firms merge, then as a single firm they face a single marginal cost curve and will engage in only one markup that results, hence, reducing allocative inefficiency.<sup>6</sup>

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<sup>5</sup> *Id.* at 243.

<sup>6</sup> *Id.*

## B) Productive Efficiency

A second type of efficiency is productive efficiency. Productive efficiency occurs where all goods are produced at the lowest possible average total cost per unit<sup>7</sup> so that there is no alternative business arrangement or organization that increases the output for one product without decreasing the output of another product.<sup>8</sup> Productive efficiencies are divided into three types: economies of scale, economies of scope, and synergies.<sup>9</sup>

Economies of scale result from a firm being optimally sized. Sometimes, a firm can be more efficient if it expands, but at a certain point expansion can become inefficient if, for example, expanding makes it more difficult to manage the production process. In competitive markets, the issue of economies of scale is of central importance. If a firm is not efficiently sized, then other firms that are optimally sized will be able to price below the inefficiently-sized firm. As a result, the inefficiently sized firm will either exit the market or will be acquired by another firm. This is known as the “survivor principle”.<sup>10</sup> Mergers play a vital role in this because combining operations can reduce duplication; allow fixed costs to be spread over a larger output base; achieve longer production runs and a reduction in switchover costs through organization; lower inventory costs; and enable more use of specialization in the labor force.<sup>11</sup> In addition, the larger a firm is the more it will enjoy lower borrowing costs and the more cost-

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<sup>7</sup> Productive efficiency can also be defined in terms of total cost for all goods. Implicitly, producing all goods at the lowest total cost is synonymous with producing at the lowest average total cost per unit.

<sup>8</sup> Kolasky, *supra* note 4, at 244.

<sup>9</sup> *Id.*

<sup>10</sup> George Stigler, *The Economies of Scale*, 1 J.L. Econ. 54 (1968).

<sup>11</sup> Kolasky, *supra* note 4, at 244.

effective its advertising and promotions will be.<sup>12</sup> Although economies of scale can often be achieved through internal expansion and reorganization, merger is advantageous because merger is faster than internal expansion; demand is sometimes decreasing and internal expansion would result in further price reductions that make the expansion unprofitable; and internal expansion may result in waste if the competing firm fails and its resources are scrapped as a result.<sup>13</sup>

A second type of productive efficiency is economies of scope, which occurs where it is cheaper to produce two or more products together. Many of the cost savings associated with economies of scope involve producing multiple products without having to duplicate production processes. For example, where the same inputs are used to manufacture two different products, the firm can achieve cost savings. In some cases, technical knowledge may be common to several products, and a firm can reduce per unit costs by having a single specialized labor force that can deal with multiple products. As with economies of scale, economies of scope can be achieved outside of the context of a merger through a joint venture, for example. However, if the cooperating firms have not merged, then the likelihood of hold-up increases since the firms are highly reliant on each other and the joint venture arrangement can give each firm an incentive to engage in opportunistic behavior.<sup>14</sup>

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<sup>12</sup> Timothy J. Muris, *The Government and Merger Efficiencies: Still Hostile After All These Years*, 7 Geo. Mason L. Rev. 729, 734 (1999).

<sup>13</sup> Kolasky, *supra* note 4, at 244-45.

<sup>14</sup> *Id.* at 246.

The last type of production efficiency is a synergy, which is a cost saving or quality improvement that flows from a specific, hard-to-trade asset.<sup>15</sup> There are many possibilities in this category. One synergistic situation exists where two products are compliments, which means that consumers who use one tend to use the other. For example, a computer user may rely on two different software programs to work on a project, but if the two companies that produce the products do not work together, then the user can be faced with issues of incompatibility.<sup>16</sup> Merging allows the companies to achieve a synergy because they can work together to improve the interoperability of the programs. Another situation that produces synergies is where two firms that produce the same or similar products have expertise or superiority in different areas of the production or distribution process.<sup>17</sup> One commentator suggests that in the context of synergies, managerial expertise can have a substantial impact on costs.<sup>18</sup> As long as the firms do not merge or cooperate, they are discouraged from sharing the expertise or superiority because they view each other as competitors or potential competitors.

### C) Dynamic Efficiency

Dynamic efficiencies relate to the effect of competition and potential competition on costs and product quality in the long run.<sup>19</sup> The idea is that short run allocative and productive inefficiency brought on by market power is offset by the benefits of “creative

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<sup>15</sup> Joseph Farrell & Carl Shapiro, *Scale Economies and Synergies in Horizontal Merger Analysis*, 68 Antitrust L.J. 685, 687 (2001).

<sup>16</sup> *Id.*

<sup>17</sup> *Id.*

<sup>18</sup> Muris, *supra* note 12, at 734-35.

<sup>19</sup> See Kolasky, *supra* note 4, at 247-48.

destruction,” which occurs over time and results from product innovations and technological advancements in the production and distribution process.<sup>20</sup> Even if a firm has market power, it will be forced to invest resources in research and development to improve its product and productive processes because the firm faces the constant threat of other firms’ innovation. As a result, short-run allocative inefficiency is held in check. A key ingredient with dynamic efficiencies is that because product differentiation and innovation create barriers to entry that can lead to supracompetitive profits, firms have an incentive to innovate. Without the potential to achieve those barriers to entry and the resulting supra-competitive profits, there is far less incentive to use resources for research and development. Hence, intellectual property laws provide a legal mechanism barrier to entry for new creations, and as a consequence, they promote dynamic efficiency. Likewise, mergers enhance dynamic efficiency and reduce prices by facilitating innovations, and these innovations are passed along to society through diffusion.<sup>21</sup> The idea of diffusion is extremely important to consumer welfare because it suggests that technological enhancements to both products and the production process diffuse to rival firms over time, thereby multiplying the efficiencies by the output of an entire industry.

#### D) Transactional Efficiency

Transactional efficiencies occur where a firm is able to reduce costs associated with business transactions through business practices, contracts, and organizational forms.<sup>22</sup> Costs associated with business transactions include, but are not limited to,

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<sup>20</sup> Joseph A. Schumpeter, *Capitalism, Socialism, and Democracy* (1950).

<sup>21</sup> Gary L. Roberts & Steven C. Salop, *Efficiencies in Dynamic Merger Analysis*, 19 *World Competition L. & Econ. Rev.* 5, 7-8 (1996).

<sup>22</sup> Kolasky, *supra* note 4, at 249.

information costs and exposure to possible hold-up.<sup>23</sup> There are several ways in which a firm can obtain transactional efficiencies. With respect to vertical mergers, firms in the distributional chain are often repeat players, and they incur expense each time the firm negotiates a new deal. However, if the firms merge, such costs can be avoided. Another situation is where the product is highly specialized and dependant upon an input that can be provided only by one firm. Once the downstream firm has committed resources to producing the specialized product, the input supplier, knowing that the downstream firm does not want sunk costs, will hold out to extrapolate more out of the downstream firm. Finally, transactional inefficiencies arise because firms do not have complete information when negotiating contracts. This is referred to as information costs. A merger can eliminate information costs because merging firms then have access to more information. As a result of the possibility of transactional efficiencies, firms have an incentive to expand up to the point where the cost of organizing an extra transaction within the firm equals the cost of engaging in the same transaction outside of the firm.<sup>24</sup>

### **III The Role of Welfare Standards**

There are two competing welfare standards in antitrust economics: the total welfare standard and the consumer welfare standard.<sup>25</sup> Both seek to protect consumers. The difference is that the total welfare standard seeks to protect consumers by way of maximizing welfare for society, whereas the consumer welfare standard treats consumers as the end goal of antitrust.

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<sup>23</sup> *Id.*

<sup>24</sup> Ronald H. Coase, *The Nature of the Firm*, 4 *Economica* 386, 395 (Nov. 1937).

<sup>25</sup> Muris, *supra* note 12, at 735.

Proponents of a total welfare standard are concerned with maximizing total consumer and producer surplus, not with wealth transfer between consumer and producer.<sup>26</sup> Under a total welfare standard, mergers can be damaging when they produce allocative inefficiency, or deadweight loss, as a result of monopolistic behavior (i.e. reducing output to maximize profits) by the merging firms.<sup>27</sup> Thus, the extent to which the merger will lead to such a misallocation of resources is weighed against the extent to which the merger will lead to efficiencies, which create value for society as a whole.

Where a consumer welfare standard is used, the concern is the net effect on consumers instead of the net effect on society. Thus, in addition to deadweight loss, a merger's potential to reduce output and raise prices is also considered anticompetitive because it results in a transfer of wealth from consumers to the producers.<sup>28</sup> This does not mean that using a consumer welfare standard would result in a rejection of efficiencies, but it does mean they are considered indirectly in determining the merger's overall effect on price.<sup>29</sup> Theoretically, some productive and transactional efficiencies resulting from a merger influence a firm's static marginal cost curve and the level of output on the curve at which the firm will produce. As a result, these efficiencies are a part of any analysis that is based on a total or consumer welfare standard.<sup>30</sup> However, the traditional consumer welfare standard relies primarily on a static model to predict post-

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<sup>26</sup> See, e.g., Robert H. Bork, *The Antitrust Paradox* 91 (rev. ed. 1993); Richard A. Posner, *Antitrust Law: An Economic Perspective* 8 (1976).

<sup>27</sup> See, e.g., Bork, *supra* note 26, at 50-89; Posner, *supra* note 26, at 8-18.

<sup>28</sup> Alan A. Fisher, Frederick I. Johnson, & Robert H. Lande, *Price Effects of Horizontal Mergers*, 77 Cal. L. Rev. 777, 780-81 (1989).

<sup>29</sup> *Id.* at 792.

<sup>30</sup> *Id.* at 792-94.

merger price.<sup>31</sup> As a result, it precludes consideration of dynamic efficiencies and some transactional efficiencies.

As mentioned previously, the ability to achieve temporary supra-competitive profits is an important element to dynamic efficiency since such profits are an incentive for a firm to separate itself from the competition through superior ideas and innovation.<sup>32</sup> At the same time, the threat of entry imposes at least some degree of price restraint on the firm with market power, and in order to maintain its position, it must expend some resources in ensuring that its product and business processes are the most technologically advanced. In addition, some of the efficiencies realized by the firm are diffused throughout the entire industry as other firms capture the dominant firm's ideas and innovations.<sup>33</sup> Thus, in the short run, consumers might pay more for a product as a result of the wealth transfer, but in the long run consumers are better off because dynamic competition produces ideas and innovations that result in greater allocative and productive efficiencies and these efficiencies are diffused throughout the entire industry and economy.

The idea of dynamic competition does make an assumption that could be subject to criticism by proponents of a consumer welfare standard. At the outset, it assumes that monopolists will invest any supracompetitive profits in research and development in order to maintain its dominant market position. In this way, the firm is using innovation and resulting efficiencies as a barrier to entry. However, it is plausible that a monopolist

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<sup>31</sup> See *Id.* at 794.

<sup>32</sup> See Schumpeter, *supra* note 20.

<sup>33</sup> Roberts, *supra* note 21, at 7-8.

might instead use its profits to create other barriers to entry that do not create value for society. Thus, monopoly profits can provide the means and the incentive for a firm to engage in behavior that exacerbates the allocative inefficiency problem of monopoly. Still, the fact that there is a chance that this might happen is not a sufficient justification to intervene in a merger since, as most economists now realize, it is efficiency that explains concentration in many industries.<sup>34</sup>

The total welfare standard is also subject to criticism because it ignores direct effects of mergers on consumers. Even those that have advocated a total welfare standard admit that antitrust laws should focus on the effects of merger on consumers. For instance, Robert Bork says:

Consumer welfare is greatest when society's economic resources are allocated so that consumers are able to satisfy their wants as fully as technological constraints permit. Consumer welfare, in this sense, is merely another term for the wealth of the nation. Antitrust thus has a built-in preference for material prosperity, but it has nothing to say about the ways prosperity is distributed or used. Those are matters for other laws.<sup>35</sup>

Thus, the point of disagreement between the traditional consumer and total welfare standard is not over whether the antitrust laws should seek to protect consumers, but over whether wealth transfer should be a factor or whether efficiency maximization should be the only factor. This debate is relevant to the outcome of a merger case since those that promote wealth transfer would require that at least some efficiencies be passed on to consumers, in the form of lower price, immediately after the merger.<sup>36</sup>

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<sup>34</sup> Muris, *supra* note 12, at 736.

<sup>35</sup> Bork, *supra* note 26, at 91.

<sup>36</sup> However, it is also plausible under the consumer welfare standard that a merger is acceptable if the post-merger efficiencies were merely sufficient to hold post-merger price constant.

In their traditional form, neither the consumer welfare standard nor the total welfare standard is adequate. The traditional consumer welfare model suffers from a failure to consider dynamic competitive effects, and it is a fair criticism of the traditional total welfare standard to say that it is not entirely consistent with the consumer protection goal of antitrust. Consideration of economic models that use these standards will further demonstrate the need to adopt a standard that is both more practical for consideration of efficiencies and more beneficial to consumers in the long run.

#### **IV Economic Models That Have Implications for Merger Review**

There have been a number of models proposed for use in merger analysis that account for efficiencies. One of the first economic models to consider efficiencies was Oliver Williamson's model, which he published in 1968.<sup>37</sup> Williamson's model relied on simple static social welfare analysis using the traditional total welfare standard.

Williamson highlighted the importance of efficiencies in a competitive homogenous goods market, showing that small efficiencies produce large welfare gains while price increases resulting from market power produce a much smaller welfare decrease in the form of deadweight loss. Under the assumption that total social welfare should be the goal of antitrust, Williamson argued that efficiencies, not price, should be the focus of merger review because efficiencies created by the merger could easily trump the deadweight loss due to any increased price brought about by market power that resulted from the merger.<sup>38</sup>

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<sup>37</sup> Oliver E. Williamson, *Economies as an Antitrust Defense: The Welfare Tradeoffs*, 58 Am. Econ. Rev. 18 (1969).

<sup>38</sup> *Id.*

However, some have said Williamson's model was inconsistent with the goals of antitrust because it disregards the wealth transfer caused by market power and monopoly pricing. This is the position of Fisher, Johnson, and Lande, who proposed an alternative price standard model that focused on predicting post-merger price in order to quantify the wealth transfer effects of a merger.<sup>39</sup> Thus, they are concerned about consumer welfare maximization, not total welfare maximization. It is important to keep in mind that Fisher, Johnson, and Lande do not advocate ignoring efficiencies. Instead, their model determines the level of productive efficiencies necessary to hold prices constant under a hypothetical change in concentration and market structure resulting from merger. Thus, the model implicitly requires that efficiencies be passed on to consumers to at least some degree.

Even if one accepts the premise that merger analysis should be about protecting consumer welfare, this model fails to adequately consider efficiencies that benefit consumers because it only considers short run price effects of the merged firm's efficiencies at the expense of considering dynamic effects. Another criticism of this model is that it uses unrealistic assumptions. In order to sidestep informational problems associated with estimating cost structures, Fisher, Johnson, and Lande assume that the product market is homogenous and the firms' cost structures are similar.<sup>40</sup> Without these assumptions, even they admit that the market would not reach a stable equilibrium.<sup>41</sup> As

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<sup>39</sup> Fisher, *supra* note 28.

<sup>40</sup> *Id.* at 819-20.

<sup>41</sup> *Id.* at 823.

a result, their conclusion regarding the amount of efficiencies necessary to prevent price increase is not applicable to a large number of markets.

In response, Roberts and Salop advocated a model that attempted to incorporate dynamic competition into the analysis.<sup>42</sup> Their model is a hybrid of the above models since it uses a price standard, but it also considers long term diffusion of cost savings and innovation as well as the return of wealth to consumers through their aggregate equity ownership.<sup>43</sup> As a result, their model requires less efficiencies to prevent a price increase post-merger. However, this model, like the price standard model, assumes that the product market is not differentiated and that firms in the market have similar cost structures. Thus, the price equilibrium used will not hold true in the long run.

The above models implicitly consider three types of efficiencies: allocative, productive, and dynamic. However, they often exclude consideration of transactional costs as a reason for corporate behavior, including mergers.<sup>44</sup> To remedy this problem, the New Institutional Economic (NIE) model posits that there are five factors that produce procompetitive and anticompetitive effects in any given market regardless of concentration.<sup>45</sup> First, the number and type of competitors influences a firm's institutional choices. Second, the nature of the relationships between a firm and its customers is also an influence. This includes the probability of post-contractual opportunistic behavior by the customers and the ability of the firm to secure long term

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<sup>42</sup> Roberts, *supra* note 21.

<sup>43</sup> *Id.* at 7-8.

<sup>44</sup> Malcolm B. Coate, *Efficiencies in Merger Analysis: An Institutional View*, 13 Sup. Ct. Econ. Rev. 189, 212-15 (2005).

<sup>45</sup> *Id.* at 216-24.

commitments from customers. Thus, the firm does not merely use demand to calculate price, but instead it attempts to manage demand and firm reputation through its actions. This might act as a check on the firm's desire to raise prices, and the desire to obtain long term relationships might result in the firm's willingness to pass on some cost savings to customers. Applying the same logic as the second factor, the third factor is the relationship between the firm and its suppliers. It is in the second and third factors that transactional efficiencies resulting from merger are considered. Fourth, the traditional entry and expansion issues influence a firm's desire to merge and to raise or lower prices. Finally, competition and potential competition from substitutes are a factor.

Although the traditional models of Williamson and Lande are interesting and explain behavior and effects in certain contexts, they are not a useful basis by which a framework for analysis in actual merger cases should be established since they are based on assumptions that are unrealistic. The considerations of the New Institutional Economics model, however, do provide a good basis for a framework under which mergers can be analyzed. However, analysis by the courts and agencies often reflects an understanding of the effects of mergers that stems from one of the more traditional models.

## **V Consideration of Efficiencies in the Courts and Federal Agencies**

Although federal agencies and some courts have begun to consider certain efficiencies, they continue to be hostile toward consideration of efficiencies. One commentator notes that since 1991, only three out of 23 district court cases had a favorable view toward substantial efficiencies.<sup>46</sup> There are several possible reasons for this. First, U.S. Supreme Court case law is sometimes interpreted in such a way as to

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<sup>46</sup> *Id.* at 229-230.

prevent consideration of efficiencies. Second, since efficiency claims involve predictions about the future, they are very difficult to prove and are often labeled “speculative.” As a result, courts and agencies have adopted a framework that is prejudicial to the consideration of efficiencies. This framework is based in part on Supreme Court precedent, but it establishes an analytical structure apart from that precedent that imposes a heavy evidentiary burden on merging parties. This section offers specific instances where these barriers preclude full consideration of efficiencies in merger analysis.

#### A) Supreme Court Precedent

In *United States v. Philadelphia Nat’l Bank*, the U.S. Supreme Court established a rebuttable presumption of illegality for mergers that produce “a firm controlling an undue percentage of the relevant market, and results in a significant increase in the concentration of firms in that market.”<sup>47</sup> In this light, the Court then addressed the issue of efficiencies as a possible defense to rebut the presumption:

We are clear, however, that a merger the effect of which may be to substantially lessen competition is not saved because, on some ultimate reckoning of social or economic debits and credits, it may be deemed beneficial. A value choice of such magnitude is beyond the ordinary limits of judicial competence, and in any event has been made for us already, by Congress...<sup>48</sup>

Several years later, in *FTC v. Procter & Gamble Co.*, the Court said, “Possible economies cannot be used as a defense to illegality. Congress was aware that some mergers which lessen competition may also result in economies but it struck the balance in favor of protecting competition.”<sup>49</sup> Since the *Procter & Gamble* case, the Court has

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<sup>47</sup> 374 U.S. 321, 363 (1963).

<sup>48</sup> *Id.* at 371.

<sup>49</sup> 386 U.S. 568, 580 (1967).

not addressed the issue of efficiencies in the context of a merger case, and lower courts have not been consistent in interpreting the Court's language.

For example, the Ninth Circuit interpreted the above language to be an outright rejection of all efficiency arguments intended to rebut a presumption of illegality established under *Philadelphia Nat'l Bank*.<sup>50</sup> On the other hand, the Eleventh Circuit Court of Appeals has interpreted the Supreme Court's use of the phrase "possible economies" to mean efficiencies that are speculative.<sup>51</sup> One reason why lower courts might be inclined to accept such an interpretation is that the Supreme Court, in the *General Dynamics* case, declared that the merging parties' evidence regarding uncommitted coal reserves rebutted the presumption of illegality because uncommitted coal reserves were a better indicator of a firm's future ability to compete in the coal industry than historical share of sales.<sup>52</sup>

In addition, there are at least two instances when, after the *General Dynamics* case, the Federal Trade Commission (FTC) declined to challenge a merger on efficiency grounds.<sup>53</sup> The first involved a merger between the Japanese company that makes Mazda automobiles and Ford that would have created a large enough market share to warrant a challenge under the 1968 Merger Guidelines.<sup>54</sup> The parties advanced a justification for allowing the merger that relied upon both transactional efficiencies and productive efficiencies. They claimed that Mazda was better at producing transaxles for a new type

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<sup>50</sup> *RSR Corp. v. Fed. Trade Comm'n*, 602 F.2d 1317, 1325 (1979).

<sup>51</sup> *Fed. Trade Comm'n v. University Health, Inc.*, 938 F.2d 1206, 1222 (1991).

<sup>52</sup> *United States v. General Dynamics, Co.*, 415 U.S. 486 (1974).

<sup>53</sup> Kolasky, *supra* note 4, at 214-15.

<sup>54</sup> *Id.*

of car that Ford was developing, but that transactions costs prevented Ford from obtaining transaxles from Mazda absent merger. Ford thought that if Mazda knew of the resources it had invested in developing the new car, then Mazda would hold up Ford's production by refusing to supply the transaxles in order to extract more money from Ford. However, if the parties merged, they contended that this threat disappeared and Ford would no longer fear the risk associated with pursuing such economies of scope with Mazda.<sup>55</sup> A second example of the FTC considering efficiencies involved a proposed merger between two nickel cadmium battery businesses. This time, the FTC accepted the merging parties' argument that the merger would produce significant economies of scale that would enable the merged company to more effectively compete on price with the dominant player in the market, General Electric.<sup>56</sup>

More recently, the D.C. Circuit Court of Appeals simply acknowledged that the Supreme Court has "not sanctioned the use of the efficiencies defense in a section 7 case," but then proceeded to declare that because the trend in lower courts is to recognize the defense "proof of extraordinary efficiencies" can rebut the presumption that arises with mergers that produce "high market concentration levels."<sup>57</sup> Some courts, such as the Eighth Circuit, have considered efficiencies without mentioning Supreme Court authority.<sup>58</sup>

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<sup>55</sup> *Id.*

<sup>56</sup> *Id.* at 215-16.

<sup>57</sup> *Fed. Trade Comm'n v. H.J. Heinz Co.*, 246 F.3d 708, 720 (2001).

<sup>58</sup> *Fed. Trade Comm'n v. Tenet Health Care Corp.*, 186 F.3d 1045, 1054 (1999).

## B) Modern Analytical Framework as a Barrier to Consideration of Efficiencies

While the analytical framework used for merger review varies considerably from case to case, the Department of Justice (DOJ) and the Federal Trade Commission (FTC) have used a more uniform framework.<sup>59</sup> Still, both courts and the agencies impose requirements on merging parties that want to have efficiencies considered, including the merger-specific requirement, the verifiable requirement, and the pass-on requirement. Since these evidentiary requirements are the result of legitimate concerns over speculative efficiencies, they are not always undesirable. However, when combined with the anticompetitive presumption, the requirements are highly prejudicial to the consideration of efficiencies. As a result, this section begins with a discussion of the role of the presumption in merger analysis.

### 1) The Presumption

Although the DOJ and the FTC counted efficiencies against merging parties at one time, the two agencies have substantially softened their position on efficiencies over time.<sup>60</sup> The current Guidelines used by the FTC and DOJ admit that the primary benefit of mergers to the economy is their potential to generate efficiencies.<sup>61</sup> The Guidelines make an admirable attempt to consider efficiencies in a dynamic context, suggesting that efficiencies “may result in benefits in the form of new or improved products...and may result in benefits even when price is not immediately and directly affected.”<sup>62</sup> However,

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<sup>59</sup> However, even the DOJ and FTC have modified their method of analysis.

<sup>60</sup> Muris, *supra* note 12, at 730-33.

<sup>61</sup> U.S. Dep't. of Justice & Fed. Trade Comm'n, Horizontal Merger Guidelines (rev. ed. 1997), 4 Trade Reg. Rep. (CCH) ¶ 20,573-11 (Apr. 8, 1997).

<sup>62</sup> *Id.* at 20,573-12.

the Guidelines still presume that high concentration levels in an industry produce a unilateral price increase above competitive levels.<sup>63</sup> This presumption is based on the Cournot assumption that concentration causes unilateral price increases.<sup>64</sup>

Aside from the fact that empirical data supports, at best, the idea of a weak presumption of price increase in concentrated industries,<sup>65</sup> the presumption is also problematic because, like the price standard model discussed earlier, it is concerned only with price immediately after a merger, ignoring the long term dynamic effects of the merger. Although the Guidelines attempt to limit product and geographic markets using the “nontransitory” requirement in its hypothetical monopolist test, the DOJ and the FTC rely on the Diversion Ratio model to define product and geographic markets.<sup>66</sup> The Diversion Ratio model simply attempts to calculate how much demand is diverted from one product to its next best substitute when that one product’s price increases in the short run. This calculation does not include the potential long run effects of innovation and technological progress. As a result, the Guidelines essentially give the government a presumption of price increase, which would otherwise be difficult to prove, based solely on static considerations related to concentration. Then, they require the merging parties to prove that certain efficiencies be realized, which are equally difficult to prove. The Guidelines do not give the merging parties the luxury of any presumptions. In this way, the Guidelines give more weight by default to static presumptions about price than to considerations of the effects of efficiencies. Indeed, it has been suggested that the high

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<sup>63</sup> Muris, *supra* note 12, at 736.

<sup>64</sup> Fisher, *supra* note 28.

<sup>65</sup> Muris, *supra* note 12, at 737.

<sup>66</sup> Carl Shapiro, *Mergers with Differentiated Products*, Antitrust 23, 24-25 (Spring 1996).

burden imposed on merging parties offering evidence of efficiencies virtually precludes it from being a factor in the outcome of cases.<sup>67</sup>

Judge Posner has noted the problem with presumptions about competitive effects in *Rockford Memorial*, saying “it is regrettable that antitrust cases are decided on the basis of theoretical guesses as to what particular market-structure characteristics portend for competition...”<sup>68</sup> Nevertheless, Judge Posner still applied the presumption in that case.<sup>69</sup> It is possible, though, that Posner’s dictum regarding the presumption had an effect on the United States District Court for the Western District of Michigan, which accepted the productive efficiency argument made by a defendant’s testimony that nonprofit hospital mergers reduce duplicative costs through consolidation of clinical services and greater coordination of activities.<sup>70</sup> Still, other courts have not been as accepting of efficiency arguments.

In *FTC v. Cardinal Health.*, the court found that significant efficiencies would likely result from the proposed merger,<sup>71</sup> but that nevertheless the merger was enjoined. The judge appeared to agree with the FTC’s argument that the merger would result in a near duopoly and thus should be presumed illegal despite the presence of significant efficiencies.<sup>72</sup> The D.C. Circuit also dealt with evidence of efficiencies rather harshly in

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<sup>67</sup> Coate, *supra* note 45, at 230-231.

<sup>68</sup> *United States v. Rockford Memorial Corp.*, 898 F.2d 1278, 1286 (7th Cir. 1990)

<sup>69</sup> *Id.* at 1285.

<sup>70</sup> *Fed. Trade Comm’n v. Butterworth Health Corp.*, 946 F.Supp 1285, 1295-96, 1302 (1996) *aff’d*, 121 F.3d 708 (6th Cir. 1997).

<sup>71</sup> 12 F. Supp. 2d 34, 63 (D.D.C. 1998).

<sup>72</sup> *Id.* at 45 n.8, 52, 54, 63, 66, 67.

the Heinz baby food case.<sup>73</sup> In mirroring the presumption language in the guidelines, the court found that efficiencies would never justify a merger to monopoly or near-monopoly and that very high concentration levels required, on rebuttal, “proof of extraordinary efficiencies.”<sup>74</sup> Thus, high concentration levels serve to strengthen the presumption and require greater efficiencies despite the fact that there is often no evidence that presumed supracompetitive prices of a two firm market, for instance, will be higher than supracompetitive prices that already exist in a three firm market.

Since the presumption is often not supported by empirical data, it should be eliminated. This would force both sides to produce evidence of concentration, of characteristics of the market structure for the particular industry, and of potential efficiencies with the burden of proof on the plaintiff to prove that a merger is more likely than not to substantially lessen competition. When combined with the other requirements imposed by the Guidelines, the problem created by the presumption is magnified.

## 2) Cognizable Efficiencies: Verifiability and the Merger-Specific Requirement

The Merger Guidelines single out certain types of efficiencies because these efficiencies are often associated with certain infirmities:

Other efficiencies, such as those relating to research and development, are potentially substantial but are generally less susceptible to verification and may be the result of anticompetitive output restrictions. Yet others, such as those relating to procurement, management and capital cost are less likely to be merger-specific or substantial, or may not be cognizable for other reasons.<sup>75</sup>

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<sup>73</sup> *Fed. Trade Comm'n v. H.J. Heinz Co*, 246 F.3d 708 (2001).

<sup>74</sup> *Id.* at 720.

<sup>75</sup> U.S. Dep't of Justice & Fed. Trade Comm'n, Horizontal Merger Guidelines (rev. ed. 1997), 4 Trade Reg. Rep. (CCH) ¶ 20,573-18 (Apr. 8, 1997).

Thus, in order to be considered, efficiencies must be both verifiable and merger-specific. The verifiable requirement comes from skepticism that efficiencies actually result from mergers. The merger-specific requirement, on the other hand, is a reflection of the acceptance of the anticompetitive presumption. Since mergers increase concentration, and concentration is assumed to result in price increase, the merger-specific requirement seeks to encourage firms to be efficient by using means other than merger.

One of the more notorious statements regarding efficiency consideration came from Judge Richard Posner when he said, “The measurement of efficiency...[is] an intractable subject for litigation.”<sup>76</sup> There are two reasons why the measurement of efficiencies might be intractable for litigation. First, while economists are fairly confident that efficiencies exist in theory, proving them in reality is highly speculative. Courts have imposed the burden on the merging parties to show that efficiencies are verifiable. In *FTC v. University Health, Inc.*, the merging parties, which were hospitals, argued that the merger would result in significant dollar savings because of economies of scale and scope that would reduce duplication, but the Eleventh Circuit rejected consideration of this type of productive efficiency, claiming that it is too speculative.<sup>77</sup> In a more recent decision, a district court in California simply declared that the merging parties’ productive and dynamic efficiency explanations were too speculative without further explanation.<sup>78</sup> The D.C.

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<sup>76</sup> Posner, *supra* note 26, at 112.

<sup>77</sup> 938 F.2d 1206, 1222 (1991).

<sup>78</sup> *United States v. Oracle Corp.*, 331 F. Supp. 2d 1098, 1175 (N.D. Cal. 2004).

Circuit seems to have preempted consideration of most dynamic efficiencies in saying that innovation claims are “often speculative.”<sup>79</sup> Finally, in *FTC v. Staples*, the court considered productive efficiencies, but failed to even address the dynamic efficiencies that the merging parties insisted would result from the merger.<sup>80</sup>

A second reason why efficiencies might be an intractable subject for litigation is that even if certain efficiencies are known to exist, that which is unknown could be far more important. Measurement of both consumer welfare and total welfare change hinges on deriving a marginal cost curve that would result from a merger. The marginal cost curve is merely a prediction based on quantifiable efficiencies that will result from the merger. As Judge Robert Bork has pointed out, this prediction will often fail to consider unknown efficiencies that result from more unmeasurable qualities of the post-merger firm, such as the skill of management, which may be the most important element of efficiency.<sup>81</sup>

Another requirement of the Guidelines and of many courts that can be onerous is that efficiencies must be merger-specific. Although the 1997 revision of the DOJ and FTC Guidelines soften this requirement by only considering alternative means that are “practical in the business situation faced by the merging firms,”<sup>82</sup> this requirement continues to be a substantial barrier to the consideration of efficiencies. For example, the U.S. Court of Appeals for the D.C. Circuit appears to have endorsed the merger specific

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<sup>79</sup> *H.J. Heinz Co.*, 246 F.3d at 721.

<sup>80</sup> 807 F. Supp 1066, 1090 (D.D.C. 1997).

<sup>81</sup> Bork, *supra* note 26, at 127.

<sup>82</sup> U.S. Dep't of Justice & Fed. Trade Comm'n, Horizontal Merger Guidelines (rev. ed. 1997), 4 Trade Reg. Rep. (CCH) ¶ 20,573-13 (Apr. 8, 1997).

requirement of the Merger Guidelines, finding that the lower court had committed legal error by failing to explain why the parties could not achieve comparable efficiencies without a merger.<sup>83</sup>

Robert Pitofsky, who was instrumental to the 1997 revision, argues that there are several efficiency claims that are systematically weak because they are not merger specific. One such efficiency is a type of productive efficiency that he calls distribution efficiency, whereby merging companies are able to rely on one instead of two distribution networks.<sup>84</sup> He rejects this efficiency because it is possible for the two companies to hire an independent distributor instead of merging, which would produce the same result.<sup>85</sup> However, this ignores the possibility that the efficiency would never be realized because of the transaction costs associated with contracting with such an independent entity. In addition, synergies that result from combining management teams or creative teams are rejected because it is said that they can be achieved through other means.<sup>86</sup> Again, it is true that such synergies can be achieved by other means in some cases, but not in all cases. Technology-sensitive industries sometimes rely on extremely high-skilled research teams that are not easily replaced. Even if management teams and creative teams can be replaced, it can be cost-prohibitive and disruptive to do so.

Although the agencies and some courts view evidence of efficiencies with a degree of skepticism when they do not meet the above requirements, some courts have not been as concerned. For example, although the district court in *FTC v. Tenet*

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<sup>83</sup> *H.J. Heinz Co.*, 246 F.3d at 721.

<sup>84</sup> Robert Pitofsky, *Proposals for Revised United States Merger Enforcement in a Global Economy*, 81 *Geo. L.J.* 195, 217 (1992).

<sup>85</sup> *Id.*

<sup>86</sup> *Id.* at 217-18.

*Healthcare Corp.* found that productive cost efficiencies offered by the merging parties were not merger specific and too speculative,<sup>87</sup> the U.S. Court of Appeals for the Eighth Circuit found that the district court had committed legal error in refusing to consider “evidence of enhanced efficiency in the context of the competitive effects of the merger.”<sup>88</sup> In *U.S. v. Long Island Jewish Medical Center*, the court looked favorably on claimed productive efficiencies, including capital avoidance savings that were “difficult to ascertain.”<sup>89</sup>

### 3) The Pass-On Requirement

The issue of whether courts and agencies should require that efficiencies be passed on was discussed in Part III. The pass-on requirement is merely a term to suggest that the courts and agencies are concerned that consumers are not paying higher prices for products post-merger. As is the case with the wealth transfer model discussed previously, the problem with the pass-on requirement is that it can be used to preclude consideration of efficiencies that result in long run benefits to consumers. This is especially true where static economic models are used to predict post-merger price. The DOJ Merger Guidelines appear to mirror the pass-on requirement of Lande’s model by saying the final determination is based on whether efficiencies are sufficient to prevent price increase.<sup>90</sup> However, a footnote makes it clear that the requirement is not as restrictive, saying that the “Agency also will consider the effects of cognizable

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<sup>87</sup> 17 F. Supp. 2d 937, 947 (E.D. Mo. 1998).

<sup>88</sup> 186 F.3d 1045, 1054 (1999).

<sup>89</sup> 983 F. Supp. 121, 148 (E.D.N.Y. 1997).

<sup>90</sup> U.S. Dep’t of Justice & Fed. Trade Comm’n, Horizontal Merger Guidelines (rev. ed. 1997), 4 Trade Reg. Rep. (CCH) ¶ 20,573-16 (Apr. 8, 1997).

efficiencies with no short-term, direct effect on prices in the relevant market. Delayed benefits from efficiencies...will be given less weight because they are less proximate and more difficult to predict.”<sup>91</sup>

Still, some courts find that the pass-on requirement makes consideration of efficiencies more problematic. As the court in *University Health* notes, aside from the difficulty of measuring efficiencies, there is also the “difficulty of calculating the anticompetitive costs of an acquisition against which these efficiencies would be passed on to consumers.”<sup>92</sup> Although the Eleventh Circuit takes a traditional consumer welfare approach, the problem of trying to determine the net effect of a merger is not unique to the consumer welfare standard. Even under a total welfare standard, any measured merger efficiencies must be weighed against any allocative inefficiency that results from an increase market power. This problem is illustrated by *FTC v. Staples*, where the court acknowledged that 15-17% of efficiencies resulting from the merger would be passed on to consumers, but simply declared that the anticompetitive presumption was not rebutted without discussing what the result of those efficiencies would be on price.<sup>93</sup> The court was apparently more concerned about the degree to which efficiencies would be passed on rather than whether those that were passed on would prevent a price increase.

However, as economic understanding progresses and the tools of economic analysis become more advanced, the evidentiary concerns with efficiency consideration

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<sup>91</sup> *Id.* at n.37.

<sup>92</sup> *Fed. Trade Comm’n v. University Health, Inc.*, 938 F.2d 1206, 1222-23 (11th Cir. 1991).

<sup>93</sup> 807 F. Supp 1066, 1090 (D.D.C. 1997).

will be weakened. Even Judge Posner, fourteen years after saying efficiencies are intractable, admitted as much:

[Actual price effect] is a studiable hypothesis, by modern methods of multivariate statistical analysis, and some studies have been conducted correlating prices and concentration in the hospital industry. Unfortunately, this literature is at an early and inconclusive stage, and the government is not required to await the maturation of the relevant scholarship in order to establish a prima facie case.<sup>94</sup>

## **VI Conclusion and Recommendations**

Prior to making any recommendations for change, it is important to acknowledge that very few mergers are ever challenged.<sup>95</sup> Thus, it would be fairly easy to overstate the need for change. However, in those cases where a merger is challenged, there are two fundamental barriers that prevent efficiencies from being adequately considered. First, the federal agencies and the courts have adopted an approach that is based on a static consumer welfare model, which means that the principle concern of a merger is its short run effect on price. Although such a model can be inclusive of productive and allocative efficiencies, it often precludes consideration of dynamic efficiencies and transactional efficiencies as part of the initial analysis. Then, the courts and agencies proceed by assuming that price varies directly with market concentration despite the fact that studies show that this is often not true. Once concentration reaches a certain point, mergers are often presumed to have an anticompetitive price effect. Absent evidence introduced by the merging parties, the result is that a complaining party, who would ordinarily bear the burden of persuasion, will win the case without actually offering any evidence, aside from concentration data, of a price increase. Modern economics demonstrates that

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<sup>94</sup> *United States v. Rockford Memorial Corp.*, 898 F.2d 1278, 1286 (7th Cir. 1990).

<sup>95</sup> Farrell, *supra* note 15, at, 686.

focusing solely on concentration oversimplifies price theory and can result in an inaccurate prediction.

Once the presumption is applied, though, the courts and agencies often impose further limitations on the consideration of efficiencies. Viewed in isolation, some of these limitations, such as the pass-on requirement and the verifiability requirement, are understandable since it is important that the merger is motivated by potential efficiencies, which can benefit both the merging parties and consumers. Efficiencies and their effect on price are difficult to prove on a case by case basis. In fact, they are as difficult to prove as proving the effects of concentration on price. However, unlike the treatment of the government's concentration data, those that offer potential efficiencies are not afforded any presumptions.

Since it often ignores dynamic efficiencies and transactional efficiencies as part of its presumption, the current framework for considering efficiencies should be changed to reflect the factors of New Institutional Economics. The courts and agencies should continue to consider efficiencies on a case by case basis, but several analytical changes are needed. The presumption should be eliminated. Market concentration should be considered, but only as one factor in balancing the competitive effects. Second, the long run benefits of dynamic competition should be given more weight when balanced against short run price increases. Indeed, individual characteristics of a given market can make the market more conducive to long run dynamic competition despite high market concentration. Finally, consistent with New Institutional Economics, transactional efficiencies should be considered as part of the analysis since they can be extremely important in enhancing consumer welfare.