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Estimating the Cost of Monopsony Power Abuse Imposed by a Single U.S. Auto Insurer upon a Large Individual Auto Collision Repair Shop

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Abstract

Over recent decades, the U.S. auto insurance industry has secured tight control over the auto collision repair (ACR) industry through a use of preferred provider networks of captive ACR shops under contract with individual auto insurers. By exercising control over the ACR industry, auto insurers claim they have instituted a better, safer and more efficient system of auto repair service provision, but the independent ACR shops tell a quite different tale of market power abuse, steering of ACR jobs into insurers' own direct repair provider (DRP) networks, undue control over reimbursements and damage appraisals, suppression of ACR labor rates, and improper reputational losses due to 'tortious interference' with these shops' customer relations.

These independent ACR shops have fought back through litigation and politics, trying to wrest control of their industry back into their own hands to restore a level competitive field of fair rivalry in place of an autocratic control by insurers over repairs, labor rates and revenues. For litigation efforts and regulatory initiatives, some assessment of the allegedly illegal behavior is needed, and there is seldom adequate data available for this purpose. The aim of this paper is to present a method of calculating the losses incurred by an individual independent ACR shop pursuant to an auto insurer's adverse steering of jobs and its suppression of hourly labor rates against this shop. One of the virtues of this method is that it does not require a great deal of information from the auto insurer, as so often a paucity of data is supplied through discovery.

The economic analysis of an auto insurer's steering of jobs is based on an asserted relation of insurers' market shares to their revenue shares of a large ACR shop's insurance-based sales. An assessment of the losses due to labor rate suppression is founded on the use of auto mechanical repair (AMR) labor rates as an economic comparable, applied to both the jobs performed under that auto insurer's policies and to jobs steered away from this single large ACR shop. This study includes a report on the estimated losses suffered by an actual ACR shop in New York State from 2002 to 2007 and discusses some possible limitations, adjustments and tests of the results so produced. At the end, a brief discussion of further research applications appears.

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Introduction

Over recent decades, the U.S. auto insurance industry – or at least significant portions thereof – has secured control over the auto collision repair (ACR) industry through a use of preferred provider networks of captive ACR shops under contract with individual auto insurers. Due to important industry information asymmetries and information impactedness, auto insurance policyholders in need of ACR services tend to be thrust into this market unexpectedly in a state of helpless ignorance and disrupted uncertainty, unlike for most significant decisions involving large capital outlays. Also, auto insurers have marketed their policies on the basis of ‘being there’ for policyholders whenever a claim is submitted.¹ The policyholder thus expects and seeks some assistance with the choice of collision repair facilities, and auto insurers are ready to help direct these claimants into their own network of direct repair program (DRP) shops.

Given insurers’ strong control and influence over consumers’ repair decisions, individual ACR shops face a difficult choice between (a) becoming a DRP shop for at least some insurers – consenting to a lower hourly labor rate for repairs in exchange for an expectation of higher repair volumes steered into their shop – and (b) doing business as a totally independent repair shop, promoting its ACR services in the market directly to consumers, with insurance-related jobs steered away from them by auto insurers. Most states have passed ‘anti-steering’ statutes set to limit auto insurers’ efforts to steer claimants into their own DRP shops, but these laws are all too often ineffective and unenforceable.²

The auto insurance industry argues that this is an efficient institutional arrangement for ACR work, that it reduces the costs of auto collision repair and therewith insurance premiums within an integrated program of ongoing and committed business relationships that also serve to assure and maintain a high and exacting standard of quality for these repairs.³ An alternative view is that this DRP system entails an improper and inefficient abuse of monopsony power by auto insurers against both independent and network (DRP) shops, that the lower hourly labor rates so achieved for ACR work – and then imposed on independent shops as a ‘competitive market’ rate – do not result from the working of free market competitive forces but instead derive from market power abuse by the auto insurance industry through its strict control over damage adjusters and over consumers’ choices with regard to ACR shops.

Interestingly, this problem has been a concern of the U.S. Department of Justice for some time; as of November 27, 1963, under Attorney General Robert F. Kennedy, a *Consent Decree* signed by 237 auto insurers contained the following language about these insurers’ “conspiracy” to restrain trade:

19. Included among the means used under the Plan to control and depress automobile material damage repair costs are the following: (1) to repair rather than replace damaged parts; (2) to replace damaged parts by used

rather than new parts; (3) to obtain discounts on new replacement parts; (4) to establish strict labor time allowances by the sponsored appraisers; and (5) to obtain the lowest possible hourly labor rate. ...

25. The aforesaid offenses have had, among others, the following effects: (a) Elimination of competition in the adjustment and settlement of automobile property insurance claims, in the automobile material damage appraisal business and in the automobile material damage repair business; (b) Non-sponsored appraisers engaged in or desiring to engage in the automobile material damage appraisal business have been foreclosed from a substantial segment of the business; (c) Repair shops which refuse to accept the sponsored appraisers' estimate have been foreclosed from a substantial segment of the automobile material damage repair business; and (d) Prices charged by repair shops have been subjected to collective control and supervision by defendants and co-conspirators.

FINAL JUDGMENT

... NOW, THEREFORE, ...it is hereby ORDERED, ADJUDGED AND DECREED as follows: ...

IV. (A) Each defendant is enjoined from placing into effect any plan, program or practice which has the purpose or effect of: (1) sponsoring, endorsing or otherwise recommending any appraiser of damage to automobile vehicles; (2) directing, advising or otherwise suggesting that any person or firm do business or refuse to do business with (a) any appraiser of damage to automobile vehicles with respect to the appraisal of such damage, or (b) any independent or dealer franchised automotive repair shop with respect to the repair of damage to automobile vehicles; (3) exercising any control over the activities of any appraiser of damage to automotive vehicles; (4) allocating or dividing customers, territories, markets or business among any appraisers of damage to automotive vehicles; or (5) fixing, establishing, maintaining or otherwise controlling the prices to be paid for the appraisal of damage to automotive vehicles, or to be charged by independent or dealer franchised automotive repair shops for the repair of damage to automotive vehicles or for replacement parts or labor in connection therewith, whether by coercion, boycott or intimidation or by the use of flat rate or parts manuals or otherwise.

This sweeping prohibition against any direct involvement by auto insurers in the process or pricing of damage appraisals or auto collision repair (ACR) work has since been ignored with impunity by auto insurers, for reasons that remain unexplained. Most auto damage appraisers are insurers' staff employees, and thus are under their complete control; labor rates are set by auto insurers and duly enforced by staff adjusters; and auto insurers are also engaged in an ongoing effort to 'steer' their collision repair jobs into their own network of captive DRP shops.⁴ A few independent ACR shops – in general, only those strong enough in their markets to resist strong inducements to enter into DRP contracts – have made attempts to litigate against insurers' monopsony power abuse, either on antitrust grounds or under state unfair trade practices laws. In the course of these cases, a damage assessment is needed. This paper reports and describes a method for the assessment of damages suffered by an individual ACR shop pursuant to the loss of business due to steering and the suppression of hourly labor rates for its ACR services.

Summary Description of the Analysis, Methodology, and Results

There are two primary components to this economic loss analysis. First, the process of steering is introduced and discussed. Then the problem of labor rate suppression is summarized and presented. Next, the specific context of the application is discussed and the loss analysis is described. At the end, the results are presented and then examined in terms of their limitations and possible policy implications.

General Approach to Steering Analysis: Auto insurance companies' steering of insured ACR jobs from independent shops into their own contractual networks of DRP shops and other preferred ACR providers is often noted by industry participants and in the trade press. The effects of this practice are to reduce the amount of ACR work performed by independent shops and to increase auto insurers' influence over the setting of hourly labor rates for ACR work, enforced through their steering of jobs and strict control over adjusters. The steering component of the analysis described below is based on the premise that the percentage of any given independent shop's insurance-sourced revenues from a particular auto insurer is related to that insurer's percentage share of the market, plus or minus given its steering activities. The rationale for this relation is founded on the impact of a highly competitive auto insurance sales market that should keep premiums closely aligned with the costs of fulfilling claims over time. If so, then payouts on claims (*ceteris paribus* for other variability) and a shop's revenues from each insurer ought to align over time with that insurer's market share. In other words, if **M** is the market share of a given auto insurer and **R** is the share of an ACR shop's insurance-sourced revenues for repair jobs paid for by that insurer – and in the absence of steering activity by *any* auto insurer – all the ratios of **M** to **R** (call them '**M/R ratios**') for these insurers should generally equal unity, at least on average over time beyond mere random variability, especially if the size of that independent ACR shop is significant in its own market domain.

The impact on a given shop of auto insurers' efforts to steer their ACR claimants out of independent shops into their own networks of DRP shops economically operates in the same manner (and with similar business effects on sales and earnings) as that shop having a poor reputation for ACR job performance. In each case, customers tend to take their repair work elsewhere to a greater extent than if the shop had a reputation for work of 'average' or 'superior' quality relative to a typical shop in a particular region. One might think of these reputational forces as 'attracting' or 'repelling' customers, where a reputation for high-quality work 'attracts' more sales than average, while a reputation for poor performance 'repels' sales sufficiently that a shop brings in a below-average share of its local market demand. But these 'reputational' forces simply affect a shop's share of its own market; it is only when auto insurers differ in their direction of ACR jobs toward or away from a given shop that the shop's **M/R** ratios for those insurers diverge from unity. In other words, this model of steering effects is a *relative* measure: if all auto insurers steer the same percentage of their ACR work away from a given shop, the **M/R** ratios will not reveal this as steering activity, as all these revenue shares will scale down in the same proportion as will that shop's revenues. The only indication of steering appears in the form of a marked disparity across different auto insurers, where those steering the least become a benchmark for a relative measure of steering activities by all the others. Assuming all major auto insurers have DRP networks into which they move ACR work (with these DRP shops being closely controlled and dependent on that insurer), any assessment of ACR jobs lost to an independent shop with this model will be conservative, as based on a benchmark that includes steering activity. Only the

relative variation of these steering effects can be discerned through this methodological lens.

Consequently, the ratio of an auto insurer's market share (**M**) in a particular region to that insurer's share of an independent shop's insurance-related revenues (**R**) offers a relative basis for assessing that shop's 'attraction' or 'repulsion' of those claimants, at least in the absence of any additional influence on consumer choice, such as insurers' steering activities. So any auto insurer's efforts to steer its collision repair claimants away from an independent shop embodies similar economic effects as a poor reputation among that particular insurer's claimants; indeed, one of the primary means by which such steering gets exercised is by an insurance company's suggestion to its claimants that the independent ACR shop's work is substandard and so will not be guaranteed; only if those services are performed by its own DRP shop will the repairs be guaranteed.⁵ All this implies that the ratio of an auto insurer's market share to its share of an independent shop's insurance-related sales can serve as a relative measure of the effects of that insurer's steering efforts on a shop's volume of sales.

There is an issue of data availability and therefore of 'scaling' worth mentioning here. The only data available for a direct comparison of auto insurers is state-wide data on market shares based on auto insurance premiums from the sale of auto insurance policies in New York State. The regional market in which this ACR shop operates is the area in and around Nassau County on the western end of Long Island in New York State. The application of state-wide insurance market shares to a narrower regional market calls for explanation. The market for auto insurance sales is extremely competitive, as auto insurers often declare, in spite of their antitrust exemptions for "the business of insurance" as specified in the McCarran-Ferguson Act of 1945. There are many sellers of auto insurance, and though there are three auto insurers that dominate the New York market with state-wide shares of from 10 to over 20 percent, there is a strong competitive fringe of smaller sellers in this market. Such a very competitive market has some meaningful characteristics that justify a use of state-wide data in application to an ACR shop of significant size in a particular regional market.

First, as in all highly competitive market environments, this means profits on these policies tend to be normalized across insurers, such that the profit ratio of revenues to costs on these auto insurance policies are disciplined by market forces, which implies that their market shares based on premiums (or revenues) should stay in fairly close alignment with the distribution among these auto insurers of the costs of fulfilling auto collision claims. Second, there is no clear reason that the split between the two primary components of auto collision claims – that for healthcare due to personal injuries and that for ACR repairs – should differ markedly across insurers, so the specific proportional distribution of collision repair or ACR costs between these auto insurers should be fairly closely aligned with their market shares based on auto insurance premiums. Of course, there will be random variations over time, but during the six-year period of this analysis, these variations should generally be expected to cancel out and become unimportant with respect to the calculation of overall damages during these six years.

What about the scaling down from a state-wide level on which different insurers can be compared to the regional level in which this particular ACR shop operates? First, there are no available data on which these auto insurers can be compared on their county-wide market shares, since each insurer also defines its regional and local data based on the location of its claims processing centers, and not on any governmentally-defined geographic region. In this case, however, vehicle

registration data could be used to test the regional or local share of any particular insurer, and so to adjust the damage results up or down depending on whether, for example, that insurer has a larger or smaller share of its insured vehicles in that region than at the state-wide level. Were the insurer to have a larger regional share based on vehicle registrations, then the results could be adjusted to reflect that difference.⁶ There were several other tests of this steering estimate that could be applied as well, had appropriate data been provided to perform them.⁷ Such data limitations are typical in these situations; one works around them as best one can.

There is another relevant qualification for the use of this measure of steering based on M/R ratios: the share of any single shop's insurance-related revenues tied to a given insurer also depends on other auto insurers' steering efforts. In a market with only one auto insurer steering claimants away from an independent shop, a proper measure of these steering effects would equalize – *ceteris paribus* over time – this insurer's market share M to its share of this ACR shop's insurance-related revenues R , showing (by the difference between the actual and projected revenue shares) that shop's lost sales due to that insurer's steering activities. The estimate of lost sales due to steering would thus be based on a unitary benchmark, namely by adjusting the sales covered by any given insurer until reaching an M/R ratio of **1.00**. But in a market with any other insurers steering their claimants away from that shop as well, then the benchmark for any single insurer's M/R ratio (absent its own steering effects) would have to be *less than 1.00* to adjust for the lower total revenues for this ACR shop due to the other insurers' steering activities. A benchmark M/R ratio of 1.00 would overlook these steering effects, since that shop's revenues are reduced by other insurers' steering, so unduly inflating these revenue shares. Consequently, when other auto insurers are also directing jobs away from that shop, the benchmark M/R ratio for the absence of steering must be less than 1.00 to correct for the effects of revenues lost due to these other insurers' steering activities. The whole idea is to adjust the total revenues of that one large shop to correct for these other insurers' steering effects on its revenue levels.

This is the reason for reporting a range of steering estimates, to trap an 'average' loss between both minimum and maximum measures of the actual losses incurred. The minimum measure of steering loss is based on an M/R ratio of 1.00, which is a minimum for two reasons: first, because the measure is relative to the other insurers (all or most of which are presumed to be steering as well, though some not as effectively); and, second, because the only circumstances under which an M/R ratio of one will indicate an absence of steering is if *none* of the other auto insurers are doing any steering at all. The maximum measure of steering employs a benchmark based on the *lowest* M/R ratio observed during each year – the analysis is done on an annual basis – on the assumption that there are other random forces at work that might affect that measure along with steering. The relativity of the model always implies a conservative bias as long as insurance jobs are being steered away from this shop by even the auto insurer with the lowest M/R ratio (used as the benchmark for maximum steering losses).

Once the number of ACR jobs steered away from an independent shop by an auto insurer has been identified through this method, then the value of those lost jobs – based on the profits that were not thus earned – is stated as a loss due to that insurer's steering activities. The next step in the analysis is to assess the losses incurred by this shop due to auto insurers' suppression of hourly ACR labor rates.

General Approach to the Analysis of Labor Rate Suppression: Although the market for ACR work is strongly influenced by auto insurers through a third-party payment system including captive damage appraisers and the steering of claimants and jobs into insurers' DRP and other preferred shops, there is another similar market less subject to insurers' control, the auto mechanical repair (AMR) market. The AMR market involves the same customers and vehicles, repair payments are made for both labor hours and parts, and indeed there are only two significant differences between these markets. First is the type of repair (and the equipment used for that purpose); second, the manner of payment differs among these two sectors. ACR work is mostly paid for by insurers, and thus is subject to insurers' control as described above, while AMR work is mostly paid directly by consumers, so is not really subject to any overarching control by insurers. Furthermore, based on common knowledge in the auto repair industry, AMR work is less capital intensive than ACR work (which often includes some AMR work, while the AMR shops seldom do ACR work), and the required skills and wages for proper ACR work generally exceed those for AMR work. Finally, the levels of risk involved with ACR work, which is mostly customized to the details of an auto collision, far exceed those in AMR work, which is mostly formulaic and involves removal and replacement of parts. Thus, if 'freely competitive market hourly labor rates' for ACR work call for estimation – as they do in this instance – there is a very convenient comparable labor rate that can be used for this purpose: the prevailing rates for AMR work in a given area offer a useful proxy for a minimum measure of what ACR rates would be in a truly unencumbered 'free market' environment.

This is especially the case since – as noted – the capital requirements and skill sets for AMR work are less costly and stringent than those for ACR work (which includes expensive frame machines and painting booths along with most of the tools and types of computer equipment used in AMR work). If so, then AMR labor rates can be used as a minimum proxy for what ACR labor rates would be in a 'free market' setting unencumbered by auto insurers' abuse of their monopsony power over ACR rates, repair reimbursements and ACR customers. In addition, most AMR customers simply pay the posted labor rate for mechanical repairs, so average posted rates in a given area can be used as a minimum measure of what truly 'free market' ACR labor rates would be in the absence of auto insurers' control.⁸

Table 1 below reports on the percentage weekly and annual wage differentials between ACR and AMR workers for the United States, New York State and Nassau County.⁹ This wage rate differential appears in national U.S. data and even more strongly in New York State overall and in Nassau County.

Table 1. Percentage Excess of Weekly and Annual ACR Wages over AMR Wages

Percentage Excess (ACR-AMR)/AMR	United States		New York Statewide		Nassau County Long Island, NY	
		Year	Weekly	Yearly	Weekly	Yearly
Median	4.4%	2002	13.8%	13.9%	22.1%	22.1%
Hourly		2003	12.3%	12.4%	22.6%	22.7%
Mean	5.6%	2004	12.9%	12.9%	29.9%	30.1%
Hourly		2005	11.8%	11.6%	22.6%	22.6%
Mean	5.6%	2006	13.7%	13.6%	25.9%	26.0%
Annual		2007	15.1%	15.2%	28.3%	28.3%

So according to the U.S. Department of Labor's Bureau of Labor Statistics, hourly and annual wages for "Automotive Body and Related Repairers" exceed the hourly and annual wages for "Automotive Service Technicians and Mechanics," showing the relative skills and training levels of ACR technicians are accordingly higher than those for AMR workers, which is also often attested to by auto repair specialists. This skill differential, along with the often-expressed observation that initial capital requirements are also higher for ACR shops than for AMR shops, implies that ACR labor rates should be at least as high as the AMR rates being voluntarily paid in an unencumbered free market to comparable AMR service providers. The AMR labor rates serve as a reasonable minimum bound for what the ACR labor rates would be in 'arm's length' transactions unsuppressed by insurers' control.

Consequently, the fact that the average level of ACR wages in Nassau County consistently exceeds the average level of AMR wages by well over 20 percent implies that ACR labor rates, if set under 'arm's length' conditions in a truly free marketplace, should be at least as high as the prevailing AMR labor rates, especially in Nassau County. Furthermore, if the skill and capital requirements and the risks undertaken by ACR shops exceed those for AMR shops, all three of these factors strongly imply that ACR labor rates in a free and uncontrolled 'arm's length' market for auto collision repairs should significantly exceed these free market AMR labor rates, based on internationally-accepted tax standards used in transfer pricing analyses applied to multinational firms' cross-border internal pricing decisions.¹⁰

These two analytical approaches – of steering and labor rate suppression – were used in a case in which a large ACR shop in Nassau County, NY filed a complaint against one of the largest U.S. auto insurers (henceforward referred to as "Insurer A"), against its steering activities and its suppression of ACR labor rates. In my professional role as an economic damages expert, I was asked to prepare a damage assessment in this situation. The rest of this paper reports on the method I used to calculate the economic losses suffered by this ACR shop pursuant to Insurer A's alleged wrongdoing.

Initial Analytical Steps: The very first step in the analysis was to identify the relative standing and characteristics of this ACR shop in comparison with an 'average' shop in different regional categories. For this comparison, data was used from

the 2002 U.S. Census of Business¹¹ for the United States overall, the state of New York, the NY-NJ Metropolitan Area, the L.I.-NY Metropolitan Area, and Nassau County, NY (in western Long Island, NY). [Table 2](#) below reports the findings from this analysis.

Table 2. Comparison of This ACR Shop with All Other Shops by Region (2002 data)

Business Regions	United States Overall	NY State Overall	NY-NJ Metro	LI-NY Metro	Nassau County	ACR Shop
Revenues	\$22,405,337,000	\$978,843,000	\$497,493,000	\$282,224,000	\$143,755,000	\$5,673,492
Total Shops	35,200	2,063	1,055	572	250	1
Revenues/Shop	\$636,515	\$471,954	\$466,622	\$484,327	\$554,544	\$5,673,492
ACR Shop/Avg	8.91	12.02	12.16	11.71	10.23	1.00

The data in [Table 2](#) indicate that this ACR shop is: (1) almost *nine times* the average size of U.S. ACR shops; (2) about *twelve times* the average size of all other shops in New York State, in the NY-NJ Metropolitan Area, and in the L.I.-NY Metropolitan Area; and (3) over *ten times* the average size of all other shops in Nassau County, NY. This information shows that this ACR shop is attracting a far greater than average share of business, even despite endeavors by some auto insurers to steer their claimants away from this ACR shop into either their own networks of DRP shops or to other preferred shops. This suggests this ACR shop enjoys a significantly above-average market reputation for the quality of its ACR work compared to an average shop of its kind, due to its superior ability to attract business away from other rival shops. The reason this ACR shop's relative size in its own market domain is important is that this makes it more likely that other random sales variations (than auto insurers' steering activities) will be relatively small in proportion to its total amount of business, given its strong market position.

The next stage of the analysis was to identify two measures of profit from this ACR shop's IRS corporate income tax data for the eight calendar years from 2002 through 2007: gross profit margins (based on those data) averaged 44.4 percent and a constructed measure of 'variable net profit' margins (based on the components of below-the-line costs that vary with volume of sales) averaged 26.2 percent during these six years. The actual gross and 'variable net' profit margins used in the analysis – based on these data – for this ACR shop were accordingly assumed to be *40 and 20 percent*, respectively, in order to make the resulting loss estimates somewhat more conservative in their valuation of lost revenues.

The “But For” Scenario for Steering Estimates: Three estimates were developed to yield a minimum, average and maximum measure of revenue losses incurred by this ACR shop by estimating a 'but for' world without steering by Insurer A. The first measure, which serves as a minimum estimate of this ACR shop's revenue losses due to steering, was based on an equalization of Insurer A's market share in New York (**M**) with its share of this ACR shop's revenues (**R**) for each year (as designated by an **M/R** ratio equal to **1.00**). This generates a minimum measure of revenue losses due to Insurer A's steering activities because the effects of other auto insurers' steering also reduce this shop's revenues, so raise Insurer A's revenue share (**R**) at this ACR shop, thus (misleadingly) showing 'less steering.' In other words, were Insurer A

the only New York auto insurer steering ACR jobs away from this ACR shop, this ‘minimum’ measure of lost jobs due to steering would generate a more complete estimate of the impact of Insurer A’s steering activities on this ACR shop’s revenues. Since other insurers are also steering work away from this shop, a simple equalization of these shares (by setting Insurer A’s **M/R** ratio to **1.00**) will understate the full revenue loss effects of Insurer A’s own steering activities.

[Table 3](#) displays the average **M/R** ratios over time for 10 large NY auto insurers paying for ACR work at this shop, to show evidence for steering activities by these other insurers (especially relative to Insurer B’s low steering benchmark):

Table 3. Insurance Companies’ Average Ratios of Market to Revenues Share, 2002 to 2007

<u>Insurance Company Name</u>	<u># ACR Jobs at Shop</u>	<u>ACR Shop’s Revenues from Ince Company</u>	<u>Average Revenue per Job</u>	<u>Unadjusted Average M/R Ratio</u>	<u>Adjusted Average M/R Ratio</u>
Insurer A	983	\$6,192,683.33	\$6,299.78	1.21	1.17 ¹²
Insurer B	1,226	\$8,965,006.08	\$7,312.40	0.85	0.78
Insurer C	271	\$1,793,459.65	\$6,617.93	1.25	1.15
Insurer D	100	\$785,675.77	\$7,856.76	1.87	1.73
Insurer E	138	\$978,591.55	\$7,091.24	1.42	1.31
Insurer F	47	\$291,583.36	\$6,203.90	4.02	3.66
Insurer G	75	\$598,046.65	\$7,973.96	2.00	1.81
Insurer H	200	\$1,497,959.99	\$7,489.80	2.39	2.21
Insurer I	636	\$4,249,449.16	\$6,681.52	1.12	1.03
Insurer J	1,424	\$5,826,683.54	\$4,091.77	0.70	1.09 ¹³

The ‘maximum’ measure of Insurer A’s steering effects is based on the *minimum* **M/R** ratio in each year of auto insurance companies’ NY market shares (**M**) divided by their revenue shares (**R**) at this shop (as adjusted in 2002 and in 2005-2007 to remove ‘positive’ steering effects).¹⁴ This minimum **M/R** ratio is considered to be a maximum measure of steering losses, because certain other factors may affect this ratio in addition to steering (for example, when an auto insurance company has more or fewer policy holders per capita relative to other insurers in Nassau County than elsewhere in New York State).¹⁵ As a result, using the lowest ratio will overstate the likely effects of steering so offers a maximum measure of Insurer A’s economic effects on this ACR shop’s annual insurance-related revenues. For all years covered, Insurer B with consistently the lowest **M/R** ratio was used as a benchmark for the maximum measure of steering losses. These benchmarks for each year are found in [Table 4](#) below.

An ‘average’ measure of revenue losses is then based on an **M/R** ratio halfway between those used for the maximum and minimum steering losses. Those insurance companies (with **M/R** ratios of less than **1.00** in any given year) can be considered as doing the least steering of jobs away from this ACR shop. The difference between this ‘average’ **M/R** ratio and Insurer A’s actual **M/R** ratio offers a basis for an economic estimate of the revenue effects of Insurer A’s steering of work away from this ACR shop (adjusted for other insurers’ steering activities), which steering efforts must overcome and offset the attractive effects on customers of this ACR shop’s superior reputation for quality work (which explains its above-

average size relative to other shops – locally, county-wide, area-wide, state-wide and nationally – even in the evident presence of steering by other auto insurers). [Table 4](#) shows these **M/R** ratios, first for Insurer A relative to the other NY auto insurers shown to be steering jobs from this shop, and then displays the average benchmark ratios for each of these steering measures:¹⁶

Table 4. Ratios of Market and Revenue (M/R) Shares for Insurer A and Other Companies

<u>Insurer A's vs. Others' Steering</u>			<u>Benchmarks Used for Steering Estimates</u>		
<u>Year</u>	<u>Insurer A</u>	<u>Average of Other Insurers > 1.0</u>	<u>Minimum Steering</u>	<u>Average Steering</u>	<u>Maximum Steering</u>
2002	1.00	1.32	1.00	0.92	0.83
2003	1.30	1.93	1.00	0.94	0.88
2004	1.03	1.94	1.00	0.87	0.73
2005	1.20	1.48	1.00	0.85	0.71
2006	1.04	2.07	1.00	0.85	0.71
2007	1.27	1.28	1.00	0.90	0.80

The information in [Table 4](#) was then used to calculate the implied percentage of insurance revenues steered away from this ACR shop by Insurer A for each year between 2002 and 2007. [Table 5](#) displays the results of this analysis, showing that Insurer A steered away from this ACR shop from 2003 to 2007 an average of **20-40 percent** of the estimated annual revenues from Insurer A's jobs that would have gone to this ACR shop in the absence of steering by Insurer A, or an overall average of almost **30 percent** of the revenues that would have gone to this ACR shop from Insurer A, as shown in [Table 5](#).

Table 5. Percentage Steered from ACR Shop by Insurer A

<u>Percentage Steered from ACR by Insurer A</u>			
<u>Year</u>	<u>Minimum</u>	<u>Average</u>	<u>Maximum</u>
2002	<i>n.a.</i>	<i>n.a.</i>	<i>n.a.</i>
2003	26.74%	32.13%	37.53%
2004	3.93%	19.35%	34.78%
2005	19.82%	34.19%	48.56%
2006	5.13%	22.17%	39.22%
2007	25.17%	34.52%	43.87%
Overall	16.26%	28.65%	41.39%

The “But For” Scenario for Labor Rate Estimates: A use of AMR labor rates as an economic comparable for what the ACR labor rates would be in a free and uncontrolled market – as a minimum bound thereof – framed the basis for the analysis of labor rate suppression by Insurer A on its own ACR claims. The AMR labor rates used in this analysis were based on a professional survey conducted in January 2010 of 103 AMR shops in Nassau County, New York. The minimum, average and maximum estimates represent the mean (average) AMR labor rate and its range of variation within a 95 percent confidence interval of these AMR shops’ posted hourly labor rates, which these shops reported that they received on an average of 71 percent of their AMR jobs. This survey yields AMR labor rates in the following range when adjusted CPI data are used to develop a time series for these rates over the period 2002 to 2007. The resulting range of AMR rates surveyed by year are shown in [Table 6](#) below:

Table 6. Average AMR Labor Rates for the Long Island, NY Area, 2002 to 2007						
	2002	2003	2004	2005	2006	2007
Minimum:	\$64.19	\$66.36	\$68.15	\$70.86	\$73.67	\$76.08
Average:	\$66.39	\$68.63	\$70.48	\$73.28	\$76.19	\$78.69
Maximum:	\$68.58	\$70.89	\$72.81	\$75.70	\$78.71	\$81.29
Average of Insurer A’s ACR Rates:						
	2002	2003	2004	2005	2006	2007
	\$37.83	\$38.01	\$39.73	\$40.04	\$42.87	\$44.08

The difference between the average AMR labor rates and Insurer A’s average ACR labor rates paid to this shop in each year (as shown in [Table 6](#) above) was applied to the work performed on Insurer A’s jobs by this ACR shop to yield an estimate of the losses incurred by this shop because of Insurer A’s suppression of labor rates. The additional losses due to Insurer A’s ACR labor rate suppression on ACR jobs steered away from this ACR shop were estimated in a similar way, to be described below.

Based on information from this independent ACR shop, the total labor hours worked on Insurer A’s ACR jobs and the average labor rates for those jobs were calculated for each year between 2002 and 2007, and then the difference between the average labor rates paid by Insurer A to this ACR shop and the (minimum, average and maximum) estimated ACR labor rate for each year in the ‘but for’ world (based on the comparable AMR labor rates as described in [Table 6](#) above, considered as a minimum bound for the ‘arm’s length’ free market ACR labor rates) were used to calculate the implied hourly labor rate losses to this shop due to Insurer A’s labor rate suppression on ACR work already performed for Insurer A’s policyholders during those six years. The data used are in [Table 7](#):

Table 7. Hours, Labor Rates and Hourly Losses to this ACR shop from Labor Rate Suppression

Year	Labor Hours	Average ACR Rate	Hourly Loss by ACR Shop		
			Minimum	Average	Maximum
2002	14,071.7	\$37.83	\$26.36	\$28.56	\$30.75
2003	7,496.4	\$38.01	\$28.35	\$30.62	\$32.88
2004	11,750.6	\$39.73	\$28.42	\$30.75	\$33.08
2005	11,081.8	\$40.04	\$30.82	\$33.24	\$35.66
2006	12,085.7	\$42.87	\$30.80	\$33.32	\$35.84
2007	11,180.6	\$44.08	\$32.00	\$34.61	\$37.21

On the basis of these data, pre-tax losses incurred by this ACR shop due to labor rate suppression by Insurer A were calculated for all of Insurer A's ACR jobs already performed by this ACR shop. The next step in the analysis involved taking the estimate of jobs steered away from this ACR shop by Insurer A and calculating the losses on those jobs attributable to labor rate suppression as well. Using the method described here along with the steering estimates seen above, the average labor component of those steered jobs was used to determine both the revenue and labor rate losses on claims steered from this ACR shop by Insurer A. These annual losses were then converted to present value terms (into 2011 and then to 2023 dollar values at 3.5% interest rates based on the 10 and 20 year U.S. Treasury fixed-term bond yields as of year 2011)¹⁷ using the U.S. Treasury fixed-term bond yields shown in [Table 8](#) below:

Table 8. U.S. Treasury Bond Yields and Conversion Factors for 2011 and 2023 Dollar Values

Year	Treasury Rate	Bond Yield	Conversion to 2011	Conversion to 2023 @ 3.5%/Year
2002	7-year	4.30%	1.4607	1.5111
2003	7-year	3.52%	1.3188	1.5111
2004	7-year	3.87%	1.3045	1.5111
2005	5-year	4.05%	1.2690	1.5111
2006	5-year	4.75%	1.2612	1.5111
2007	3-year	4.35%	1.1857	1.5111

The Estimate of Losses: A range of estimated revenue losses due to the effects of Insurer A's steering activities and labor rate suppression was developed based on the three benchmarks in [Table 4](#) and the various methods and data described above to show minimum, average and maximum losses per year incurred by this ACR shop due to Insurer A's activities. These estimated losses are as follows.

Steering Effects: This ACR shop's revenue losses attributable to Insurer A's steering of jobs away from this shop were derived by estimating the additional revenues from Insurer A's work that this ACR shop would have had to receive to bring Insurer A's **M/R** ratio into equality with each of the three benchmark ratios: **1.00** for a 'minimum' measure; the minimum

insurance company **M/R** ratio each year for a ‘maximum’ measure; and an average of these two ratios for the ‘average’ measure of revenue losses. The results are presented in [Tables 9 and 10](#), first for revenue and gross profit losses and then for variable net profits and their present values:

Table 9. Estimated Revenue and Gross Profit Losses due to Insurer A’s Steering

<i>Year</i>	<i>Minimum Revenue Loss</i>	<i>Average Revenue Loss</i>	<i>Maximum Revenue Loss</i>	<i>Minimum Gross Profit Loss</i>	<i>Average Gross Profit Loss</i>	<i>Maximum Gross Profit Loss</i>
2002	<i>n.a.</i>	<i>n.a.</i>	<i>n.a.</i>	<i>n.a.</i>	<i>n.a.</i>	<i>n.a.</i>
2003	\$244,047.30	\$316,615.13	\$401,718.25	\$97,618.92	\$126,646.05	\$160,687.30
2004	\$43,264.61	\$253,805.35	\$563,913.79	\$17,305.84	\$101,522.14	\$225,565.52
2005	\$250,516.38	\$526,407.85	\$956,404.28	\$100,206.55	\$210,563.14	\$382,561.71
2006	\$63,292.98	\$333,575.00	\$755,450.51	\$25,317.19	\$133,430.00	\$302,180.21
2007	\$374,481.99	\$586,934.85	\$870,163.09	\$149,792.80	\$234,773.94	\$348,065.24
Total¹⁸	\$975,603.26	\$2,017,338.18	\$3,547,649.93	\$390,241.30	\$806,935.27	\$1,419,059.97

Table 10. Current and Present Value in 2023 of Variable Net Profit Losses due to Steering

<i>Year</i>	<i>Minimum Vbl Net Profit Loss</i>	<i>Average Vbl Net Profit Loss</i>	<i>Maximum Vbl Net Profit Loss</i>	<i>P.V. of Min. Vbl Net Profit Loss</i>	<i>P.V. of Avg. Vbl Net Profit Loss</i>	<i>P.V. of Max Vbl Net Profit Loss</i>
2002	<i>n.a.</i>	<i>n.a.</i>	<i>n.a.</i>	<i>n.a.</i>	<i>n.a.</i>	<i>n.a.</i>
2003	\$48,809.46	\$63,323.03	\$80,343.65	\$97,270.76	\$126,194.37	\$160,114.20
2004	\$8,652.92	\$50,761.07	\$112,782.76	\$17,056.03	\$100,056.63	\$222,309.40
2005	\$50,103.28	\$105,281.57	\$191,280.86	\$96,073.33	\$201,878.03	\$366,782.17
2006	\$12,658.60	\$66,715.00	\$151,090.10	\$24,123.48	\$127,138.72	\$287,932.29
2007	\$74,896.40	\$117,386.97	\$174,032.62	\$134,188.39	\$210,316.77	\$311,806.14
Total¹⁹	\$195,120.65	\$403,467.64	\$709,529.99	\$368,711.98	\$765,584.52	\$1,348,944.21

[*The Effects of Labor Rate Suppression on Jobs by this ACR shop for Insurer A’s Claimants*](#) Using the hourly loss calculations and the labor hours shown in [Table 7](#) above, the pre-tax losses incurred by this ACR shop and the present values thereof were determined for each year between 2002 and 2007. The findings are displayed in [Table 11](#) below:

Table 11. Pre-Tax Losses from Labor Rate Suppression and Their Present Values as of 2023

Year	Losses from Labor Rate Suppression	Present Value of Losses from L.R.S. in 2023					
	Minimum	Average	Maximum		Minimum	Average	Maximum
2002	\$370,893.02	\$401,850.76	\$432,667.79		\$818,637.50	\$886,967.63	\$954,987.16
2003	\$212,538.89	\$229,555.72	\$246,497.59		\$423,561.74	\$457,474.01	\$491,236.89
2004	\$333,997.98	\$361,376.88	\$388,755.78		\$658,353.21	\$712,320.56	\$766,287.91
2005	\$341,565.87	\$368,383.82	\$395,201.78		\$654,954.56	\$706,378.15	\$757,801.74
2006	\$372,255.62	\$402,711.58	\$433,167.55		\$709,407.24	\$767,447.15	\$825,487.06
2007	\$357,739.12	\$386,920.48	\$415,990.04		\$640,944.53	\$693,227.42	\$745,310.00
Total	\$1,988,990.50	\$2,150,799.25	\$2,312,280.52		\$3,905,858.78	\$4,223,814.92	\$4,541,110.76

The Effects of Additional Labor Rate Losses on Jobs Steered from this ACR Shop by Insurer A In the 'but for' scenario, had Insurer A not steered jobs away from this ACR shop at the estimated levels above and not suppressed the ACR labor rates on those jobs, the value of those jobs to this ACR shop would have been higher by the ACR labor rate differential per labor hour lost (as shown in [Table 7](#)). This part of lost value was determined by applying the hourly labor rate differential to the calculated labor hours Insurer A steered from this shop. The lost labor hours, in turn, were figured by applying the average labor cost percentage of this shop's overall charges on Insurer A's jobs for each year to the revenues evidently steered away from this ACR shop by Insurer A as shown in [Table 12](#) below:

Table 12. Estimated Labor Hour Losses on Jobs Steered Away from this ACR Shop by Insurer A

Year	Labor % of Costs	Steered Labor Charges			Steered Labor Hours		
		Minimum	Average	Maximum	Minimum	Average	Maximum
2002	49.4%	<i>n.a.</i>	<i>n.a.</i>	<i>n.a.</i>	<i>n.a.</i>	<i>n.a.</i>	<i>n.a.</i>
2003	46.3%	\$112,917.43	\$146,493.60	\$185,869.67	2,970.9	3,854.3	4,890.3
2004	48.0%	\$20,764.55	\$121,812.12	\$270,646.52	522.7	3,066.3	6,812.8
2005	47.6%	\$119,228.14	\$250,533.05	\$455,181.05	2,977.9	6,257.4	11,368.8
2006	48.1%	\$30,424.42	\$160,346.78	\$363,138.90	709.7	3,740.4	8,471.0
2007	48.1%	\$180,066.13	\$282,222.08	\$418,409.70	4,084.7	6,402.0	9,491.3
Total		\$463,400.67	\$961,407.62	\$1,693,245.84	11,265.8	23,320.4	41,034.1

The labor hours so derived were multiplied by the estimated hourly loss from labor rate suppression for each year to determine the additional losses incurred by this ACR shop due to Insurer A's labor rate suppression on the jobs it steered away from this shop. These additional labor rate losses due to Insurer A's steering activities and their present values (in 2023 dollar values) are shown in [Table 13](#) below:

Table 13. Estimated Losses due to Labor Rate Suppression on Jobs Steered from ACR Shop

Years	Labor Rate Losses From Steered Jobs			Present Value of Labor Rate Losses in 2023		
	Minimum	Average	Maximum	Minimum	Average	Maximum
2002	<i>n.a.</i>	<i>n.a.</i>	<i>n.a.</i>	<i>n.a.</i>	<i>n.a.</i>	<i>n.a.</i>
2003	\$84,231.22	\$118,026.75	\$160,803.28	\$167,861.61	\$235,211.61	\$320,459.54
2004	\$14,856.98	\$94,300.71	\$225,394.55	\$29,285.02	\$185,878.90	\$444,281.81
2005	\$91,785.30	\$208,010.60	\$405,436.61	\$175,998.86	\$398,861.54	\$777,427.08
2006	\$21,860.08	\$124,635.72	\$303,610.54	\$41,658.73	\$237,518.19	\$578,590.37
2007	\$130,694.24	\$221,549.46	\$353,136.55	\$234,158.79	\$396,939.85	\$632,698.32
Total	\$343,427.82	\$766,523.24	\$1,448,381.53	\$648,963.01	\$1,454,410.11	\$2,753,457.11

The Overall Loss Calculation: The total cumulative losses (based on variable net profits) suffered by this ACR shop attributed to Insurer A's steering activities and labor rate suppression for the 6-year period from 2002 to 2007 are found by the above-described economic methods to be **\$9,981,804.22** (measured in 2023 dollar values), and in any case are calculated to lie between a minimum figure of **\$8,384,566.91** and a maximum figure of **\$12,295,432.91**. The annualized total losses and their present values (in 2023 dollars) are displayed in [Table 14](#) below:

Table 14. ACR Shop's Overall Annual Losses due to Insurer A and Their 2023 Present Values

Years	ACR Shop's Total Losses due to Insurer A			Present Value of ACR Shop's Total Losses		
	Minimum	Average	Maximum	Minimum	Average	Maximum
2002	\$739,236.36	\$778,832.57	\$821,275.28	\$1,631,647.33	\$1,719,044.34	\$1,812,724.16
2003	\$543,252.39	\$612,896.46	\$696,185.12	\$1,082,629.74	\$1,221,421.10	\$1,387,404.32
2004	\$667,320.27	\$822,992.33	\$1,053,820.43	\$1,315,374.55	\$1,622,224.32	\$2,077,216.35
2005	\$767,953.29	\$972,400.18	\$1,292,118.49	\$1,472,554.94	\$1,864,583.07	\$2,477,644.81
2006	\$714,275.09	\$908,285.04	\$1,212,357.16	\$1,361,193.48	\$1,730,918.10	\$2,310,388.10
2007	\$849,029.63	\$1,017,838.18	\$1,244,691.14	\$1,521,166.86	\$1,823,613.29	\$2,230,055.18
Total	\$4,281,067.02	\$5,112,644.76	\$6,320,447.63	\$8,384,566.91	\$9,981,804.22	\$12,295,432.91

Conclusions and Further Research Questions

This analysis describes a method for calculating financial losses incurred by a large independent ACR shop in New York State due to both the steering of ACR jobs away from that shop by a single auto insurer and its suppression of ACR labor rates, both due to monopsony power abuse of its policyholders and to its strict control over auto damage appraisals when

needing ACR work after auto collisions by its policyholders. The measure of steering effects arises from an asserted relationship between these auto insurers' premium-based state-level market shares and their shares of insurance-based revenue at a particular large ACR shop. The measure of ACR labor rate suppression is founded upon the difference between the average ACR labor rates paid by insurer A in each year to this shop and the results of a survey of comparable posted hourly labor rates for AMR work in the local area extrapolated back to those years with consumer price index (CPI) data. The losses computed on hourly labor rates are then applied both to jobs performed and jobs steered away from this ACR shop during the years at issue.

Three tests were described for this model, none of which could be performed in this instance due to unavailable data that were requested from but not supplied by Insurer A (the defendant) in discovery. The first was to test for the regional market share of Insurer A by using vehicle registration data in Nassau County, as a means to determine whether resulting losses due to steering activities should be adjusted upward or downward if Insurer A's local market share was found to be higher or lower than its statewide market share. The other two proposed tests of the steering results were more direct: first, to look at the average difference in jobs or revenues on ACR work compensated by Insurer A for DRP shops that changed their DRP status between 2002 and 2007, comparing those years for which they were in and outside the program; and, second, to compare the average annual jobs or revenue on ACR work paid by Insurer A as separately performed by DRP and independent ACR shops to the overall average jobs per shop within the full sample of ACR shops doing work for Insurer A's claimants. The conservative nature of the model described, in both its steering analysis (based on *relative* proportional differences between auto insurers), and its labor rate suppression analysis (by use of comparable labor rates for AMR work as a *minimum bound* for what 'arm's length' ACR rates would be in the absence of auto insurers' suppressive control over this ACR market), implies that the economic losses so derived by the methods described above will likely be below the actual losses incurred, rather than overstated.

There are other potential applications and uses for this model and/or for the steering tests described. For example, at the state level – either for class action suits or in support of regulatory efforts by state authorities – it would be useful to measure relative steering activities by auto insurers at a statewide level. There are several ways this analysis could be adapted to such an effort and tested by a study of steering. Insurers and their database services store and maintain data adequate for such analyses of the effects of insurers' steering activity, so identifying persistent patterns of illegal steering could be done by gaining access to such data. Also, more research on capital and operating costs and the relative skills required for ACR and AMR work could validate the claim that prevailing AMR labor rates serve, first as a valid comparable and second as a minimum bound for 'arm's length' ACR rates. If so, that would legitimate the use of free market AMR rates as a minimum benchmark for insurance-supported ACR rates, in the absence of ACR shops' willing acceptance of lower hourly labor rates.

These stopgap provisions, without a more radical restructuring of the ACR industry in line with the 1963 Consent Decree under U.S. Attorney General Robert F. Kennedy, offer a few ways in which the unconstrained abuse of market power by auto insurers against the ACR industry might be regulated, limited or curtailed at least to some degree, even without repealing the McCarran-Ferguson Act of 1945 (originally intended to cover underwriting and to reduce risk, and not to grant these insurers control over the ACR or healthcare industries). The measurement of losses incurred due to insurers'

steering activities and suppression of labor rates for services subject to third party payments suffers from a lack of data on these offenses. One of the great virtues of the model presented here is its limited data requirements; the market share data are available from the National Association of Insurance Commissioners (NAIC), and revenue data can be acquired from independent large ACR shops victimized by this system. Because insurers seldom are overly generous in their production of data through the discovery process, any approach to this sort of analysis with very limited data needs from insurers can be very useful.

Footnotes

¹ For example, State Farm is “a good neighbor” and you’re in “good hands” with Allstate.

² “‘Steering’ refers to an illegal insurance industry practice ... of directing insureds and/or claimants to or away from specific repair facilities.” Quoted from note 30, p. 506, of Michael V. Sacchetto, “Buyer Power Abuse in the Auto Repair Industry: Is There a Remedy?” in *Southwestern Law Review*, Vol. 38, 2009, pp. 503-31.

³ However, most of the auto insurers’ quality assurance surveys occur before repairs are completed, and thus are focused on how well consumers were treated at the DRP shop, rather than how satisfactory were the actual repairs performed *ex post*...

⁴ Sacchetto, *op. cit.* [note 2 above], pp. 506-7, describes the auto insurance industry and its control over ACR shops thus:

For the insurance industry, the drive to cut costs and increase profits has materialized into practices such as steering, capping materials or labor, and independently conducting labor rate surveys. These practices have allowed the insurance industry to direct the automotive repair industry on how to conduct its business, and dictate at what price the repair industry can charge. The insurance industry’s ability to control another industry is astonishing, unprecedented, and begs the question, how? ...

At first glance, this oligopsonistic power appears to benefit society, as it allows the insurance industry to keep premiums down by controlling its costs. However, whatever is saved in premiums is more than lost in unforeseen costs [which] ... include everything from lower wages for repair facility employees and unprofitable repair facilities, to improperly repaired vehicles due to the repair industry’s inability to train and equip technicians to repair increasingly advanced vehicles.

⁵ Such claims that an independent shop will not guarantee its own work for consumers are generally and patently false, as in most if not all states such shops are held by law to proper repairs. As Sacchetto, *op. cit.* [note 2 above], p. 509, puts it:

One might assume that the insurer’s entanglement in the repair process is to ensure that the repairs are performed properly. However, this assumption is negated by the fact that the repair facility is required by law to restore the insured’s vehicle to its pre-accident condition, while the insurer is required only by contract. What is troubling about the insurer’s entanglement in the repair process is the lack of remedies available to a repair facility in the event that an insurer-repair facility relationship deteriorates. ... Although there is contractual privity between the insured and insurer, and the insured

and repair facility, there is typically no contractual privity between the insurer and the repair facility.

Furthermore, the auto insurers are not the ones guaranteeing the repairs; the ACR shop (DRP or not) carries the full liability for repairs performed poorly. Interestingly, in most jurisdictions insurers could require their auto policyholders to use DRP shops for collision repairs as a condition in their auto insurance policy, but – based on legal precedent – doing so would almost certainly render the insurer equally liable with the ACR shop for the quality and propriety of the repairs.

⁶ In the course of this analysis, such data were requested through discovery from the defendant insurer but not provided, despite that they could be easily generated from computerized claims records, according to my understanding of how these data are kept and stored. That these data were not turned over invites speculation that they might have shown that the insurer's share of the regional market exceeded its state-wide share, so warranting an increase in the damage estimate...

⁷ Again, these data were requested through the discovery process, but were not provided to the plaintiffs by the defendant. One test would have been to look at the defendant's DRP shops that either joined or left its program during these years, so the percentage change in their average annual ACR jobs or revenues from the defendant could be compared for years within and outside the network; another test would be to compare the average annual jobs or revenues from ACR work covered by this insurer for ACR shops both in and outside its DRP program with the overall average of jobs or revenues per ACR shop performing ACR work during the period for this insurer's claimants. Neither test was possible here due to data limitations.

⁸ A more detailed discussion of the use of comparables in the valuation of labor rates is found in the second ("Part 4" in the February 2021 issue) of this author's series of four essays on ACR labor rates in "LABOR RATE: Facts, Fiction and the Future (An Economist's Perspective) – Parts 3-6," *New England Automotive Report*, January, February, March and April, 2021; found at <https://www.grecopublishing.com/new-england-automotive-report-archives/>.

⁹ Both defense experts who criticized this analysis summarily rejected these figures from the BLS Quarterly Census of Employment and Wages (QCEW) without either refuting or specifically identifying them, citing other BLS Occupational Employment Statistics (OES) figures that appear to contradict this information. However, the OES figures cited by these adversarial experts were based on a semi-annual self-reported mail survey, which is a considerably less reliable method of information gathering than what is used to assemble the QCEW data, which is based on a quarterly census which "produces a comprehensive tabulation of employment and wage information for workers covered by State unemployment insurance (UI) laws..." (cf. BLS Overview, <http://www.bls.gov/cew/cewover.htm>). These defense experts thus cited less reliable data to reject these results, without acknowledging this important difference between these two sources or the greater accuracy and credibility of the QCEW data compiled by the BLS displayed in *Table 1* above.

¹⁰ Cf. the reference in note 8 above.

¹¹ Cf. www.census.gov for NAICS category 8111211 for "paint or body repair", although for both the Long Island – New York Metropolitan Area and the United States as a whole, due to data limitations, NAICS category 811121 for "automotive body, paint, and interior repair and maintenance" was used.

¹² Insurer A's average M/R ratio is based only on 2003 to 2007 due to this ACR shop being Insurer A's DRP shop in 2002.

¹³ Insurer J's average M/R ratio is based only on 2002 to 2004 due to an Insurer J claims center placed at this shop in 2005.

¹⁴ Adjustments were made for positive steering effects on revenues in 2002 by Insurer A due to this ACR shop's brief role as a DRP shop in Insurer A's network, and in 2005-2007 by Insurer J due to the presence of an onsite drive-in claim center run by Insurer J at this ACR shop, by setting these insurers' non-steered share of revenues equal to their percentage market shares (by imposing an M/R ratio = **1.00**) as a means of adjusting this ACR shop's revenues to remove the known effects of favorable steering activities due to the special relationships between this ACR shop and these two insurers (A and J) during these years.

¹⁵ For example, Insurer F, which appears to be actively steering jobs away from this ACR shop, is an upstate NY insurer.

¹⁶ Due to incomplete data, the 2007 'maximum' steering estimate is derived from the minimum **M/R** ratios for prior years.

¹⁷ The 1.5111 used to convert the 2011 present values into 2023 dollars comes from 1.035 raised to the 12th power.

¹⁸ These 'totals' are not in constant dollar terms; they include dollars at different times and thus of different value.

¹⁹ The first three 'totals' are not in constant dollar terms; present value totals are stated in constant 2023 dollar values.