

Inducements to Advocacy:
The Economist as Independent Expert

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I. Introduction

On one side of the courtroom sits the plaintiff, on the other side the defendant. Each is accompanied by attorneys, paid by the client to advocate his or her interests. Each side calls expert economists to testify, who, like the attorneys, are paid by the clients, and who generally give evidence intended by the attorneys to persuade the jury or judge. Outside the courtroom, the economists often act as integral members of the client's team. Yet their proper role is not to advocate the client's interest, but rather to offer an independent professional opinion about economic issues before the court. In short, the appropriate role of the testifying economic expert is to seek the truth, whereas the role for the attorneys is to seek the best possible outcome possible for the client.¹ Can an expert economist provide an independent, professionally respectable opinion in this setting fraught with advocacy?

There is widespread supposition that expert witnesses are not much more than high-priced prostitutes: that experts will say whatever their client pays them to say. Critics point to the fact that both sides always seem able to offer one or more experts who confidently offer contradictory conclusions under oath. If the economists were really expert and were really offering honest, independent opinions, wouldn't they agree on the conclusions?

¹ Of course, as officers of the court, the attorneys are bound by rules on how they may seek a good outcome in the truth-seeking forum of a civil trial. But an attorney can and should vigorously advocate her client's case even if she believes the client is wrong. A testifying expert, if he or she believes the client is wrong, must say so if asked the appropriate questions.

Of course, all practicing economists -- or for that matter, all social scientists -- know that the world of human commercial interactions is far too complex and imperfectly understood for every well-intentioned, well-trained professional to agree on the interpretation of the same set of facts. Most of economic theory is profoundly immature²; most of it is also not very thoroughly tested, and almost never with high quality, controlled experimental data.³ Most economists are very comfortable with the fact that we cannot incontrovertibly prove the economic causality of specific events, and thus that we can reasonably disagree in our economic conclusions on a fact-based question.

Therefore, we should not conclude that economic experts differ because they are mere advocates for their clients. Nonetheless, there is a myriad of inducements for the expert witness to become an advocate for the client. In this chapter, we discuss the inducements to advocacy faced by economists who testify in antitrust proceedings, and ways in which a practicing economic expert might counter these inducements. We discuss two cases in which we have been involved to illustrate some of the important issues.

² For example, nearly all of economic theory goes no deeper into the psychology of human motivation than to assume that on average, individuals tend to make rational and internally consistent decisions directed toward maximizing a well-specified single-objective utility function. This "rational human" assumption has proved to be very powerful for testing the conformance of behavior to theory on average in many settings, but few if any economists would claim to believe that every individual decision is always consistent with rational choice-making. We simply have not had the time nor sufficient understanding of human psychology to develop an even richer, more general set of theories.

³ This is not to say that one answer may not be better -- more likely to be correct -- than another answer, or that there is no value to economic analysis! But it's a good thing that economic analysis is generally not called on for criminal cases in which the standard of proof is "beyond a reasonable doubt". Economic evidence is useful in civil actions when the standard is "the preponderance of evidence".

Some of the discussion will be personal. We are human; we have felt inducements to mere advocacy. It is our awareness of these inducements and the seriousness with which we take the professional obligation to resist them that motivated us to write this essay in the first place.

II. Who we are

Much of this essay is based on our reflections and analysis, fed by our experiences. We have not made a systematic, scientific study on this topic. The weight that a reader should assign to our views, in particular to our recommendations, should be based at least in part on knowledge of the experience we have had. Therefore, we shall take the somewhat unconventional step of describing our experience as a basis for our views.

MacKie-Mason has been on the economics faculty of the University of Michigan since 1986, but got involved in antitrust consulting as an assistant to Robert Pindyck in 1982, and later with Jerry Hausman, both at MIT. MacKie-Mason first took a case as a testifying expert in 1989, for Virtual Maintenance, Inc. Since then, he has testified in three federal trials; in all three his clients prevailed, including through appeals to the Supreme Court in two of the cases. He has filed sworn written testimony in twelve cases, and given oral deposition testimony in most of those as well. He has consulted for about ten other clients without providing sworn testimony. In his best known case he testified for the plaintiffs in *ITS v. Kodak*. Other clients have included AT&T, America OnLine, Sun Microsystems, Grumman, GTE, Bell Atlantic and EDS.

Pfau is a doctoral candidate in economics at the University of Michigan; before that he was a staff economist for Michigan Bell. He has been working as a staff economist with MacKie-Mason since 1991. Pfau has performed antitrust research and analysis for a dozen clients, including managing several cases. Although he has not testified as a witness, he has

assisted in the preparation of numerous affidavits and expert reports that were entered in evidence.

In addition to our personal experience, we have over twenty years of combined experience closely observing other experts at work, sometimes as colleagues and other times as adversaries. MacKie-Mason has also participated in numerous professional practice conferences and teaching seminars, and in those settings has frequently discussed the issues we address with other experts. Therefore, although we are writing from our experience and personal knowledge, that experience is drawn from observing and working with a sizeable sample of practicing economic experts.

III. Inducements to Advocacy

“Advocacy,” in the sense we use the word here, is the advancement of arguments that are unsupported by the economist’s expert opinion, in order to promote the client’s antitrust claims.⁴ An expert witness has both a moral obligation and a professional obligation to testify honestly to his professional opinion, rather than become a mere advocate for his client’s interests. In this article, we will presume that no explanation or defense of that proposition is necessary. Indeed, in our experience, there is such wide acceptance of that proposition that we scarcely encounter even the slightest implication that any other sort of testimony is expected of the expert economist. Yet many features of the expert’s typical role create pressures against independence. The expert has both a psychological and an economic interest in winning the suit. The psychological interest is due to ego, a desire to “win,” and psychological ties to the people for and with whom he or she works. The economic interest is due to the expected increase in the expert’s future earnings from similar work if the client obtains a favorable outcome.

A. Economic interest

In this article by and for economists, we discuss economic inducements to advocacy first. Expert economists usually are hired by the client’s attorneys, who serve as advocacy agents for the client. There is little doubt about the attorneys’ objective: to obtain a favorable outcome for their client, and thus to seek an economic expert expected to best contribute to that goal. Plaintiffs’ attorneys often share the trebled damages awarded to successful antitrust plaintiffs, and attorneys with a winning record have greater expected future earnings than attorneys with a

losing record. Moreover, attorneys have a fiduciary obligation to act in their clients' interest, and part of that obligation is to hire the economist most likely to advance the client's case.

To assess the likely contribution from a potential expert witness, attorneys consider the contribution the witness has made to previous clients' success in antitrust suits. Economists whose clients win gain a reputation for being on the winning side. In our experience, attorneys most often develop a list of potential experts by seeking experts who testified for the appropriate side in related cases with favorable outcomes.⁵

Given these unsurprising practices in the signaling market for expert economists, it is clear that there are economic inducements towards advocacy. A reputation for winning increases an expert economist's expected future earnings from forensic work, both by increasing the number of cases offered, and by increasing the expert's market-clearing wage rate. An economist who has at least some interest in increasing his or her income thus might contemplate resorting to mere advocacy if it seems that advocacy would improve the client's prospects.

The potential power of economic inducements to mere advocacy is sufficiently high that our legal and professional institutions have developed at least two significant countervailing inducements. First, it is generally considered unethical and unacceptable for an expert witness to accept a contingency payment based on the outcome of the litigation. The standard financial arrangement is for the expert to be compensated for *time*, not the content of his or her testimony, on an hourly basis with payment in full regardless of the outcome.

⁴ All arguments that promote the client's claims may be more generally considered to be "advocacy," and the definition we use here better fits the term "mere advocacy." Our usage is simply for convenience.

The second countervailing inducement is the “market” for reputation. The professional expert typically develops two relevant reputations: for success and reliability in the forensic community, and for professional honesty and integrity in the academic or professional community. High reputation of both types is important to most experts for both psychological and economic reasons. Future opportunities to testify or do other consulting work, as well as advancement in the professional or academic community will depend on these reputations. Fortunately, a reputation for success and reliability in the forensic community typically is enhanced by integrity and professional honesty. That is, although it may seem that the expert can enhance the client’s probability of success with mere advocacy in a particular case, this is not likely to be a successful long-run strategy. Aggressive cross-examination in front of judge and jury, as well as the critical testimony of the expert for the other party, are likely to expose a mere advocate at some point, and this exposure can severely damage the expert’s forensic reputation. Thus, even a direct self-interest in future earnings is not an unambiguous inducement to mere advocacy.

Indeed, in our experience, most good attorneys are very aware of the fact that mere advocacy can backfire, not just over time but even in the context of a single case. If the judge or jury become convinced that an expert is lying or shading the truth on even one issue, they may discount most of the expert’s testimony, and may even (inadvertently) discount other evidence that favors the client. Since there is a not uncommon expectation that experts are tempted to be

⁵ For example, following our work on the *ITS v. Kodak* case, we have received (and largely turned down) dozens of calls seeking our engagement by plaintiff attorneys on cases they believed were similar.

mere advocates, many attorneys and experts will go extra distance to ensure the reliability, integrity and unimpeachability of the expert's testimony.

B. Professional interest

The advantages of having a reputation for winning do not end with pecuniary rewards. Having more cases offered means greater liberty to select cases that are of professional interest. This is an advantage, of course, in being able to select more important cases, but it is also an advantage in being able to select cases that correspond to areas of research interest.

There is a very productive synergy between forensic work and academic research. Forensic work requires that one "get in up to the elbows" with industry details and the internal decision making of at least one or two firms. It is nearly impossible to obtain such detailed grounding in any other way, except by working in that industry. Such grounding is of substantial value to an industrial organization or management economist. For example, an economist interested in competitive strategies can read the rich but confidential documentary record of actual strategic decisions, implementations and consequences, rather than the usual reliance on indirect inference from publicly-available data. Direct, detailed conversations with decision making executives also provide valuable insights and stimulate creative research ideas.⁶

Another concern for many expert economists is the effect that consulting might have on their collegial reputation. Expert consulting means time away from the office. Further, many colleagues seem to assume that consulting time is time away from academic work, rather than

⁶ For example, conversations with du Pont executives about their pricing and marketing strategies for Kevlar® across different markets stimulated the ideas that were developed and published as "Price Discrimination and Patent Policy", Jerry Hausman and Jeffrey K. MacKie-Mason, RAND Journal of Economics, vol. 19, no. 2 (Summer 1988): 253-65.

time away from leisure or other personal activities. Colleagues may be more understanding and supportive when consulting cases are more weighty or socially significant.

C. Ego

Psychological motivations are, in our experience, by no means the least important inducements to advocacy, and not the least of these is ego. Generally an expert won't be testifying unless she believes that her client deserves to win, and in antitrust that generally means that the expert believes society as a whole will be better off if her client wins, as well. Thus, it is easy to slip from neutral, objective analysis and conclusions on the economic questions at hand to an attempt to advocate for the "right" outcome.

An economic witness can easily come to identify with the client for a host of other reasons as well. There is a "team spirit" that evolves among the client's forensic team, as discussed below. The claims of the client incorporate in a fundamental way the witness' professional opinion. Opposition attorneys try to disprove not only the client's claims, but the economic witness' testimony in particular, and sometimes even her professional reputation during *voir dire*. The process establishes an adversarial tone, an "us vs. them" psychology. In the struggle to prevail against such attacks, there can be a tendency to close ranks with the entire forensic team, to identify with them, and to become a general advocate of the client's claims.

These concerns of ego and the desire to win present subtle issues of the distinction between advocacy and "mere" advocacy, and of the appropriate professional role for an expert economist. Suppose a careful expert prepares a careful, professionally respectable and independent analysis and then draws certain conclusions that favor the client. Is it inappropriate for the expert to present the analysis and conclusions in a way that is honest and forthright, but

that is designed to be as persuasive as possible? In other words, is there a problem if the expert is fair, honest and complete but advocates the answer she believes is right?⁷ We think that it is probably nearly impossible to prevent oneself from some effort to persuade or advocate for a conclusion that one believes is true, particularly if the consequences seem socially significant. However, we also believe that this is a dangerous slope, and that expert economists should in general attempt to avoid engaging in much effort to do "good" advocacy, because the temptation to slip into "mere" advocacy (of ideas or conclusions not believed to be correct, in order to obtain a preferred outcome) may be strong.

D. Temperament

Many who are attracted to forensic economics may be receptive to inducements to advocacy because of temperament. For example, both of us considered careers as attorneys early in life, no doubt due at least in part to our recognition that we were suited by temperament for argumentation. Both of us find pleasure in matching wits on the issues with a capable opponent; in constructing an argument that will stand, in finding the flaws in the arguments of the opposition, in finding the telling facts. One finds oneself in an internal tug-of-war in which the desire to create a convincing case is opposed by the necessity of retaining objectivity. This problem is, to some extent, self-correcting: part of constructing a good argument is to test it against foreseeable criticism, so divergences between the argument and one's professional opinion come to light during the process of argumentation itself. Still, we are talking about

⁷ Donald McCloskey has argued that the practice of economics is primarily rhetorical: that the progress of research is engaged in as a process of persuasion. The rhetoric of economics (Madison: University of Wisconsin Press, 1985). Under this view, there is no line between objective analysis and advocacy of honest beliefs about correct conclusions.

tendencies and inducements, and the tendency to become enamored of a useful argument is one that we are both aware of, and must, at times, consciously put behind us.

E. Obligation to client

A sense of obligation to the client can be an inducement to advocacy. We don't know what the attorneys tell the client about our role, but we presume they tell the client that we are necessary, and will help the client win. We have always had the sense that the clients have every expectation that we will help them. They are, after all, paying for our time, and winning is certainly what they spend their money for. When the client is a small businessman, the antitrust case can literally make or break his business. We meet the client, speak with him from time to time, and get to know him personally. We are always sympathetic with the client's interests – taking cases that seem right is one of the criteria we use to select cases. Of course, we know we have no obligation to help the client that overrides the moral and professional obligations to restrict testimony to professional opinion, but we do feel a *desire* to help the client within those bounds. This creates a tension between advocacy of the client's interests and the obligation to testify to professional opinion.

F. Team spirit

In our experience, economists are often regarded as members of the client's team rather than as outsiders. The scope of engagement might surprise those who have not worked in the field. To a large extent, the broad involvement of an antitrust economist follows from the centrality of economics to antitrust jurisprudence: many lawyers have insufficient economic expertise to make all of the decisions about the structure of the case, and strategies for developing and presenting the arguments. Thus, the lawyers are likely to ask the economists to

consult on strategic questions that are separate from their expert testimony. Of course, it is possible to answer a client's questions about the strategic relevance of certain economic theories, or about how to persuasively present an economic concept, without affecting the neutrality of the expert's analysis and conclusions on the issues about which she testifies. But when one is both advising on advocacy in a non-testifying role, and also testifying as an objective analyst on specific economic questions, the line can become blurry.

When a client's attorneys have sought our advice as economists on strategic issues, we have become involved in many aspects of the case separate from the sworn testimony we prepare and deliver. For example, we have been involved in assessing the viability of cases, ascertaining what claims will be brought, formulating and amending the complaint, writing interrogatories and discovery requests, preparing lawyers to take depositions of opposition witnesses, assisting during depositions,⁸ drafting portions of briefs, and even researching law, in addition to the duties that might be more commonly expected, such as examining evidence, conducting economic research and analysis, writing affidavits, and testifying at depositions and at trial. We don't mean to imply that we have been undifferentiated members of the legal team. There is a clear demarcation of responsibility for decision making and argumentation: the lawyers retain responsibility for deciding the legal strategy, generally write the briefs, and conduct business with the courts, and the economic witness retains the authority to decide to what he will testify.⁹

⁸ This is a common example: more often than not when MacKie-Mason has been deposed, the economic expert for the other side has been present and has advised the lawyer on lines of questioning during the course of the deposition. Each of us has provided the same service for our clients.

⁹ For example, we have only assisted on small portions of briefs, which are largely argument. Our contributions have been limited to assisting in the expression of some of the crucial economic concepts or analyses. Likewise, our legal research is generally limited to

Thus, in our experience, there have been few boundaries to the nature of the contributions that are accepted, and even expected, of the economists. The economists seem to be regarded by the lawyers not solely as witnesses, or even as experts in a related field to be called upon when their skills best suit the task at hand, but rather as capable brains to be networked with those of the others on the team. Indeed, in some cases lawyers will retain a "consulting expert", who does not offer expert testimony. A consulting expert is free to advise and engage in advocacy within the usual professional standards for truthfulness with the client. One way to try to resolve the confounding of objective analysis with advocacy in this setting would be to hire two (or more) different economists: one (team) to testify, and a separate one (team) to consult. However, in practice only one economic team is hired, and it is difficult to always draw a bright line. The careful testifying economist must pay attention to the inducements of team participation and guard against allowing it to bias offered testimony.

The good news is that, in our experience, there is usually a close correspondence between the client's goals and the appropriate role of the testifying expert witness. As evidence for this, we have never experienced nor heard of any suggestion that an economist testify to anything that did not comport with her view of the case. Doing so would likely not be in the client's interest, since the expert's reservations are likely to be due to weaknesses in the case that are best addressed forthrightly rather than denying or glossing over them. Nonetheless, the feeling of team spirit or camaraderie can subtly color the economist's perspective.

finding and trying to understand the case law that deals specifically with economic questions, in order to better inform ourselves about the questions that the courts need us to answer, and to help the lawyers understand these economic questions.

G. Getting locked into a position

There is another form of advocacy that we have not yet discussed: advocacy of one's own previous positions. In both testimony and academic work, economists take a variety of positions they may subsequently have an interest in maintaining, even despite circumstances that don't support the prior position. Suppose one has argued, for example, that antitrust policy with respect to predatory pricing has more deleterious than salutary effects, because it is unlikely to be successful and may therefore be expected to be rare, yet can have a widespread chilling effect on competitive pricing. Such an economist would be a natural choice for a defendant in a predatory pricing case. But suppose the case turns out to be one of those rare instances in which goods are priced below cost for anticompetitive purposes. There is, in principle, no reason why the prior position taken should necessarily preclude one from testifying on behalf of the plaintiff in such a case, yet there may be a tendency in such circumstances to become an advocate for one's established prior position, and thus testify for the defendant.

IV. Ameliorating and avoiding inducements

We have shown that there are many inducements to become an advocate for the client's interests. What is one to do about this problem? The first thing is to be aware of it. That is the reason we have chosen to write on this subject – we hope that by doing so, new practitioners (and perhaps even some with experience) who read this will consciously (and conscientiously) address them.

A. Choose cases carefully

The most important thing is to be careful to select only those cases that comport with one's professional opinion, for if all the allegations in the case are consistent with the economist's

professional opinion, there will be much less conflict between the client's advocacy interests and the economist's duty.

The economist should find out as much as he can about the facts of the case and the legal strategy contemplated by the attorneys, and think critically about them before agreeing to testify in a case. This can be more difficult than it might seem at first blush. Attorneys often hire experts after the complaint has been filed, but before the case is well defined. This may seem to be paradoxical, since the case is defined by the complaint, but, in practice, the complaint often goes through several amendments before trial. Sometimes, the complaint is not well thought out in its initial state, simply because the issues and facts are new to everyone working on the case, and the entire team is not yet in place. Therefore, neither the facts nor the legal strategy may be well developed at the time the economist is asked to join as a testifying expert.

It is important to remember during the attorneys' initial presentation of the facts and allegations that the attorney is not an unbiased observer. It is generally in the client's best interest to attempt to present an objective summary to a potential expert: retaining an expert on false pretenses will almost always backfire. However, the attorneys, who *are* professional advocates, are subject to all of the same inducements to mere advocacy as are experts, and they also spend so much time thinking about how to convince strangers of their case that it can be hard for them to step back and give a full and fair assessment of both the strengths and weaknesses. Therefore, it is always wise to get more than just the attorneys' summary of facts and allegations before making a decision. Ask to get copies of any motions that have already been filed by the other side, or any judicial opinions. Get copies of initial depositions taken on both sides, and key documents. And when feasible, do some independent research.

Although thoroughly researching the facts, allegations and strategy before accepting a case may seem wise, it is also costly in time and possibly staff resources. To deal with this while maintaining a cautious skepticism, we often adopt a two-stage approach. We inform the client that we are interested in the possibility of testifying, but that before we agree to do so we need to undertake initial research into the case as a consulting, not testifying, expert. The client will be billed for the time; of course, the results of the preliminary research are turned over to the client, including time for presentations and discussion of the findings. One advantage to the client is that the materials of a consulting, non-testifying expert are viewed by the courts as attorney work product, and thus any unfavorable findings need not be disclosed to the other side. Since the research is research that would need to be performed by a testifying expert anyway, and the results can be turned over to the next expert if we decline to take the case after the preliminary study, the client's risk is small.

Of course, every expert witness should make clear from the outset that they intend to testify honestly at every juncture, and that should their opinions develop unfavorably, the testimony would be unfavorable.¹⁰ Thus, in a sense, an expert is *always* in uncommitted research mode: it is always possible to change one's mind. However, once the expert is declared to the other side as a testifying expert, the attorneys cannot protect the work product, nor prevent the other side from calling the expert as a witness if it appears his position has changed. Therefore, the formal preliminary period of work as an uncommitted, consulting expert is helpful for both the economist and the client.

¹⁰ The client, of course, need not call the expert to the stand if his opinions have developed in an unfavorable direction.

During the initial research period, we find it very important to discuss any reservations we have about the case at this point with the attorneys. This accomplishes two things: they are advised of the sort of testimony they can expect by hiring us, and, second, we find that, to the extent we bring flaws they were not aware of to their attention, they are grateful for the insight. We have been involved in several cases in which our preliminary opinions led the client and its attorneys to either choose not to file a lawsuit, or to gracefully exit from a suit if it was already filed. It is *not* always the case that the attorneys will just shop for a more favorable expert.

B. Research wisely

The expert economist should apply all of the best methods of academic research to the research undertaken for a client. For example, the search for "truth", or at least the best understanding possible of the economics of what happened, should never end during the expert's involvement. Never stop asking the fundamental question, "what's going on?", rather than "how can we support the client's case?" This is of value to everyone on the team, since it gives a fresh perspective, in addition to preserving the economist's independence.

The expert should also, of course, conduct as much research independently of the attorneys as possible. Further, while remaining cognizant of the theories of the client and her attorneys, attempt to think about the case *de novo*. Indeed, it is important to establish the intent to conduct independent research during the initial discussions about committing to be an expert. It may not be reasonable to insist that the client write blank checks to support independent research. However, the expert is justified in insisting that she be permitted to do as much research, and to obtain as much independent information as she feels is necessary to make her

comfortable with her opinions. If the client balks, don't take the case. If the client initially agrees but later balks, refuse to continue on the case.

Researching independently of the attorneys takes many forms. Often, much or most of the best evidence is obtained by the attorneys, through the discovery process. The expert cannot ignore this evidence. However, the expert should not rely on the attorneys to selectively provide materials from the files of discovery. The expert should insist on the right to see *all* of the materials produced by both sides, as well as all of the client's files whether or not requested by the other side. And, as a general matter, we think the expert should exercise this right at least with respect to the materials produced by both sides in the case. It may be prohibitive for the testifying expert to personally review every document: there may be thousands or even millions of pages (not to mention thousands more of deposition transcript). The first step is for the expert to have one or more of her own staff members review all of the documents and make the selection for the expert to personally review. If the document load is especially onerous, at the least the expert or her staff should gain access to the complete files and then spend some days spot checking them.

Independent research can also be carried out using data obtained from either public or private sources unaffiliated with the case. Market research and industry intelligence firms (like Datapro and The Gartner Group in the computer industry) are often excellent private sources of relevant information. We also routinely insist that we be allowed to independently interview a number of customers of the parties to the litigation.

Another helpful strategy for maintaining objectivity and integrity is to work with at least one other good economist whose role is (at least some of the time) to play skeptic or devil's advocate. If the testifying expert works with staff economist support, this might be a role for a

mature, clever staff member. Alternatively, the expert can require that the client support regular meetings with another, otherwise independent economist who will review the theories, analysis and conclusions, and will challenge the expert on logic and evidence. From time spent in academia, whether just in academia or as part of our career, we all know the value of submitting our theories and analyses to peer review.¹¹ A good lawyer with substantial antitrust economics experience may be able to play the role of skeptic, but rarely will there be a good substitute for another economist to keep one in line.

Some of the allegations in the complaint may have been made in good faith, but turn out to be unsupported or contradicted by evidence once the research is under way. It is quite likely that, once the attorneys become aware of this, they will amend the complaint to drop the unsupported claims. If they don't, they should be put on notice that the economic expert can't support them.

C. Construct testimony heavily buttressed with fact

Our approach has always been to construct a very fact-intensive expert report. Our reports are often several times thicker than those of opposition expert economists, and, to a large extent, the difference is due to the relative amount of empirical material in the reports. While not done specifically for this purpose, it is clear in hindsight that this method of preparation is a very substantial counterweight to the tendencies discussed above to become an advocate for the client. It is not true that “facts speak for themselves,” and much empirical evidence without a theory to

¹¹ Indeed, a related strategy is to plan from the beginning to publish at least one academic article developed out of the case. Knowing that the analysis and opinions on at least one aspect of the case will be scrutinized in academic review will be a powerful inducement to intellectual integrity.

explain it is empty, but it is certainly easier to delude oneself with a theory and little empirical evidence than with a theory well-butressed with fact. Many an attractive and useful theory can be deflated by “too much” empirical evidence.

D. Be conservative

As a general matter, we think it is in the best interest of both the expert economist and the client for the expert to be conservative when making judgment calls. On many issues, there will be some uncertainty about the magnitude or severity of an effect. This most routinely occurs in damage analyses. Since recoverable damages are the difference between the counterfactual profits that would have been earned but for the defendant's actions (assuming they were illegal) and the profits actually earned, there will always be some uncertainty about the size of damages. We recommend that experts try to err on the low side.

Aiming to err on the low side is a relatively straightforward, concrete way in which to lean against the inducements to advocacy. It serves a policing role in the following way: if the expert intends to testify (and face cross-examination on the claim) that his calculations or other analyses are conservative, then he will need to explain in what ways they are conservative. The assertion of conservatism then becomes a strong inducement to conservatism.

It may seem paradoxical, but we believe that conservatism (at least up to a point) is generally in the client's best interest as well. By being credibly conservative, the expert helps to buttress his overall credibility, and in particular to establish his independence from the client: the expert avoids the appearance of being a cheerleader.

V. Case studies: Prime and EDS

In this section we discuss two cases in which we have been involved (MacKie-Mason testified in federal court in each, once for the plaintiff and once for the defendant). Our purpose is not to re-argue the merits of the case. We have tried to be balanced and fair, but it is quite possible that knowledgeable parties might object that we have not been completely accurate or forthcoming.¹²

We present these two cases because our involvement in them raised some interesting issues of advocacy versus independent professional analysis. The most striking of these led to an unsuccessful motion to have MacKie-Mason disqualified from the second case. Tricom, the plaintiffs in the second case, believed that their situation was almost identical to that of Virtual, the plaintiff in the first case. On that basis, they tried to hire MacKie-Mason as their expert. He turned them down, and then a couple of years later was approached by and agreed to testify for the defendants in the second case. The plaintiffs subsequently filed a motion to disqualify MacKie-Mason. After we present the basic facts and procedural history of the two cases, we will return to our roles in them and in particular to the issues challenged by the Tricom motion to disqualify.

A. *Virtual Maintenance vs. Prime Computer*

Virtual Maintenance, Inc., is a computer maintenance and support company headquartered in Rochester Hills, Michigan. In 1989 it filed a federal antitrust lawsuit against Prime Computer. The main allegation was that Prime was tying access to upgrades of a Ford

¹² We hope that is not the case, but urge anyone who is especially interested in the details of the cases to refer to the court files themselves, or in the case of the *Virtual* case, to the more careful discussion in Borenstein, Severin, Jeffrey K. MacKie-Mason and Janet Netz, "The

Motor Company software package to the use of Prime as a hardware maintenance company.

Virtual prevailed at trial, and after receiving favorable opinions from the U.S. Supreme Court and (on remand) the 6th Circuit Court of Appeals, obtained a favorable settlement from Prime in 1994.¹³

Ford Motor Company employs independent engineering firms to supply it with automotive design services. In order to ensure compatibility among all of its suppliers and in-house design shops, Ford required that its suppliers of many engineering services use the newest version of a CAD/CAM software product developed by Ford, called PDGS (Product Design Graphic System). PDGS was distributed exclusively by Prime Computer under an annually renewable license, and at the time ran only on Prime 50 Series computers.¹⁴ The PDGS updates that engineering firms were required to use were issued frequently, about twice a year.

Economics of Customer Lock-in and Market Power in Services", in *The Service Productivity and Quality Challenge*, P. Harker, ed. Kluwer Academic Press, 1993.

¹³ On remand the 6th Circuit accepted Virtual's positions on the merits, but found that procedural errors in the instructions to the jury made it impossible to know whether the jury had found Prime guilty on the correct grounds, and thus a retrial was ordered. The settlement occurred before the retrial took place.

¹⁴ During the course of the case, Prime was merged with Computervision, and Prime stopped manufacturing its Series 50 minicomputers. Also during the course of the case -- but after the lawsuit was filed -- Ford ported its PDGS system so that it would run on other hardware, including Sun workstations.

In addition to selling computers and software, Prime also sold computer hardware maintenance and software support. Prime's software support included the only economic means of obtaining PDGS updates¹⁵, and Prime sold software support only bundled with hardware maintenance on the Prime computers that ran PDGS. Virtual Maintenance provides computer hardware maintenance services. When Virtual attempted to market their services to engineering firms that used PDGS, they found that prospective customers would have liked to employ them, but could not because they needed PDGS updates, and the only economic way to get them was to buy hardware maintenance from Virtual's competitor Prime.

Virtual sued Prime, claiming that Prime illegally tied the sale of hardware maintenance to software support. In order to demonstrate a *per se* illegal tie, the plaintiff must show that there is a tying arrangement between two separate goods; that the seller has sufficient economic power in the market for the tying product (software updates in this case) to force customers to buy the tied product (hardware maintenance in this case), and that a not insubstantial amount of commerce is affected. Tying is also illegal under the rule of reason, if the tie is an unreasonable restriction on competition in the tied product market.

¹⁵ The annual software support contract cost \$16,000, and new copies of PDGS cost \$80,000. The alternative to purchasing the software support contract, purchasing a new version of PDGS every time it was updated, would have cost about ten times as much as the software support contract.

MacKie-Mason testified on behalf of Virtual that the tying product market might reasonably be defined to be either the market for CAD/CAM software, or the narrower market for Ford-required CAD/CAM software, and that Ford's requirements conferred sufficient power upon Prime in the tying product market that Prime could force design firms that preferred Virtual to employ Prime for hardware maintenance by means of an illegal tie.¹⁶ Design firms that had made investments in PDGS and the Prime minicomputers necessary to run it were locked-in, that is, once those investments had been made, it was more economic for them to pay supracompetitive maintenance prices than to seek employment some place other than Ford. Further, MacKie-Mason testified that Prime exploited its position as the sole seller of hardware maintenance of computers running PDGS by charging prices in excess of the competitive level; Virtual's prices for service of equal or higher quality were well below Prime's.

Prime argued that, under the broad tying market definition (all CAD/CAM software), Virtual's *per se* tying claim was unsupportable as a matter of law, since Prime's share of that market was not more than 11%, a fact Virtual did not dispute. Virtual's response was that Prime had sufficient power in that market to force the tie on an appreciable number of hardware maintenance customers (about 350 minicomputers), and that that is sufficient to meet the requirements of the antitrust law on tying.

Prime claimed that the other tying product market definition, Ford-required CAD/CAM, was too narrow, since the preference of a single customer (Ford) cannot define a market, and because Prime couldn't exercise power in any Ford-required CAD/CAM market, since that

¹⁶ For the sake of simplicity, we don't discuss here the fact that other software products, a Prime operating system and a Prime networking software product were necessary in order to run PDGS, and that tying goods included software support for each of these products.

power is held by Ford, not Prime. MacKie-Mason's definition of the narrow tying product market (Ford-required CAD/CAM) was based on the method of defining markets recommended in the Department of Justice 1984 Merger Guidelines: a product market is the smallest set of products for which, if there were only one seller, that seller could profitably raise the price 5% above the competitive level for one year. A too narrowly-defined market will fail this test because it will exclude substitutes to which buyers could turn in the face of the price increase, making the price increase unprofitable. MacKie-Mason argued that the fact that PDGS was priced higher than other CAD/CAM software (so high that few or no companies except those doing or hoping to sell engineering services to Ford ever bought PDGS) and that Prime charged above-competitive prices for hardware maintenance services tied to PDGS were direct evidence of monopoly power in the narrowly-defined market. The fact that substitutes for PDGS would be expensive and slow to produce, and no substitute can be produced for proprietary PDGS surface modeling formulas, and the fact that Ford absolutely refused to accept the output of other CAD/CAM software, were indirect evidence of monopoly power within the narrowly defined market. The power was a result of Ford's requirements, but was exercised and enjoyed by Prime, for Prime was able to extend its monopoly power in software (to which it was entitled by its license to intellectual property) to the market for hardware maintenance, where, absent the tie, Prime would have had no monopoly power.

A jury found in favor of Virtual. The verdict was overturned on appeal, which saw things much as Prime did. The Supreme Court remanded the case to the appeals court for reconsideration in light of its finding in *Kodak* that lent support to the narrow market definition. On reconsideration, the appeals court retained its position on the broad market definition and the rule of reason theory, but vacated its position on the narrow market definition. Since the jury

didn't specify which theory it had based its decision on, a new trial was ordered, using just the narrow market definition. The parties reached a settlement agreement before the second trial was held.

B. Tricom vs. EDS

A couple of years later, another case arose, *Tricom vs. EDS*, that the plaintiff's attorneys described as "nearly identical" to *Virtual Maintenance vs. Prime Computer*.¹⁷ Like Prime, it involved one of the Big Three American automobile manufacturers, contractual engineering design firms, and a third party that distributed CAD/CAM software services required by the automobile manufacturer.

¹⁷ *Tricom vs. Electronic Data Systems Corporation*, "Brief in Support of Tricom's Motion for Order Striking Expert Witness Jeffrey MacKie-Mason from Defendant's Witness List and Precluding his Testimony," p. 4.

GM developed the CAD/CAM software Corporate Graphics System (CGS), and required outside engineering firms working on some projects to submit their work in CGS format. GM did not make CGS available for any purpose other than its use by designers on GM projects. Initially, GM provided CGS free to design vendors working on projects done in CGS format. One was given a mainframe version of CGS to run on their computer. Beginning in 1986, GM distributed CGS exclusively through its wholly-owned subsidiary, Electronic Data Systems (EDS)¹⁸. EDS initially provided CGS in two ways: designers could go to the EDS Design Center and use graphics terminals there on an hourly basis, or a design firm could lease a telecommunications link to the EDS mainframe, where CGS resided, and use graphics terminals in their own offices. Beginning in 1991, a stand-alone workstation version of CGS, to be used at the designers' offices, was also made available for lease from EDS.¹⁹ All leases were short term, a year or less. In addition to CGS, EDS sold access to two other CAD/CAM software packages on its mainframe, CADAM and CATIA.

The plaintiff, Tricom, sold computer services, including access over telecommunications lines to a mainframe computer running CADAM and CATIA, in competition with EDS. Tricom alleged that EDS illegally tied several products to access to CGS, including (i) access to CADAM and CATIA, (ii) the telecommunications lines linking design vendors to the EDS mainframe computer, (iii) computer hardware including graphics terminals, and (iv) a minimum of 40 hours of CPU time per week.²⁰

¹⁸ Complaint, *Tricom vs. Electronic Data Systems Corporation*

¹⁹ Defendant's Memorandum of Points and Authorities in Support of Its Motion for Summary Judgement, p. 2, *Tricom vs. Electronic Data Systems Corporation*

²⁰ Complaint, *Tricom vs. Electronic Data Systems Corporation*

Several basic facts stated in the claims were in dispute, even before reaching the economic questions of market power and its use. EDS claimed that there was no tie to CADAM and CATIA, and that most designers bought CADAM and CATIA elsewhere. In fact, one of the plaintiff's own exhibits summarizing the terms of CGS mainframe contracts showed that 14 of the 20 customers did not license CADAM or CATIA from EDS.²¹ The claim that CADAM and CATIA were tied to mainframe CGS was later dropped. EDS also maintained that design firms were not required to lease graphics terminals in order to access CGS. In fact, some customers leased EDS' terminals, some didn't, and EDS even allowed customers to cancel their graphics terminal leases prior to expiration. EDS did not dispute the remaining claims, that it sold access to mainframe CGS bundled with telecommunications lines, and that it imposed a minimum charge for 40 hours of CPU time per week.²²

²¹ Defendant's Reply Brief in Support of Its Motion for Summary Judgement, *Tricom vs. Electronic Data Systems Corporation*

²² Defendant's Memorandum of Points and Authorities in Support of Its Motion for Summary Judgement, *Tricom vs. Electronic Data Systems Corporation*

MacKie-Mason testified for EDS that the circumstances in this case were importantly different from *Prime*. The primary difference was that EDS was a wholly owned subsidiary of GM. GM bought EDS to rationalize its computer operations, and EDS' policies were ultimately GM's policies.²³ Second, all the goods at issue in the case were supplied by EDS by short term contract, so the designers were not locked-in. Because there was no lock-in, GM had to compensate the designers fully for their expected CGS expenses in order to induce them to work for GM rather than other automobile or aerospace manufacturers. CAD/CAM costs were substantial – about half of design costs, the other half being, of course, the designers' labor. In some cases, the designers simply passed CGS expenses directly through to GM. The charges for the use of CGS were essentially transfer prices, designed to ensure its efficient use; GM's design costs would have increased if it had charged transfer prices that were too high or too low.²⁴ Aside from designers' unanticipated cost overruns, the money for CGS simply went around in a circle: designers paid EDS, EDS belonged to GM, and GM compensated the designers. It was not possible to earn monopoly profits from the designers in these circumstances. Nonetheless, Tricom claimed that EDS was charging supracompetitive prices for CGS. It recognized that GM compensated designers for CGS use (other than cost overruns), so the inevitable conclusion was that EDS systematically overcharged its owner for a decade. That is the conclusion Tricom reached.²⁵

²³ “EDS is a wholly-owned subsidiary of General Motors... As the sole stockholder of EDS, General Motors has the power and authority to elect and remove directors of EDS and can cause EDS to agree with General Motors to make such changes as General Motors desires in the arrangements pursuant to which EDS provides services to General Motors” (Prospectus, 3/21/91). At the time GM bought EDS, it offered EDS shareholders a choice of cash or Class E GM stock. (Tricom's closing argument, *Tricom vs. EDS* trial transcript, vol. XXVI) Class E GM

Since GM did not allow any use of CGS other than on GM designs, CGS was not even a marketed product – it was simply GM’s toolkit, which it leased for use on its own projects. There can be no question that GM, as the customer of design services, is entitled to specify the tools to be used in its provision. Tricom claimed that GM didn’t have a right to make this demand – that the courts should use the antitrust laws to force GM to accept Tricom’s tools.²⁶

Once the structure of the market is recognized – EDS was simply part of GM, and GM was the customer, demanding design services supplied with CGS – it was clear that there was not only no antitrust offence, the logic of the antitrust laws was scarcely applicable to the case. Nonetheless, Tricom’s claim had to be refuted using the standard methods of antitrust analysis. In a tying case, the plaintiff must show that the tying and tied goods are demanded separately, and that the defendant has market power in the tying good. GM, as the customer of design services, demanded mainframe CGS and EDS’ telecommunications lines together. Since the sole purchaser always demanded them together, EDS’ telecommunications lines and mainframe CGS were not separate goods, and the first test of tying fails.

EDS had no market power in the alleged tying good, since GM didn’t market CGS, it only offered it for use as an input in its own production process, and then compensated the

stock paid dividends determined by the GM board of directors, based solely on EDS’ earnings (EDS S-15 Registration, 9/21/84 p. 5).

²⁴ Evidence that outside designers subject to EDS’ transfer prices used equipment more efficiently than in-house GM designers is presented below, at footnote 30.

²⁵ In Tricom’s closing statement to the jury, their attorney said, “You’ve got a chance to correct this – the 10 years of injustice that’s been done by EDS to General Motors...” (*Tricom vs. EDS* trial transcript, volume XXVI, p. 185. See also pp. 84 and 87)

²⁶ “Well, what is it that we want to provide? We want to provide the mainframe time, we want to provide time sharing services as a whole, if that’s what the customers want, or we want to provide the terminals that they use at their location, or we want to provide the

lessors. A firm cannot have market power in a good that is not marketed. The other alleged tied good was a minimum charge for 40 hours of CPU time. This was merely the fixed portion of a two-part tariff, a valid and commonly used device for inducing the efficient use of resources with high fixed cost and low variable cost, like computers and telecommunications lines.

telecommunications links if they want somebody else to handle that.” (Tricom’s closing statement, *Tricom vs. EDS* trial transcript, volume XXVI, p. 68)

Tricom claimed that EDS was independent of GM, because GM bought EDS in part with a special class of GM stock whose dividends depended solely on EDS' earnings.²⁷ But even if EDS were independent of GM, and, *arguendo*, CGS were a marketed good, EDS could not have enforced a tie under the circumstances in which it operated. The reason is perhaps best understood by comparison to *Prime*. In *Prime*, designers owned the Prime computers necessary to run PDGS, and had made such large investments in them that it was more economic for them to pay supracompetitive maintenance prices than to abandon their investment in computers and software. They had no economic alternative to Prime's supracompetitive prices; they were "locked-in." As a result, they were "forced" to purchase Prime's maintenance services in precisely the manner described by the Supreme Court as "the essential characteristic" of an illegal tie.²⁸ In *EDS*, designers had many choices that would have allowed them to escape paying supracompetitive prices and leasing the telecommunications lines alleged to be tied to mainframe CGS. All three modes of access to CGS, mainframe, the Design Center, and workstation CGS were supplied by short-term leases of a year or less, so designers were free to seek employment from firms other than GM, if paying supracompetitive prices made employment elsewhere more profitable. If they wished to work for GM, they needn't have used CGS – many GM projects were done in other systems. If they wished to work on the projects that were done in CGS, they could use some other CAD/CAM software and translate the results to CGS format. Unlike PDGS, the software required by Ford, CGS used no proprietary formulae, so translation to CGS was feasible; in fact, one design house did *all* of its work for GM from 1989 to 1992 in PDGS, and translated it to CGS before transmitting it to GM.²⁹ If they wished to work directly in CGS,

²⁷ See footnote 23, above, for details of the ownership of EDS.

but wished to avoid leasing the telecommunications lines that were alleged to be tied to mainframe CGS, they could use either of the other two modes of access to CGS, the Design Center or workstation CGS. The fact that some firms chose each option (firms with small GM projects tended to use the Design Center, and firms with large GM projects leased workstations) demonstrated that designers were not forced to lease telecommunications lines by manipulative prices.

Even if it were accepted that EDS operated independently of GM, had market power in CGS which it used to tie telecommunications lines to mainframe CGS, and charged supracompetitive prices, EDS would still not have been liable because its policies had legitimate, overriding business justifications. GM believed that requiring the designers to use EDS' telecommunications was necessary both for efficiency and security. GM was naturally concerned about the security of its proprietary designs, and allowing designers to arrange for third party telecommunications would introduce a serious security risk. Moreover, security concerns made GM reluctant to allow third parties access to EDS' distribution frame, which would have been necessary if third parties supplied telecommunications lines. Requiring designers to use EDS' telecommunications lines also permitted the deployment of end-to-end diagnostics, and eliminated the possibility of repair coordination problems and finger pointing. These efficiencies reduced repair and maintenance costs, and reduced designers' downtime, which was ultimately

²⁸ “Our cases have concluded that the essential characteristic of an invalid tying arrangement lies in the seller’s exploitation of its control over the tying product to force the buyer into the purchase of a tied product that the buyer either did not want at all, or might have preferred to purchase elsewhere on different terms.” *Jefferson Parish Hospital District No. 2 v. Hyde*, 466 U.S. 2, 12 (1984)

²⁹ *Tricom vs. EDS* trial transcript, testimony of Carollo, volume VI, pp. 9, 12-13, 43, 106, 108-9.

paid for by GM. The minimum usage charge was, as mentioned above, simply the fixed portion of a two-part tariff designed to promote efficient use of equipment. Such pricing structures are common where there are high capacity costs and low usage costs, such as telecommunications and computers. And it worked – outside designers used equipment much more efficiently than in-house GM designers³⁰. Significantly, Tricom employed policies similar to the ones it was suing EDS for using – it did not allow any of its customers except Boeing to use non-Tricom telecommunications lines, and Tricom billed a minimum usage charge.

C. Advocacy issues

Virtual v. Prime was the first case in which MacKie-Mason was a testifying expert rather than a staff assistant to another economist. Although he had observed in other cases many of the inducements to advocacy discussed above, in this case they affected him personally and became salient.

Two advocacy inducements were especially clear in *Virtual*. The economists were very much included as members of the client's team, and were routinely called up for strategic advice as well as for opinions on economic questions. Second, the economists spent a substantial amount of time with the clients, whom they admired as risk-taking, hard-working entrepreneurs.

Although we believe that MacKie-Mason's testimony was correct and professionally rendered, in retrospect we wish that some aspects of the engagement had been handled differently. The strong sense of team involvement, and the personal involvement with the clients, both caused MacKie-Mason and his assistants substantial stress when they tried to

³⁰ Outside designers loaded 137% more terminals on a telecommunications line, and 36% - 80% more hours per week on a terminal. (EDS' Exhibit 543)

separate these inducements from their efforts to provide independent, objective testimony.

Therefore, we wish that there had been a greater distance maintained between the economic expert team, the legal team and the clients.

We do not advocate going to extremes. For example, it might be possible to refuse to provide any consultation or advice except for strictly limited answers to the specific economic questions on which the expert will be asked to testify. We do not think it is necessary, or even advisable to take such a stance. For one thing, an economist has valuable advice to offer on how to present economic issues to a jury. Likewise, such advice is appropriate on how to frame economic issues in briefs, and on how to cross-examine an opposing economist. These types of consultation we believe can be provided in a manner that is consistent with the obligations to provide independent expert testimony. Since the most important reason for an academic economist to become involved in forensic work is for the insights into the strategic decisions of both the lawyers and the clients, and for the in-depth learning about a particular industry, we think it would be a mistake to limit the economist's role too severely.

We do, however, think that an expert economist should be aware of the dangers of becoming too involved with the lawyers and the clients, and should moderate the extent of such involvement.

Tricom v. EDS brought to the fore issues of case selection and the desire to appear consistent with prior testimony. In this case, the plaintiffs (Tricom) believed they had an identical set of facts as those in *Virtual*, and so approached the *Virtual* plaintiff experts (us) to testify for Tricom.

Through a series of phone calls with the Tricom attorneys, and some independent research, we reached the conclusion that the fact patterns in the two cases differed in significant

ways. It was our opinion that Tricom was not in the right, and thus we refused the offer. This part was pretty easy, but it is worth nothing that there were some inducements to accept the offer. First, we were turning down a handsome fee. Second, we had the opportunity to "recycle" our analyses and theorizing, and thus the case was not likely to be hard. These motivations might persuade one unless there are countervailing concerns with the case. This situation emphasizes the importance of not accepting the lawyers' initial characterizations of the case, and of doing some research before committing to the case.³¹

Approximately two years later, EDS approached us about testifying for the defendant. At first we did not realize this was the same case on which we had earlier turned down the plaintiff. The case sounded intriguing, and we proceeded to do our initial investigation, and then to agree to provide expert testimony. The main feature of the case that appealed to us was that it superficially seemed to mimic other cases in which we had testified for the plaintiffs, but in this case the facts were such that we believed the defendant was on the right side.

Two conflicting issues of advocacy confronted us from the very beginning in this case. First, we were faced with the fact that if we did testify, we would have to work extra hard to explain why we seemed to be on the "opposite side" in this case compared to *Virtual*. It is generally easier to testify in cases in which the issues and theories seem similar to previous cases in which you have testified. Indeed, if we took the defendant's position in *Tricom v. EDS*, we were substantially risking future income, because thereafter plaintiffs in related cases (of which

³¹ In the *Tricom* matter, our suspicions were sufficiently strong that we did not even suggest that Tricom hire us to do a preliminary consulting expert analysis. We did the research on our own time.

there were quite a few during the 1990s, following the *Kodak* decision) might view as tainted or too risky.

Second, we were faced with the likelihood that the plaintiffs would try to portray us as hired guns, and might have some success in convincing both the jury and the antitrust community that we would take any side in a case as long as it paid well.

We decided to take the case for reasons that opposed these concerns. First, we actually relished the opportunity to establish the reputation for *greater integrity*. In our view, if we did the analysis well and presented it well, we could show that we were sufficiently objective that when the facts did *not* support the theory we had previously developed, then we would come to the opposite conclusion. Second, we wanted to increase the respect for our theory of aftermarkets, first espoused in *Virtual*, by showing that it was not vacuous: that sometimes things that looked like monopolized aftermarkets were not.

Once we decided to take the assignment, and Tricom was notified, Tricom filed a motion to have MacKie-Mason disqualified from the case. Tricom's grounds included: (1) their prior conversations with MacKie-Mason had made him privy to their confidential strategies; (2) MacKie-Mason's prior conversations about the case with the economist they did retain made him privy to confidential strategies and an unpaid participant in their venture. Thus, Tricom was essentially claiming that MacKie-Mason had participated in an advocacy role in Tricom's case and thus could not render objective testimony on the facts and economic theories of the case.³²

³² It might seem that Tricom was concerned that MacKie-Mason would squeal to EDS on secrets he had previously learned from Tricom and its expert. But Tricom never established that MacKie-Mason *knew* and secrets, and Tricom did not seek a restraining order preventing MacKie-Mason from communicating with EDS' attorneys, but rather just an order preventing him from *testifying*.

The District Court judge accepted briefs on the motion, and then held an evidentiary hearing in which both MacKie-Mason and Tricom's expert testified. At the close of the hearing, the judge denied the motion, having concluded that MacKie-Mason was capable of rendering objective and independent expert testimony.

We cannot know what was in the judge's mind, of course. However, we believe that the way in which we dealt with the parties in this case enabled us to keep the line between independent analysis and advocacy sufficiently clear that the judge was untroubled by MacKie-Mason's earlier contacts with Tricom's legal and expert team.

For example, in the several phone calls MacKie-Mason had with Tricom's attorneys while they were trying to hire him, he made it clear each time that he had not made a decision, and that they should not tell him anything confidential. He also made it clear that he had to ask questions and do a preliminary analysis in order to decide whether he agreed with Tricom's position in the case. Therefore, MacKie-Mason was operating in the role of an independent expert. The information he sought and obtained was the type of economically relevant information that an expert would rely on. There was no reason that skeptical inquiry into the facts and theories of the case would lead to biased testimony for the defendant.

MacKie-Mason had also been careful in his interactions with Tricom's expert (a colleague in MacKie-Mason's academic department). At the request of the younger, less experienced economist, MacKie-Mason had explained his theories of aftermarket power, and explained the key factors one must find. He mentioned his doubts about the degree to which the facts in this case matched the necessary pattern. MacKie-Mason reacted to and discussed various economic theories suggested by the other expert to explain the facts of the case. These discussions on

economic theories, applied to the public facts of the case, are the type of activity that an expert would engage in regardless of the side on which he is testifying.

The lessons from this case are clear. First and foremost, if an economist wants to be credible and respected as an independent expert, then she must comport herself accordingly in contexts in which that is her role. Even though we had dealings with both the attorneys and the expert for the other side, those dealings were in the role of an independent expert, and thus were not seen as damaging our ability to serve the court as independent experts.

Next, due diligence in case selection is crucial. By investigating the case with some care when first approached by the plaintiffs, we were able to end up on the side we believed was in the right, and were able to participate in a case that we thought was both a useful learning exercise and a good opportunity to strengthen our academic research on the underlying issues.

VI. Conclusion

We do not want to suggest that we always make all the right choices or avoid every risk of sliding into mere advocacy, though we certainly hope that we have learned to avoid any substantial errors. We wrote this chapter with some trepidation, because to do it honestly we had to admit that we were aware of inducements to mere advocacy, and that we had made some mistakes and learned from our experiences. We expect that at some future date some of our words will be read back to us by a cross-examining attorney.

However, we feel that what we have learned may be sufficiently valuable to other new or continuing economic experts that we are willing to take the risk. We think anyone who is intellectually honest enough to be an expert witness, will also be honest enough with himself or herself to realize that the inducements to mere advocacy are many. Only by examining those

inducements carefully, and developing professional practice guidelines to counter them, can an economist succeed as a respected, credible independent expert.