Corporations, Securities & Antitrust

Hexion v. Huntsman: Elaborating the Delaware MAC Standard

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In any large corporate acquisition, there is a delay between the time the parties enter into a merger agreement and the time the agreement is consummated, i.e., the time that the purchase price is paid and ownership of the subject business changes hands. Reasons for the delay depend on the details of the transaction but typically include obtaining clearance under the federal antitrust laws and other needed government approvals and obtaining required shareholder votes approving the deal.[1] This delay between signing and closing creates the possibility that, during the interim period, the business or financial condition of one of the parties may deteriorate. When this happens to the target company in a cash deal, or to either company in a stock-for-stock deal, the counterparty may no longer want to proceed with the transaction. One contractual protection counterparties typically have in such cases is the *material adverse effect* (MAE) or *material adverse change* (MAC) clause in the business combination agreement.[2] Although the details can vary considerably depending on how the agreement is drafted, the basic idea is that it is a condition precedent to the counterparty's obligation to consummate the transaction that the party has not suffered a MAC. Hence, if between signing and closing, a party has suffered a MAC, the counterparty may costlessly cancel the deal and walk away; if the party has *not* suffered a MAC, the counterparty has to pay the full purchase price and close the transaction.

In transactions between public companies advised by sophisticated counsel, MAC clauses are heavily negotiated and very complex. Typically, they distinguish various types of risks that may affect a party's business between the signing and closing of the agreement, including some and excluding others from the definition of "Material Adverse Change." For example, adverse changes to the party's business or financial condition arising from systematic risks such as general economic changes, changes in financial markets generally, or *force majeure* events like war or terrorism are often excluded from the definition.[3] When the definition of "Material Adverse Change" includes such exceptions, the causality underlying a MAC becomes crucially important. If the risk the materialization of which has MAC'd the party is included in the definition, then the counterparty may walk away from the deal, but if the risk is excepted from the definition, the counterparty has to pay the purchase price and consummate the transaction. Significant academic attention has been devoted to the question of which kinds of risks are typically distinguished in MAC clauses, how these risks are typically allocated between the parties, and why such allocations are likely efficient.[4]

MAC clauses have probably generated more litigation than any other provision of business combination agreements between public companies, and because MAC litigations can determine the fates of whole transactions, the stakes in such suits have usually been enormous, often billions of dollars.[5] Beginning in the early summer of 2007 when the credit markets began to deteriorate, and then later as financial and economic conditions worsened, buyers in many pending acquisitions discovered that transactions to which they had agreed were becoming significantly less attractive. This led to the termination of many pending acquisitions, including in some cases because acquirers had declared that targets had been MAC'd. The most significant litigation to emerge from these disputes is *Hexion Specialty Chemicals, Inc. v. Huntsman Corp.*,[6] in which Hexion, a portfolio company of private-equity fund Apollo Global Management, LLC, sought to terminate a merger agreement pursuant to which it had agreed to acquire Huntsman for more than $10 billion in cash. Hexion argued, among other things, that Huntsman's business had so deteriorated between signing and closing that Huntsman had suffered a MAC. Vice Chancellor Lamb of the Delaware Court of Chancery disagreed and, holding that the company had not been MAC'd, awarded judgment to Huntsman.

The first part of this article reviews the state of Delaware MAC jurisprudence prior to *Hexion*, and the second part explains how *Hexion* elaborated and extended the Delaware MAC standard in some significant ways. The third part offers some concluding observations, including by drawing some analogies between the development of Delaware's MAC jurisprudence and the development of case law under Section 271 of the Delaware General Corporation Law.

I. MAC Jurisprudence in Delaware before *Hexion*: The Doctrine of *In re IBP Shareholders Litigation* and *Frontier Oil v. Holly*

Prior to *Hexion*, there were two significant MAC cases in Delaware, *In re IBP Shareholders Litigation*,[7] which is the leading case, and *Frontier Oil v. Holly*.[8]

A. In re IBP Shareholders Litigation

In re IBP Shareholders Litigation concerned the $4.7 billion acquisition of IBP, the nation's largest processor of beef and second largest processor of pork, by Tyson Foods, the nation's largest producer of poultry. After a hotly contested auction, Tyson entered into a two-step merger agreement with IBP pursuant to which it would acquire IBP for a mix of cash and stock.[9] Both the chicken business and the beef business are cyclical and suffer during severe winters, and at the time the agreement was signed both parties knew that the beef business in particular was about to enter one of its periodic troughs.[10] After the agreement was signed but before the transaction closed, the businesses of both Tyson and IBP began to deteriorate, and Tyson's founder and controlling shareholder, Don Tyson,[11] suffering from a bad case of buyer's remorse,[12] decided he wanted out of the merger agreement. Accordingly, "Tyson's legal team

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swung into action,"[13] sending a notice to IBP purporting to terminate the merger agreement and then suing IBP on a wide variety of theories, including fraud and breach of contract, but also alleging that Tyson was relieved of its obligation to close because IBP had suffered a MAC.[14]

In the merger agreement, IBP represented and warranted that, except as set forth in a schedule attached to the agreement and in the company's periodic filings with the Securities and Exchange Commission, "there has not been… any event, occurrence or development of a state of circumstances or facts which has had or reasonably could be expected to have a Material Adverse Effect" on IBP.[15] "Material Adverse Effect" was defined as "a material adverse effect on the condition (financial or otherwise), business, assets, liabilities or results of operations" of IBP and its subsidiaries taken as a whole.[16] Somewhat unusually, the definition included none of the exceptions for systematic risks typically found in MAC definitions, such as risks arising from general economic conditions or conditions affecting the whole industry in which IBP operated. Since it was a condition of Tyson's obligation to close the transaction that IBP's representation about the absence of a MAC be true, Tyson would not have to pay the purchase price and close the deal if IBP had suffered a MAC.

In arguing that IBP had indeed suffered a MAC, Tyson pointed primarily to IBP's disappointing financial performance during the quarter in which the merger agreement was signed (but for which financial statements were not yet available at signing) and the subsequent quarter during which the merger was pending.[17] There was no doubt that IBP's financial performance during these periods was disappointing and below projections that IBP had previously prepared. The issue before the court, however, was whether the adverse change IBP had suffered was in fact *material*. This is typical of MAC litigations: the primary issue in all the important cases has been whether the adverse change suffered by a party is significant enough to qualify as a *material* adverse change within the meaning of the agreement. The typical MAC definition is of virtually no help in this context, for a "Material Adverse Change" is virtually always defined as a "material adverse change," even if some such changes, when arising from specified causes, are excluded from the definition. That is, although transactional lawyers have expended tremendous energy delineating by cause various kinds of risks, assigning some risks to one party and others to the other, the key issue in litigation has been not the cause of the adverse change but its magnitude, and on this issue the text of merger agreements has been almost entirely unhelpful.

Faced with this problem and attempting to gloss the phrase *material adverse effect* or *material adverse change*, Vice Chancellor Strine produced the doctrinal language that would be quoted in virtually all subsequent MAC cases: a MAC clause, the Vice Chancellor wrote, protects the acquirer "from the occurrence of unknown events that substantially threaten the overall earnings potential of the target in a durationally-significant manner."[18] He continued, "A short-term hiccup in earnings should not suffice; rather the Material Adverse Effect should be material when viewed from the longer-term perspective of a reasonable acquiror."[19] Since modern financial theory views the value of a company as the present value of its future earnings, it is plausible to understand a MAC on the company as something that "substantially threatens the overall earnings potential of the target in a durationally-significant manner." This is an important conceptual advance over the language of "material adverse change" and naturally lends itself to a quantitative interpretation that can be directly applied to individual cases. Although he never puts it in these terms, the Vice Chancellor started down the road towards developing such a quantitative interpretation of the doctrinal language, an interpretation that requires, in effect, two things: first, an appropriate measure of the earnings capacity of the company, and, second, a determination as to what level of diminution in that measure will be required to effect a MAC. We need to know, in other words, first, *how to measure earnings capacity quantitatively*, and, second, *what percentage decrease in earnings capacity thus measured* will amount to a MAC.

As to the first of these, Vice Chancellor Strine discusses IBP's financial performance, somewhat inconsistently, in terms both of the company's earnings before interest and taxes (EBIT)[20] and its earnings per share (EPS). What Vice Chancellor Strine refers to as EBIT is designated in IBP's financial statements as "Earnings from Operations," and it does indeed exclude interest and taxes.[21] The "earnings" Vice Chancellor Strine refers to in his EPS data, however, reflect not only interest and taxes but also extraordinary charges.[22] Hence, ratios between EBIT for given periods and EPS for the same periods are not identical, even accounting for changes in the number of shares outstanding as between the periods. There is thus a certain slippage in Vice Chancellor Strine's discussion as he shifts back and forth from EBIT numbers to EPS numbers. As we shall see below, in *Hexion* Vice Chancellor Lamb will confront this issue directly and argue persuasively that the correct measure of earnings capacity is actually EBITDA (earnings before interest, taxes, depreciation and amortization).

As to the percent decrease in earnings capacity needed to trigger a MAC, Vice Chancellor Strine begins by establishing a baseline consisting of EBIT and EPS data for the five fiscal years of the company (FY1995-FY1999) prior to the fiscal year in which the merger agreement with Tyson was signed, including by computing five-year (FY1995-FY1999) and most-recent three-year (FY1997-FY1999) averages for these figures.[23] Against this historical data, he compared the available data from the time the agreement was signed to the date of the decision, i.e., data for FY2001Q1 and preliminary data from the then still-pending FY2001Q2. Most important, he notes that EBIT for FY2001Q1 was 64% below FY2000Q1,[24] and that if IBP's FY2001 EBIT were projected from the FY2001Q1 results on a straightline basis, the diminution in its "annual performance would be consequential to a reasonable acquirer and would deviate materially from the range in which IBP had performed in the recent past,"[25] i.e., would represent a MAC. Vice Chancellor Strine does not fully spell this out, but from information contained in the opinion and in IBP's financial statements, we can compute the following:[26]

IBP PROJECTED FY2001 EBIT VERSUS VARIOUS HISTORICAL MEASURES

FY2000	-40.1%
FY1999	-61.1%
FY1998	-45.0%
FY1997	-9.4%
FY1996	-36.4%
FY1995	-57.2%
AVG. FY1995-FY1999	-46.8%
AVG. FY1997-FY1999	-45.4%

That is, if we were to assume that IBP would perform as poorly from FY2001Q2 through FY2001Q4 as it had in FY2001Q1, then its EBIT would have declined approximately 45% against historical standards and, according to Vice Chancellor Strine, *this would have been a MAC*. From this we can cautiously conclude that a decrease of 45% or more in earnings capacity, as measured by EBIT against relevant historical standards, is a MAC in Delaware.[27]

Because of the demonstrably cyclical nature of IBP's business, however, and because of other evidence that IBP's EBIT was increasing in FY2001Q2, Vice Chancellor Strine concluded that IBP's FY2001 EBIT would exceed what projecting FY2001Q1 numbers on a straightline basis would imply. In particular, he took judicial notice of the industry analysts' mean earnings estimates for IBP for both FY2001 and FY2002 as reported by Morningstar and concluded that "the analyst community was predicting that IBP would return to historically healthy earnings" in FY2002.[28] Unfortunately, Vice Chancellor Strine refers to the analyst estimates in terms of EPS rather than EBIT, which makes exact comparisons with the data relied upon above somewhat difficult, and he does not always specify exactly which fiscal periods he is comparing to which. Nevertheless, based on data in the opinion and in IBP's financial statements, we can compute the following:[29]

MEAN ANALYST ESTIMATES FOR FY2001 AND FY2002 EPS VERSUS EPS FOR FY1995-FY2000

	FY2001	FY2002	AVG. FY2001-FY2002
FY2000	+20.0%	+86.4%	+53.6%
FY1999	-55.8%	-31.3%	-43.4%
FY1998	-32.1%	+5.4%	-13.1%
FY1997	+19.0%	+84.9%	+52.4%
FY1996	-28.6%	-9.9%	-8.6%
FY1995	-49.3%	-21.3%	-35.1%
AVG. FY1995-FY1999	-37.0%	-2.1%	-19.3%
AVG. FY1997-FY1999	-34.5%	+1.7%	-16.2%
AVG. FY1996-FY1998	-19.4%	+25.2%	+3.2%

Again, Vice Chancellor Strine does not explicitly compute all of these percentages, and exactly which numbers he is comparing to which is not always clear, but he seems to draw from these figures two important conclusions. First, based on the analysts' earnings estimates, "IBP would return to historically healthy earnings" in FY2002.[30] That is, estimated FY2002 EPS was only 2.1% below the five-year average for FY1995-1999 and was actually 1.7% above the three-year average for FY1997-FY1999. Second, again based on analysts' earnings estimates, "IBP's earnings for the next two years would not be out of line with its historical performance during troughs in the beef cycle."[31] Since the Vice Chancellor mentions the FY1996-FY1998 period as a trough, if we compare the company's average EPS over this period with the average estimated EPS for FY2001-FY2002, we find that average estimated EPS for FY2001-FY2002 was actually 3.2% *above* the average EBIT in the FY1996-FY1998 trough.[32]

Hence, if we put together all the lessons of *IBP*, it seems reasonable that a decrease in earnings power, as measured by EBIT, of about 45% or more is a MAC, but a decrease in such power of about 2% or less is not. Of course, rules like this cannot be applied mindlessly: it was crucial that Vice Chancellor Strine compared trough-numbers to trough-numbers for a cyclical business. Nevertheless, once the issue of which periods' earnings numbers ought be compared to which is settled, these conclusions from *IBP*, if sound, establish two important data points: a diminution in EBIT of 2% or less is not a MAC, but a diminution of 45% or more is.

B. Frontier Oil v. Holly

In *Frontier Oil v. Holly*,[33] Frontier and Holly, both mid-sized petroleum companies, entered into a merger agreement pursuant to which Frontier would acquire Holly and the Holly shareholders would receive a mix of cash and Frontier shares.[34] Even prior to entering into the merger, the parties knew that Wainoco, a subsidiary of Frontier, was likely to be sued in connection with a potentially massive toxic tort. In particular, Wainoco had in the past operated an oil rig on land adjacent to Beverly Hills High School, and it had been publicly reported that the famous plaintiffs firm associated with Erin Brockovich was planning to sue Wainoco (and other parties associated with the site) alleging that emissions from the site were responsible for a supposed cancer cluster among students, alumni and staff at the high school.[35]

In their merger agreement, Frontier and Holly dealt with this risk in various ways, most importantly by having Frontier in effect represent and warrant that the potential litigation would not have, and would not reasonably be expected to have, a material adverse effect on Frontier.[36] After the agreement was signed but before the merger closed, however, the Beverley Hills situation worsened. The plaintiffs filed suit, and eventually there were three separate litigations involving more than 400 individual plaintiffs.[37] Although the parties disagreed about the potential costs of the suit (including both liabilities to the plaintiffs and defense costs), it was clear these costs would be significant. Although Frontier and Holly tried to renegotiate the deal, eventually Frontier sued Holly, alleging that Holly had repudiated the merger agreement.[38] Holly denied this and counterclaimed, alleging, among other things, that because of the Beverly Hills litigation Frontier had suffered a MAC.[39]

Unlike the agreement in the Tyson-IBP merger but as is typical in merger agreements nowadays,[40] the definition of "Material Adverse Effect" in the Frontier-Holly agreement contained exceptions for various kinds of adverse changes, such as changes resulting from general economic conditions, conditions in financial markets, and conditions in the petroleum industry generally.[41] Obviously, none of these exceptions was relevant, and so the sole issue was whether the Beverly Hills

litigation, which was admittedly adverse to Frontier, was of sufficient magnitude to constitute a "Material Adverse Effect" under the agreement.[42] This pattern—carefully drafted exceptions for systematic risks turn out to be irrelevant while the dispute centers on whether an admittedly adverse event is sufficiently material—is common in MAC disputes. It will recur in *Hexion*.

In determining whether the Beverly Hills litigation was sufficiently material, Vice Chancellor Noble began by quoting Vice Chancellor Strine's doctrinal glosses in *IBP* of the phrase "material adverse effect."[43] An inquiry into impairment of earnings capacity, however, is not immediately adaptable to a looming extraordinary liability like the Beverly Hills litigation. Clearly, the litigation had not yet had any significant impact on Frontier's earnings, no matter how earnings may be measured. In fact, the litigation might *never* have affected the capacity of Frontier's operations to generate EBITDA. For, if Frontier lost or settled the suit, it would presumably incur a large one-time cost, but depending on the vagaries of generally accepted accounting principles, this cost might be extraordinary and so would not affect the company's EBITDA at all. The costs of defending the suit might be treated similarly. Hence it was unclear how, or even whether, to use changes in the company's capacity to produce EBITDA in determining whether Frontier had suffered a MAC.

Vice Chancellor Noble approached the problem by attempting to determine the expected cost to Frontier of the Beverly Hills lawsuits, considering evidence regarding the likelihood of their success and the likely dollar value of the judgments or settlements if successful, plus estimated defense costs. Concluding that Holly had failed to adduce sufficient evidence to show that the plaintiffs were likely to prevail, the Vice Chancellor limited his consideration to defense costs only.[44] Recognizing that these costs would not be borne by Frontier in a single fiscal period but would likely be stretched out over several years as the litigation played out, he compared the expected defense costs (about $15 to $20 million, according to expert testimony)[45] to the enterprise value of the firm (about $338 million, according to expert testimony).[46] Enterprise value, of course, is commonly estimated as a multiple of current or expected EBITDA or as the present value of future EBITDA, and so it seems likely that in referring to enterprise value, Vice Chancellor Noble was implicitly accepting the idea that the proper measure of earnings capacity in the MAC context is EBIT or EBITDA.[47] Although Vice Chancellor Noble does not perform the calculation expressly, the ratio of his estimate of the expected cost of the litigation to the enterprise value of Frontier is between 4% and 6%. On this basis, he concludes that Holly had not proved that the Beverly Hills litigation would have a material adverse effect on Frontier. The teaching of *Frontier Oil* seems to be, therefore, that a diminution in earnings capacity of about 5% is not a MAC in Delaware.

II. *Hexion v. Huntsman*: Elaborating the Delaware MAC Standard

In June 2007, just before the credit markets began to unravel, Hexion, a portfolio company of private-equity giant Apollo Global Management, won an intense bidding contest to acquire fellow specialty chemical manufacturer Huntsman.[48] One effect of the competitive bidding for the company was that the Hexion-Huntsman merger agreement was generally quite favorable to Huntsman. In particular, even though Hexion intended to finance the entire $10 billion purchase price, its obligation to close the transaction was not conditioned on the availability of financing.[49] Immediately prior to entering into the merger agreement with Huntsman, Hexion had received commitment letters from Credit Suisse and Deutsche Bank to provide the needed financing, but the obligations of the banks under these letters was contingent in various ways that Hexion's obligation to complete the merger was not.[50] Hence, if the time came to close the deal and Hexion had not obtained the necessary financing under the bank commitment letters or otherwise, Hexion would still be obligated to pay the purchase price and consummate the merger, and it would be in breach if it did not do so.

Under the terms of the merger agreement, however, the effect of such a breach would depend on whether or not Hexion had committed a knowing and intentional breach of the agreement.[51] That is, if, as required by the agreement, Hexion had used its reasonable best efforts to take all actions and do all things necessary, proper and advisable to obtain the financing but had nevertheless failed to do so, then Hexion's liability to Huntsman for failing to close the deal would be capped at $325 million in liquidated damages.[52] If, on the other hand, Hexion had committed a knowing and intentional breach of the agreement (by, for example, intentionally sabotaging its own financing—which is what the court concluded ultimately happened), then its liability to Huntsman would not be contractually capped and Huntsman would be entitled to full expectancy damages—i.e., the purchase price in the agreement minus the fair market value of the company at the time of closing.

In the event, with the credit markets deteriorating, the transaction became significantly less profitable for Hexion, and so Hexion began to look for a way out of the agreement. One attractive strategy for Hexion was to declare that Huntsman had suffered a MAC. For, as favorable as the merger agreement was to Huntsman, it was a condition precedent to Hexion's obligation to close the transaction that Huntsman not have suffered a MAC. Hence, if Huntsman *had* suffered a MAC, Hexion could have walked away from the deal and would not have been required to pay even the $325 million in liquidated damages. As part of a larger strategy to exit the transaction, Hexion sued Huntsman, alleging, among other things, that Huntsman had suffered a MAC.[53]

The definition of "Material Adverse Effect" in the Hexion-Huntsman merger agreement contained exceptions for various kinds of systematic risks, including changes resulting from general economic or financial market conditions and changes in the chemical industry generally.[54] Moreover, just as happened in *Frontier Oil,* the carefully-crafted exceptions from the definition turned out to be irrelevant; all that mattered was how adverse a change had to be to count as a MAC. There is a good reason that MAC cases follow this pattern. For, given the structure of the typical MAC definition (e.g., "A 'Material Adverse Change' means a material adverse change on the business, financial

condition or results of operations of the company, except for changes arising from...”),[55] the first issue for the court to decide is whether the company has indeed suffered a MAC, and only if that issue is resolved affirmatively do the exceptions from the MAC definition related to the cause of the adverse change come into play. As Vice Chancellor Lamb put it in *Hexion*, “The plain meaning of the carve-outs… is to prevent certain occurrences which would *otherwise* be MAE’s being found to be so.”[56] The proper order of analysis, therefore, requires that the court determine *first* whether a MAC has occurred, and *second*, if a MAC has occurred, whether it is nevertheless excluded from the definition by one of the exceptions. Thus, while the MAC definitions in Tyson-IBP, Frontier-Holly, and Hexion-Huntsman were in significant ways different, the key issue before the court was the same in all three cases: was the adverse change undeniably suffered by the company between signing and closing sufficiently adverse to count as a MAC?

Vice Chancellor Lamb begins with the doctrinal language of Vice Chancellor Strine in *IBP*. Paraphrasing *IBP*, he writes, “The important consideration is whether there has been an adverse change in the target’s business that is consequential to the company’s long-term earnings power over a commercially reasonable period, which one would expect to be measured in years rather than months.”[57] This language is presumably synonymous with the key sentence from *IBP*, which Vice Chancellor Lamb goes on to quote: the MAC clause “protect[s] the acquirer from the occurrence of unknown events that substantially threaten the overall earnings potential of the target in a durationally-significant manner.”[58]

Whereas Vice Chancellor Strine vacillated in his *IBP* opinion between using EBIT or EPS to measure the earnings capacity of the company, Vice Chancellor Lamb confronts head-on the question of which metric should be employed. “The issue then becomes,” he says, “what benchmark to use in examining changes in the business operations post-signing of the merger agreement—EBITDA or earnings per share.”[59] In coming down in favor of EBITDA over EPS, he argues that EPS “is very much a function of the capital structure of a company, reflecting the effects of leverage.”[60] In other words, a company can tinker with its capital structure in various ways that can have dramatic effects on EPS. Since “[w]hat matters is the results of operation of the business,” and since “EBITDA is independent of capital structure,” EBITDA “is a better measure of the operational results of the business.”[61]

This is all true, of course, but it actually understates the case for using EBITDA instead of EPS. For, the earnings numbers used in calculating EPS reflect not just interest expense but also the company’s tax liabilities, which can be artificially managed in any number of ways and which may change as the tax laws change, as well as depreciation and amortization charges, which are also manipulatable and are not even cash items. Moreover, EPS will also reflect extraordinary, non-recurring items, many of which are also not cash items.[62] As the Vice Chancellor observed, this is why in the Hexion-Huntsman transaction (as indeed in most business combination transactions), EBITDA was the measure most heavily relied upon by the parties and their bankers in valuing the deal.[63]

Having established EBITDA as the measure, Vice Chancellor Lamb next needed to determine which periods’ EBITDA should be compared with which. He noted that the terms “business,” “financial condition” and “results of operations” typically used in MAC definitions and used in the Hexion-Huntsman agreement “are terms of art, to be understood with reference to their meaning in Reg. S-X and Item 7, the ‘Management’s Discussion and Analysis of Financial Condition and Results of Operations’ section of the financial statements public companies are required to file with the SEC.”[64] Appealing to the practice of financial analysts using such filings, the Vice Chancellor stated that “these results are analyzed by comparing the results in each period with the results in the same period for the prior year,” e.g., FY2007 to FY2006, FY2008Q1 to FY2007Q1, etc. This procedure seems obviously right, because many businesses experience recurring quarterly variations in their financial results, and comparing Q1 of one year to Q4 of the immediately preceding year could be badly misleading.

Vice Chancellor Lamb’s point here, however, cannot be applied mindlessly: some businesses are cyclical but on a cycle longer than one year. Recall, for example, how Vice Chancellor Strine compared trough-year EPS numbers for IBP to other trough-year numbers.[65] Had he compared peak-year numbers to trough-year numbers, even if the former immediately succeeded the latter, the result would have been deceptive. Similarly, in television and radio broadcasting, election years (especially the years of presidential elections) almost always produce financial results greatly superior to those of non-election years because of added revenues from political advertising. In determining which periods’ EBITDA to compare to which, the cyclicality of the business, if there is such a thing, should be expressly determined.

Vice Chancellor Lamb then went on to compare Huntsman’s EBITDA for FY2007 to its EBIDTA for FY2006, noting only a 3% decline, and Huntsman’s trailing twelve-month EBITDA for FY2008Q2 (the most recently completed quarter for which numbers were available) to its trailing twelve-month EBITDA for FY2007Q2, noting only a 6% decline.[66] The Vice Chancellor then compared various projections for Huntsman’s FY2008 EBITDA to its actual FY2007 EBITDA, and these comparisons revealed either a 7% decline using Huntsman’s projections for FY2008 or an 11% decline using Hexion’s projections for FY2008.[67] Finally, Vice Chancellor Lamb compared “current analyst estimates”[68] of Huntsman’s FY2009 EBITDA to Huntsman’s EBITDA for FY2006 and FY2007, noting declines of 3.6% relative to FY2006 and “a result essentially flat” relative to FY2007.[69] Interpreting this numbers about as much they will bear, the lesson seems to be that a diminution in earnings capacity of up to 10%, as measured by EBITDA across relevant fiscal periods, is not a MAC in Delaware.[70]

III. Evolution of a Standard and Analogy to DGCL 271 Cases

Reviewing the essential legal developments in these cases, we see that the Delaware courts first glossed the phrase “material adverse change” or “material adverse effect” to mean a change

or event that substantially threatens the subject company's long-term earnings capacity and then set out to explicate this gloss in a financially sophisticated and essentially quantitative way. As the cases progress, the phrase *earnings capacity* comes to mean power to produce EBITDA, thus incorporating into the legal standard all the generally accepted accounting principles needed to compute EBITDA as well as the generally accepted practices of finance professionals who routinely rely on EBITDA in valuing companies and their securities. Next, the conventions of Regulation S-X under the federal securities laws and related practices of financial analysts are used to determine the fiscal periods for which EBITDA figures should be compared. Finally, judicial commonsense is used, on a case-by-case basis, to establish how much of a decline in EBITDA thus measured will count as a MAC. In this perspective, the individual MAC litigations should be seen as plotting out data points: in *IBP*, we learn that a diminution in earnings capacity from relevant fiscal period to relevant fiscal period of 45% or more is likely a MAC, but a diminution of up to about 2% is not. In *Frontier Oil*, a diminution of about 5% is not a MAC, and in *Hexion* a diminution of even 10% is not a MAC. Although it would be fatuous to expect the Delaware courts to draw a bright line between MACs and non-MACs at some specified percentage, presumably further cases will plot out additional points between 10% and 45%, holding that some are MACs and others are not.

Such an evolution is typical of the common law. Consider by way of analogy the development of the case law under Section 271 of the Delaware General Corporation Law. That section provides that, if a corporation is to sell "all or substantially all" of its assets, the sale must be approved by a majority of the shares entitled to vote.[71] The phrase "substantially all" is a standard almost as vague as "material adverse change," and the development of Delaware law interpreting Section 271 clearly foreshadows the Delaware MAC cases. First, in *Gimbel v. Signal Cos., Inc.*,[72] the Delaware courts glossed the "substantially all" language of the statute by holding that a transfer relates to "substantially all" of a corporation's assets if, among other things, the transfer involves a quantum of assets that are "quantitatively vital to the operation of the corporation."[73] In explaining this language, the Delaware courts have considered both (a) the measure to be applied in valuing assets, referring at times to book value and fair market value as well as power to produce revenues, earnings and EBITDA,[74] and (b) the percentage of assets, however measured, that will constitute "substantially all" of the corporation's assets.[75] These issues exactly parallel those that the Delaware courts have faced in the MAC cases—determining the relevant measure and determining the percentage threshold once the measure is determined.

Finally, despite the evident analogies between Delaware's Section 271 jurisprudence and the Delaware MAC cases, there is one striking disanalogy: while the Section 271 cases began from a standard embodied in a *statute*, the MAC cases begin from language used in a *contract* between private parties. Although the meaning of the statute is the same for everyone, the meaning of a phrase in a contract depends on the particularized intentions of the parties to the agreement. Thus, at least in determining what percentage declines in earnings capacity would constitute a MAC, the Delaware courts have sometimes referred to the particular intentions and beliefs of the parties at the time they were contracting. For example, in *IBP*, Vice Chancellor Strine noted that Tyson's own investment banker had advised Tyson prior to its entering into the merger agreement that the transaction would be fair to Tyson from a financial point of view even if IBP's EBIT levels declined to levels comparable to those that IBP was in fact generating at the time of the suit.[76] The court's reliance on the particular intentions of the parties means that data points established by the cases regarding which percentage declines in EBITDA will MAC a company should be approached with caution. If, for instance, a party could prove that, at the time of contracting, the parties had understood that a decline of 10% in earnings capacity would be a MAC, then such a decline ought to be held to be a MAC.

This fact, together with the elaboration of the Delaware MAC standard in *Hexion*, suggests a possible evolution in deal technology. The MAC cases nowadays provide so much of a gloss to the phrase "material adverse change" or "material adverse effect" that future MAC disputes will very likely reduce to the questions of (a) which fiscal periods' EBITDA should be compared to which, and (b) how much of a percent reduction in EBITDA will count as a MAC. If this is indeed an efficient way to allocate risks associated with the target's business between signing and closing, then parties to merger agreements can reduce their transaction costs, including the costs uncertainty, by specifying in their agreements answers to the questions they can foresee Delaware courts will ask in determining whether a MAC has occurred. Alternatively, if the Delaware courts have got this matter significantly wrong—if, that is, the Delaware approach is not more-or-less efficiently allocating risk between the parties—then the MAC language will disappear from public company agreements, and some wholly new language allocating risk efficiently will develop. Contracts will be efficient, whether courts like it or not.

Endnotes

1 E.g., Lou R. Kling & Eileen T. Nugent, Negotiated Acquisitions of Companies, Subsidiaries and Divisions, § 1.04[1][i] (federal securities laws) (2006); James C. Freund, Anatomy of a Merger 151 (1975) (explaining how corporate law and federal securities law combine to necessitate non-simultaneous signing and closing in sale of public company); Lou R. Kling et al, *Summary of Acquisition Agreements*, 51 U. Miami L. Rev. 779 (1997) (same).

2 Although the phrase "material adverse effect" is more commonly used in merger agreements nowadays, "material adverse effect" (MAE) and "material adverse change" (MAC) are generally understood to be synonymous. I shall use "MAC" throughout. *See, e.g.,* Ronald J. Gilson and Alan Schwartz, *Understanding MACs: Moral Hazard in Acquisitions*, 21 J.L. Econ. & Org. 330 (2005) (treating MAC and MAE as equivalent and using MAC throughout); Rod J. Howard, Deal Risk, Announcement Risk and Interim Changes—Allocating Risk in Recent Technology M&A Agreements, Corporate Law and Practice Course Handbook Series (PLI No. B0-00OB, December 2000) at *244 (stating that "[o]ften the difference [between MAC and MAE] is merely a choice of shorthand terminology, and the definitions are identical or indistinguishable," but noting that clever litigators may attempt to find, *ex post*, a difference in meaning).

3 In my *The Economics of Deal Risk: Allocating Risk Through MAC Clauses in Business Combination Agreements,* 50 William & Mary L. Rev. ___ (forthcoming, 2009) [hereinafter Miller, *The Economics of Deal Risk*], I present

the results of a large empirical study of MAC clauses in business combination agreements and explain why the typical allocation of various kinds of deal risk as revealed in the empirical study is efficient.

4 *Cf.* Miller, *The Economics of Deal Risk*, supra note 2, with Ronald J. Gilson and Alan Schwartz, *Understanding MACs: Moral Hazard in Acquisitions*, 21 J.L. Econ. & Org. 330 (2005).

5 E.g., in the $25 billion leveraged buyout of Sallie Mae by J.C. Flowers, Flowers declared a MAC, and Sallie Mae sued to enforce the deal, later settling the litigation on terms favorable to Flowers. Andrew Ross Sorkin & Michael de la Merced, *Sallie Mae Settles Suit Over Buy Out That Fizzled*, N.Y. Times (Jan. 28, 2008) at C1. In the $27 billion acquisition of Guidant by Johnson & Johnson, after Johnson & Johnson declared a MAC, the parties settled litigation ahead of trial and agreed upon a reduced purchase price (though Boston Scientific later made a topping offer for Guidant). Scott Hensley & Thomas M. Burton, *J&J, Guidant Skip Courtroom, Set Deal*, Wall St. J. (Nov. 16, 2005) at A3.

6 Hexion Specialty Chemicals, Inc. v. Huntsman Corp., 2008 WL 4457544 (Del. Ch. 2008).

7 *In re IBP Shareholders Litigation*, 789 A.2d 14 (Del. Ch. 2001).

8 Frontier Oil Corp. v. Holly Corp., 2005 WL 1039027 (Del. Ch. 2005).

9 The whole case is helpfully reviewed by knowledgeable practitioners in Herbert Henryson, *'IBP v. Tyson' Teaches Valuable Lessons*, 226 N.Y. Law J. 1 No. 18 (July 26, 2001) and in Joseph R. Allerhand & Seth Goodchild, *Court of Chancery Orders Tyson-IBP Merger*, Bus. & Sec. Litig. (August 2001). For academic commentary, see Gilson and Schwartz at 355-357; Sherri L. Toub, *"Buyer's Regret" No Longer: Drafting Effective MAC Clauses in a Post-IBP Environment*, 24 Cardozo L. Rev. 849, 871-882 (2003); Jeffrey Thomas Cicarella, *Wake of Death: How the Current MAC Standard Circumvents the Purpose of the MAC Clause*, 57 Case W. Res. L. Rev. 423, 432-436 (2007); Alana A. Zerbe, *The Material Adverse Effect Provision: Multiple Interpretations and Surprising Remedies*, 22 J.L. & Com. 17, 20-26 (2002).

10 *In re IBP Shareholders Litigation*, 789 A.2d 14, 22 (Del. Ch. 2001). *See also id.* at 26 (explaining that cattle supplies go through cycles that can be tracked with some general precision using information from the United States Department of Agriculture).

11 *Id*. at 49.

12 *Id*. at 22.

13 *Id*. at 50.

14 The characterization of the behavior of Tyson and its managers given in the text is harsh, but not more so than that in Vice Chancellor Strine's findings of fact in the case. See Id. at 47-51(detailing delicts by Tyson managers).

15 Section 5.10 of the Tyson-IBP merger agreement, described in id. at 65.

16 Section 5.01 of the Tyson-IBP merger agreement, described in id. at 65.

17 *In re IBP Shareholders Litigation*, 789 A.2d 14, 65 (Del. Ch. 2001).

18 *Id*. at 68.

19 *Id*.

20 It is a good question why Vice Chancellor Strine used EBIT rather than EBITDA (earnings before interest, taxes, depreciation and amortization). As we will see, Vice Chancellor Lamb in *Hexion* will use EBITDA, never even mentioning EBIT. The change is no doubt an improvement, for depreciation and amortization are, like interest and taxes, subject to manipulation in various ways, and, unlike interest and taxes, are not even cash items. See the discussion below in Part II. As to why Vice Chancellor Stine used EBIT rather than EBITDA, the reason, I suspect, is simply that IBP's financial statements did not break out depreciation and amortization in a way that made it feasible to compute EBITDA. *See, e.g.,* IBP's Annual Report on Form 10-K of IBP, Inc. for Fiscal Year ended December 30, 2000 (on file with SEC).

21 See Annual Report on Form 10-K of IBP, Inc. for Fiscal Year ended December 30, 2000 (on file with SEC) and Annual Report on Form 10-K of IBP, Inc. for Fiscal Year ended December 25, 1999 (on file with SEC). It seems, however, that "Earnings from Operations" *includes* depreciation and amortization; that is, it is truly EBIT and not EBITDA.

22 *See id.*

23 Tyson and IBP entered into the merger agreement on January 1, 2001, which is actually two days after IBP's FY 2000 ended on December 30, 2000. Naturally, audited financial statements for this fiscal year would not have been available yet on January 1, 2001, but IBP had prepared and filed its Forms 10-Q for 2000, and so the unaudited financial information included in them for FY2000Q1 through FY2000Q3 should perhaps have been included in the baseline Vice Chancellor Strine established. Despite this omission, however, Vice Chancellor Strine does refer at times to EBIT numbers for Q1 to Q3 for FY2000.

24 *In re IBP Shareholders Litigation*, 789 A.2d 14, 69 (Del. Ch. 2001).

25 *Id.*

26 The percentages presented in the table are based on the following EBIT numbers (with all numbers in thousands). For FY2001Q1 (on file with SEC), $205,504, projected on a straightline basis from EBIT of $51,376, as reported in IBP's Form 10-Q for FY2001Q1 (i.e., Earnings from Operations of $58,273, adjusted to disregard an extraordinary gain of $6,897). For FY2000, EBIT of $346,822 as reported in IBP's Form 10-K for FY2000 (on file with SEC). For FY1999 through FY1995, EBIT of $528,473 (FY1999), $373,735 (FY1998), $226,716 (FY1997), $322,908 (FY1996), and $480,096 (FY1995), as set forth in *In re IBP Shareholders Litigation*, 789 A.2d 14, 66 (Del. Ch. 2001).

27 *See* Raskin v. Birmingham Steel Corp., 1990 WL 193326 (Del. Ch. 1990) at *5, where Chancellor Allen, on a motion to approve a shareholder class action settlement, in considering the probable merits of a claim that a party to a merger agreement had suffered a MAC, says, "While it is possible that on a full record and placed in a larger context one might conclude that a reported 50% decline in earnings over two consecutive quarters might not be held to constitute a material adverse development, it is, I believe unlikely… that that might happen."

28 *In re IBP Shareholders Litigation*, 789 A.2d 14, 70 (Del. Ch. 2001).

29 The percentages presented in the table are based on the following EPS numbers: (a) for FY2001, $1.50, and for FY2002 $2.33, as set forth in id. at 71 (taking, as Vice Chancellor Strine says, the lower end of the consensus ranges (i.e., $1.50 from the $1.50 to $1.74 range for FY2001, and $2.33 from the $2.33 to $2.42 range for FY 2002)); (b) for FY2000, EPS of $1.25 as reported in IBP's Form 10-K for FY2000 (on file with SEC); (c) for FY1999 through FY1995, EPS of $3.39 (FY1999), $2.21 (FY1998), $1.26 (FY1997), $2.10 (FY1996), and $2.96 (FY1995), as set forth in *In re IBP Shareholders Litigation*, 789 A.2d 14, 66 (Del. Ch. 2001).

30 *Id*. at 71.

31 *Id*.

32 Again, I use the figures referred to above to compute these percentages. Vice Chancellor Strine does not explain why he implicitly compares a three year average (FY1996-FY1998) to a two-year average (FY2001-FY2002), but if troughs in the beef cycle vary in length so that some extend for two seasons but others for three, such a comparison would seem unobjectionable.

33 Frontier Oil Corp. v. Holly Corp., 2005 WL 1039027 (Del. Ch. 2005). After *IBP*, *Frontier Oil* was generally recognized as the most important of the reported MAC cases before *Hexion*. E.g., William R. Kucera, *MAE Clauses Might Not Avert a Bad Deal*, National Law Journal (November 7, 2005) at S1 (noting that states other than Delaware look to *IBP* and *Frontier Oil* as persuasive authority in MAC cases); see also Memorandum and Order, No. 07-2137-II(III) (Tenn. Chan. Ct.) (December 27, 2007) in *Genesco, Inc. v. The Finish Line, Inc*. (citing *IBP* in MAC case decided under Tennessee law). *See also* Jeffrey Thomas Cicarella, *Wake of Death: How the Current MAC Standard Circumvents the Purpose of the MAC Clause*, 57 Case W. Res. L. Rev. 423, 433-435 (2007) (discussing *Frontier Oil* case).

34 Frontier Oil Corp. v. Holly Corp., 2005 WL 1039027 at *2 (Del. Ch.). Each Holly share would also receive a contingent value right representing the potential value of a litigation claim Holly was then pursuing. *Id*.

35 *Id*.

36 *Id*. at *33.

37 *Id*. at *21.

38 *Id*. at *24.

39 *Id*. at *25. More precisely, Holly claimed that Frontier's representation that there was no litigation pending or threatened against it except for such litigations as would not have (or would not reasonably be expected to have) a material adverse effect on Frontier, was false. That is, Holly claimed that Frontier's litigation representation, which was qualified to a MAC, had been breached. *Id*. at *35. Since the closing condition in favor of Holly conditioned Holly's obligation to close on all of Frontier's representations qualified to MACs (or to materiality) being true, *id*. at *8, the net effect was that Holly's obligation to close would be discharged if the Beverly Hills litigation caused a MAC on Frontier.

40 *See* Miller, *The Economics of Deal Risk*, *supra* note 2.

41 *Id*. at *33.

42 *Id*. at *35.

43 *Id*. at *34.

44 *Id*. at *36.

45 *Id*.

46 *Id*.

47 Even if the figure for the enterprise value of Frontier on which Vice Chancellor Noble relied was computed in some method that does not rely on EBITDA, nevertheless enterprise value is routinely interpreted as described in the text, and so the connection between enterprise value and EBITDA is inescapable.

48 Hexion Specialty Chemicals, Inc. v. Huntsman Corp., 2008 WL 4457544 at *4 (Del. Ch. 2008).

49 *Id*.

50 *Id*.

51 *Id*.

52 *Id*. at *2, *21.

53 *Id*. at *14.

54 *Id*. As mentioned above, such exceptions are common in contemporary MAC definitions. *See* Miller, *The Economics of Deal Risk*, *supra* note 2.

55 *See id.*

56 *Hexion*, 2008 WL 4457544 at *15.

57 *Id*.

58 *Id*. (quoting *In re IBP Shareholders Litigation*, 789 A.2d 14, 67 (Del. Ch. 2001)).

59 *Hexion*, 2008 WL 4457544 at *16. Note the change from IBP, where Vice Chancellor Strine used EBIT rather than EBITDA. *See supra* note 19.

60 *Hexion*, 2008 WL 4457544 at *16.

61 *Id*.

62 Exactly this was the case with an impairment charge that IBP was forced to recognize and to which Tyson pointed in arguing that IBP had been MAC'd. *See In re IBP Shareholders Litigation*, 789 A.2d 14, 70 (Del.Ch. 2001).

63 *Hexion*, 2008 WL 4457544 at *16. Of course, depending on the nature of the business and the accounting principles it employs, other measures such as EBITDAR (earnings before interest, taxes, depreciation, amortization and rent) or EBITDARM (earnings before interest, taxes, depreciation, amortization, rent and management fees) may be more appropriate.

64 *Id*. at *18.

65 See discussion in Part I.A above.

66 *Hexion*, 2008 WL 4457544 at *18.

67 *Id*., *but see also id.* at *18 FN 76, where Vice Chancellor Lamb says that, based on Hexion's projections for Huntsman's FY2008, EBITDA would decline 12% (rather than 11%) relative to FY2007. Presumably the discrepancy is due to inconsistent rounding between Vice Chancellor Lamb's text and his footnotes.

68 *Id*. at *19. Presumably, the Vice Chancellor was referring to mean analyst estimates like those used by Vice Chancellor Strine in *IBP*, but the opinion does not make this entirely clear.

69 *Id*.

70 In arguing that Huntsman had suffered a MAC, Hexion also referred to factors other than a decline in Huntsman's actual or expected EBITDA, including increased debt levels relative to the time the merger agreement was signed, *id*. at *19, and alleged poor performance at certain of Huntsman's business segments, *id*. at *20. Vice Chancellor Lamb dismissed the first argument because in valuing the deal, Apollo, the parent of Hexion, had assumed Hexion would have debt levels consistent with those Huntsman actually eventually had. *Id*. at *19. As to the second argument, Vice Chancellor Lamb concluded that, if the earnings capacity of Huntsman as a whole had not been impaired (which it had not, based on the EBITDA analysis described in the text), then any adverse changes limited to particular business segments *a fortiori* could not amount to a MAC on the whole company. *Id*. at *20.

71 Del. Code Ann. tit. 8 § 271 (2001).

72 316 A.2d 599 (Del. Ch. 1974), *aff'd on other grounds*, 316 A.2d 619 (Del. 1974).

73 *Id*. at 606.

74 E.g., in *Gimbel*, the court considered book value, net worth, revenue producing power and pre-tax earnings producing power. Id at 607. In *Bacine v. Scharffenberger*, 1984 Del. Ch. LEXIS 501 at *7-8 (1984) the court considered book value and power to produce revenues and operating income. In *Katz v. Bregman*, 431 A.2d 1274, 1275-1276 (Del.Ch. 1981) the court looked at book value, revenues, pretax operating income. In *Hollinger v. Hollinger International*, 858 A.2d 342 (Del. Ch. 2004), the subject corporation had recently attempted to auction its various business segments, and Vice Chancellor Strine relied on, among other things, bids from that process to establish the fair market value of the various segments.

75 The cases produce less definite answers on this issue. Reading all the cases together, perhaps the best that can currently be said is that, for purpose of Section 271, (a) a quantum of assets generally should not be deemed to constitute substantially all of a corporation's assets if the assets aggregate less than 50% of the corporation's assets as measured by each of their book value, their fair market value, their revenue producing power, and their income producing power, and (b) a quantum of assets that aggregates more than 75% of the corporation's assets as measured by any of these metrics may be deemed to constitute substantially all of a corporation's assets if the percentage is significantly more than 50% or if the assets constitute more than 75% of the corporation's assets as measured by more than one metric, particularly if one of the metrics is the assets' income producing power.

76 *In re IBP, Inc. Shareholders Litigation*, 789 A.2d 14, 70 (Del.Ch. 2001).