

Materiality In Review

Probability, Magnitude and
The Reasonable Investor

By J. Anthony Terrell



TABLE OF CONTENTS

I.	Introduction	1
II.	Primary Liability Provisions of the Securities Laws	1
III.	Case Law	2
	A. General	
	B. Undefined Terms	
	C. Observations	
	D. Degrees of Materiality	
IV.	SEC Regulations	8
	A. General	
	B. Risk Factors	
	C. MD&A	
	D. Disclosures About Market Risks	
	E. Other Non-Financial Regulations	
	F. Regulation S-X	
	G. SAB 99	
V.	Accounting Principles	20
	A. The FASB	
	B. ASC 450	
	C. Concepts Statement No. 2	
	D. Concepts Statement No. 8	
	E. ASC 275	
VI.	Auditing Standards	28
	A. PCAOB – AS 2105	
	B. AICPA – AU-C Section 320	
	C. General Observations	
VII.	The Reasonable Investor	30
	A. General	
	B. Case Law	
	C. SEC Concept Release	
	D. Behavioral Economics	
	E. Other Proposals for Reform	
VIII.	Proposed Bayesian Analysis	39
IX.	Concluding Observations	40

1. INTRODUCTION

The crystal ball is an essential tool for compliance, and assessing compliance in hindsight, with the U.S. Federal securities laws, with particular reference to the Securities Act of 1933, as amended (the “1933 Act”), and the Securities Exchange Act of 1934, as amended (the “1934 Act”, and, together with the 1933 Act, the “Securities Laws”). The Securities Laws provide a framework for making available information that is sufficient to enable investors to make intelligent decisions as to whether or not to purchase or sell a security or approve a business proposal. This information is not only historical in nature but necessarily includes trends, uncertainties, contingencies and other forward-looking information. A company subject to the Securities Laws and its advisors have to make judgments as to the effect of possible future events or circumstances, in addition to the chance that those events or circumstances will actually occur. As if this task were not difficult enough, judgments then have to be made as to whether or not a hypothetical reasonable investor would consider the possibility of those events or circumstances important in making an investment decision. This note will explore the parameters within which such judgments are made.

2. PRIMARY LIABILITY PROVISIONS OF THE SECURITIES LAWS

Perhaps putting the cart before the horse, it may be helpful first to review certain of the primary liability provisions of the Securities Laws in order to determine how best to provide adequate disclosure.

- Section 11(a) of the 1933 Act imposes liability (subject to various exceptions and conditions) if a registration statement, at the time it became effective, contained an untrue statement of a material fact or omitted to state a material fact required to be stated therein or necessary to make the statements therein not misleading. 15 U.S.C. § 77k(a).
- Section 12(a)(2) of the 1933 Act imposes liability (subject to various exceptions and conditions) if a security is offered or sold by means of a prospectus or oral communication which includes an untrue statement of a material fact or omits to state a material fact necessary in order to make the statements [therein], in the light of the circumstances under which they were made, not misleading. 15 U.S.C. § 77l(a)(2).
- Rule 10b-5 of the Securities and Exchange Commission (the “SEC”), promulgated under Section 10(b) of the 1934 Act, in relevant part, provides that it is unlawful to make any untrue statement of a material fact or omit to state a material fact necessary in order to make the statements made, in the light of the circumstances under which they were made, not misleading in connection with the purchase or sale of a security. 15 U.S.C. § 78j; 17 C.F.R. § 240.10b-5 (2020).
- Section 14(a) of the 1934 Act and Rule 14a-9 promulgated thereunder provide, in relevant part, that it is unlawful to solicit a proxy with respect to a security registered under Section 12 of the 1934 Act by any communication that contains a statement which, at the time and in light of the circumstances under which it is made, is false or misleading with respect to any material fact, or which omits to state any material fact necessary in order to make the statements therein not false or misleading. 15 U.S.C. §§ 78l, 78n; 17 C.F.R. § 240.14a-9 (2020).

- Section 14(e) of the 1934 Act provides, in relevant part, that it is unlawful to make any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which they are made, not misleading in connection with any tender offer or invitation for tenders. Rule 14e-3 of the SEC, promulgated under section 14(e), contains various proscriptions against the use of material non-public information. See 15 U.S.C. § 78n(e); 17 C.F.R. § 240.14e-1 *et seq.* (2020).

At the heart of these liability provisions of the Securities Laws are misstatements and omissions of material facts. Several other liability and anti-fraud provisions of the Securities Laws have similar or related bases, including without limitation Section 17(a) of the 1933 Act and Sections 13 (a), 13(b) and 18(a) of the 1934 Act and the applicable rules and regulations of the SEC thereunder.

3. CASE LAW

A. General

Northway

The seminal U.S. Supreme Court case articulating a standard of materiality is *TSC Industries, Inc. v. Northway, Inc.*, 426 U.S. 438 (1976) (“*Northway*”) which was an action for damages brought under Section 14(a) of the 1934 Act and Rule 14a-9 thereunder. The case involved an allegedly misleading proxy statement distributed in connection with the proposed merger of TSC Industries into Northway. 15 U.S.C. § 78(n); 17 C.F.R. § 240.14a-9. The Supreme Court held, among other things, that

An omitted fact is material if there is a substantial likelihood that a reasonable shareholder would consider it important in deciding how to vote. This standard is fully consistent with Mills['] general description of materiality as a requirement that “the defect have a significant propensity to affect the voting process.” It does not require proof of a substantial likelihood that disclosure of the omitted fact would have caused the reasonable investor to change his vote. What the standard does contemplate is a showing of a substantial likelihood that, under all the circumstances, the omitted fact would have assumed actual significance in the deliberations of the reasonable shareholder. Put another way, there must be a substantial likelihood that the disclosure of the omitted fact would have been viewed by the reasonable investor as having significantly altered the “total mix” of information made available. (emphasis added)

The Court rejected the holding of the U.S. Court of Appeals for the Seventh Circuit that material facts “include[] all facts which a reasonable stockholder might consider important”, *Northway, Inc. v. TSC Industries, Inc.*, 512 F.2d 324, 330 (7th Cir. 1975), observing that “if the standard of materiality is unnecessarily low, not only may the corporation and its management be subjected to liability for insignificant omissions or misstatements, but also management’s fear of exposing itself to substantial liability may cause it simply to bury the shareholders in an avalanche of trivial information—a result that

is hardly conducive to informed decisionmaking.” *Northway*, 426 U.S. at 448-49. The Court noted that its adopted standard of materiality, quoted above, is consistent with its holding in *Mills v. Electric Auto-Lite Co.*, 396 U.S. 375 (1970) (“*Mills*”) that, in order to be material and actionable, a defect in proxy soliciting materials must have “a significant *propensity* to affect the voting process.” *Northway*, 426 U.S. at 449.

It is submitted that *Northway* should not be interpreted as establishing two separate, alternative, tests. Rather, the test is whether or not there is a substantial likelihood that a reasonable investor would consider the omitted fact (or, it is submitted, the correct statement of the misstated fact) important in deciding how to vote (or invest), as set forth in the first sentence of the paragraph quoted above. The “total mix” test set forth in the last sentence of the quoted paragraph is the same standard “put another way” and can be used as a tool in determining whether or not the primary standard is met. Thus, in analyzing whether or not the primary standard is met, one can assess, among other things, whether the omitted fact (or correct statement) would have been viewed by a reasonable investor as having significantly altered the “total mix” of information made available. (This interpretation may not be entirely consistent with the SEC’s interpretation as noted in Release Nos. 33-10459; 34-82746 at 10), dealing with cybersecurity disclosure, in which release the SEC seemed to suggest that there were two separate, alternative, tests. However, in adopting by rule specific definitions of the term “material” under the Securities Laws, as hereinafter discussed, the SEC followed only the primary standard set forth in the quoted paragraph. See “SEC Rules”, *infra*)

While *Northway* involved disclosure in the context of a stockholder vote, the courts and the SEC have adopted the concepts articulated in *Northway* in the context of the purchase or sale of securities.

Basic

In *Basic Inc. v. Levinson*, 485 U.S. 224 (1988) (“*Basic*”), the Supreme Court refined the *Northway* definition of materiality as it may relate to possible future events. This case dealt specifically with the issue of at what point in time a possible business combination, still under negotiation, was “material” and, thus, required to be disclosed. The Court rejected a bright-line test that no disclosure was required until an agreement in principle was reached. First, the Court expressly adopted the *Northway* standard of materiality in the context of Section 10(b) and Rule 10b-5. *Basic*, 485 U.S. at 232. Then, the Court took note of the general principle set forth with respect to “contingent or speculative information or events” by the U.S. Court of Appeals for the Second Circuit in *Securities and Exchange Commission v. Texas Gulf Sulphur Co.*, 401 F.2d 833, 849 (1968)):

Even before this Court’s decision in *TSC Industries*, the Second Circuit had explained the role of the materiality requirement of Rule 10b-5, with respect to contingent or speculative information or events, in a manner that gave that term meaning that is independent of the other provisions of the Rule. Under such circumstances, materiality “will depend at any given time upon a balancing of both the indicated probability that the event will occur and the anticipated magnitude of the event in light of the totality of the company activity.”

Basic, 485 U.S. at 238.

The Supreme Court in *Basic* applied this concept in the context of a proposed merger thus:

Materiality in the merger context depends on the probability that the transaction will be consummated, and its significance to the issuer of the securities. Materiality depends on the facts and thus is to be determined on a case-by-case basis.

Id. at 250.

Basic should not be read as limiting the probability/magnitude formula to circumstances involving preliminary merger negotiations. Rather, the Supreme Court noted the adoption of that formula in *Texas Gulf Sulphur*, which involved a misleading press release regarding the results of exploratory drilling for mineral deposits. Accordingly, *Basic* should be read as approving the application of the probability/magnitude formula in all circumstances involving “contingent or speculative information or events”. *Basic* 485 U.S. at 238). This interpretation appears to be consistent with the SEC’s interpretation as noted in Release Nos. 33-9106; 34-61469 at 18, fn. 58, dealing with climate change disclosure.

Matrixx

In *Matrixx Initiatives, Inc. v. Siracusano*, 563 U.S. 27 (2011) (“*Matrixx*”) the Supreme Court rejected another bright-line test and affirmed the concepts of materiality adopted in *Northway* and *Basic*. Interestingly, however, the Court varied the language slightly from the *Northway* formula, stating that information is material if “[i]t is substantially likely that a reasonable investor would have viewed this information ‘as having significantly altered the “total mix” of information made available.’” (quoting *Basic*, 485 U.S. at 232) (emphasis added). See also *Halliburton Co. v. Erica P. John Fund, Inc.*, 573 U.S. 258, 278 (2014).

SEC Rules

The SEC has followed *Northway* by setting forth a definition of materiality in Rule 405 under the 1933 Act, as follows:

The term material, when used to qualify a requirement for the furnishing of information as to any subject, limits the information required to those matters to which there is a substantial likelihood that a reasonable investor would attach importance in determining whether to purchase the security registered.

17 C.F.R. § 230.405 (2020).

The definition of “material” in Rule 12b-2 under the 1934 Act is virtually identical in relevant part.

17 C.F.R. § 240.12b-2 (2020).

B. Undefined Terms

“Substantial likelihood” is not defined in any Supreme Court case or the Securities Laws or any rule or regulation thereunder. Accordingly, the definitions of each of those words and of certain related words and synonyms in various dictionaries (hard copy and on-line, collectively, “Reference

Dictionaries”)¹ with related commentary were examined. The consensus definitions, in the relevant context, are set forth below:

- | | |
|----------------------|--|
| “likely” (adj.) | - probable; expected; having a better chance of existing or occurring than not. |
| “probable” (adj.) | - likely; supported by evidence strong enough to establish presumption (but not proof); in view of present evidence, reasonably expected to happen or prove true; likely to happen or be true (but not certain); reasonably but not certainly expected; more than possible but less than certain; having more evidence for than against. |
| “likelihood” (n.) | - probability; the chance that something will happen or be true in the future.
- the quality or condition of being likely or probable. |
| “probability”(n.) | - a measure of the chance (or the level of possibility) that something will occur or be true in the future.
- the quality or condition of being probable. |
| “substantial” (adj.) | - large in size, value, importance, or number; of considerable importance, size, worth or number. |
| “propensity” (n.) | - a natural tendency or inclination; the fact that a person is likely to behave in a particular way. |
| “significant” (adj) | - important; large; noticeable; having or likely to have consequence or influence; meaningful, revealing, expressive; probably caused by something other than mere chance. |
| “reasonable” (adj) | - capable of reasoning; rational; governed by reason or sound thinking; within the bounds of common sense; not extreme or excessive. |

¹ The Reference Dictionaries include *Merriam-Webster’s Collegiate Dictionary, Eleventh Edition (2019)*; *Webster’s II New College Dictionary, Third Edition (2005)*; *Webster’s Third New International Dictionary (1961)*; *The Compact Edition of the Oxford English Dictionary (1971)*; *The American Heritage Dictionary, Second College Edition (1982, 1985)*; on-line versions of certain of the foregoing; and on-line versions of the Cambridge English Dictionary, the *Collins English Dictionary* and the *Macmillan Dictionary*. As used in this note, a “consensus definition” of a term represents, in the view of the author of this note, the meaning of such term, to the extent relevant, that is common to the respective definitions of such term set forth in the Reference Dictionaries.

C. Observations

It is submitted that “likely” and “probable”, as used in the relevant context, convey the same concept, which is the same as (if not more than) “more likely than not” – i.e. over a 50% chance.

It is further submitted that “likelihood” and “probability”, as used in the relevant context, are largely synonymous, with the caveat that each appears to have two meanings:

- the percentage chance that something will happen in the future, without regard to degree; and
- the quality or condition of being likely or probable.

Having in mind the first meaning of “likelihood” shown above (i.e. the mathematical meaning), a “substantial likelihood” means just that – a likelihood or percentage chance that is substantial – clearly far more than a mere possibility, yet less than a certainty. It might follow that a substantial likelihood need not be more than a 50% chance. One would think that a future event with a 49% chance of occurring would still have a “substantial likelihood” of occurring despite its also having a 51% chance of not occurring – indeed, a 40% chance or a 35% chance could be “substantial” even though less than 50%.

On the other hand, embedded in the second meaning of “likelihood” shown above is the notion that the future event or circumstance is “likely” in the first place – that is, it is already deemed “probable” and the chance of it occurring is more than 50%.

Given (i) the Supreme Court’s use of the word “propensity” in *Mills* and the confirmation thereof in *Northway*, (ii) the rejection in *Northway* of the word “might” in favor of the word “would”, and the confirmation thereof in *Basic*, and (iii) the use of the expression “substantially likely” in *Matrixx* as a substitute for “substantial likelihood”², it appears that “substantial likelihood”, as used by the Supreme Court, suggests a mathematical probability greater than 50%, at a minimum. That said, the Supreme Court has not quantified “substantial likelihood,” perhaps purposely, and thus much is left to the considered judgment of issuers, underwriters and their respective advisors.

Whatever it means, while materiality is a mixed question of law and fact, it is primarily a question of fact and the circumstances in which a court itself may determine materiality as a matter of law are limited. “[A] complaint may not properly be dismissed...on the ground that alleged misstatements or omissions are not material unless they are so obviously unimportant to a reasonable investor that reasonable minds could not differ on the question of their importance.” *Landmen Partners Inc. v. The Blackstone Group, L.P.*, 659 F. Supp. 2d 532, 540 (2009) (quoting *ECA, Local 134 IBEW Joint Pension Trust*

² The substitution of “substantially likely” for “substantial likelihood” in *Matrixx* is consistent with the discussion of materiality in *In Re Craftmatic Securities Litigation*, 890 F. 2d 628 (3rd Cir. 1990) in which the two formulations are used interchangeably. The interchangeability of such formulations is also exhibited, albeit in different contexts, in *State of Connecticut v. Wang*, 145 A. 3d 906 (Conn. 2016), and *In re Willon*, 47 Cal. App. 4th 1080 (1996). Particularly in *Willon*, the term “likelihood” seems to mean the state of being “likely”. Of course, as stated in *Wang* at page 918, “[T]he term ‘substantially likely’ has no objective, mathematical meaning. Rather, its meaning depends on the context in which it is used.”

of Chicago v. JP Morgan Chase Co., 553 F. 3d 187, 197 (2d Cir. 2009), quoting *Ganino v. Citizens Utilities Co.*, 228 F. 3d 154,162 (2d Cir. 2000)). See also *In re Liberty Tax, Inc. Securities Litigation*, 435 F. Supp. 3d 457 (E.D.N.Y. 2020). Grounds for dismissal include not only limited magnitude in terms of dollars or other units of measurement but also an assessment that the statement in question constitutes only “puffery”, hyperbolic sales talk or a belief or expectation that, in any such case, no reasonable person would rely on, as well as the protection of the statement in question by the “bespeaks caution” doctrine. See Stefan J. Padfield, *Is Puffery Material to Investors? Maybe We should Ask Them*, 10:2 U. Pa. J. Bus. and Emp. L 339, 340 (2008) and the cases and articles cited therein.

The word “significance”(and its derivatives), as used in the secondary “total mix” test articulated in *Northway*, warrants a brief comment. As indicated above, “significant” suggests “importance” and/or the state of being “consequential” and/or “influential”. Since it is used in the “total mix” test with reference to the deliberations and views of the reasonable investor, there might appear to be some circularity between the “total mix” test and the primary test articulated in *Northway*. In other words, “significant” may have the same meaning as “material”, which is what the entire formulation is attempting to define in the first place. See Thomas M. Madden, *Significance and the Materiality Tautology*, 10 J. of Bus. & Tech. L. 217 (2015) and the cases cited therein.

D. Degrees of Materiality

As noted above, the basis of liability under the Securities Laws is the misstatement or omission of a material fact. It is implicit that disclosure must be adequate to convey the information purported to be conveyed and that, conversely, inadequate disclosure may not avoid or cure an omission and/or may, of itself, constitute a misstatement. Under the “buried facts” doctrine, disclosure must be made in a manner reasonably calculated to communicate the information to a reasonable investor—that is, it cannot be hidden from view or fragmented so that a reasonable investor might not appreciate the significance of the totality thereof. Moreover, at least one court has suggested that there are varying degrees of materiality and that the prominence of the disclosure required is directly proportional to the degree of materiality. The seminal case on the “buried facts” doctrine is *Kohn v. American Metal Climax, Inc.*, 322 F. Supp. 1331 (E.D. Pa. 1971), *modified*, 458 F.2d 255 (3d Cir. 1972), *cert. denied*, 409 U.S. 874 (1972), wherein the district court held, among other things:

The Securities Exchange Act requires more than disclosure, it requires adequate disclosure. The more material the facts, the more they should be brought to the attention of the public. To view it otherwise would be to invite frustration of the policies underlying our disclosure laws. Accordingly, we have found certain facts to be “buried” in the explanatory materials. These facts should have in some way been highlighted to insure that the shareholders were aware of them.

Kohn, 322 F. Supp. at 1362. See also *Kennedy v. Tallant*, 710 F.2d 711 (11th Cir. 1983); *Kas v. Financial General Bankshares, Inc.*, 796 F.2d 508 (D.C. Cir. 1986); and *Werner v. Werner*, 267 F.3d 288 (3d Cir. 2001).

4. SEC REGULATIONS

A. General

In addition to Rule 405 under the 1933 Act and Rule 12b-2 under the 1934 Act, noted above, which define the term “material”, the SEC has promulgated regulations that require specified categories of information in filings under the Securities Laws, most notably Regulations S-K and S-X. Of particular relevance to this note, in 2020 the SEC issued Release Nos. 33-10825; 34-89670 and Release Nos. 33-10890; 34-90459 that amended (effective November 9, 2020 and February 10, 2021, respectively) many of the disclosure requirements under Regulation S-K as part of its continuing effort to enhance and modernize disclosure. These amendments, among other things, emphasize principles-based disclosure -- that is, disclosure based on what is “material” to the particular company -- and reduce prescriptive disclosure -- that is, prescribed lists of topics to be disclosed, whether or not material to the particular company. This principles-based approach, it would seem, increases the burden on companies to take a hard look to determine what is “material”.

B. Risk Factors

(1) *Disclosure Requirement.*

The requirement to disclose risk factors has been the subject of a few amendments over the last several years. Now contained in Item 105 of Regulation S-K, effective November 9, 2020 the requirement was amended and restated in its entirety by SEC Release Nos. 33-10825; 34-89670, referred to above.

In relevant part, Item 105(a) provides:

Where appropriate, provide under the caption “Risk Factors” a discussion of the material factors that make an investment in the registrant or offering speculative or risky.
(emphasis added)

17 C.F.R. § 229.105(a) (2020)

The focus on “material” risk factors was a purposeful change from the prior language that required disclosure of the “most significant” factors. In the adopting release, the SEC made it clear that, for purposes of Item 105, it was employing the materiality standard of *Northway* and *Basic*. See SEC Release Nos. 33-10825; 34-89670 at 71.

(2) *Observations.*

Risk factors necessarily involve the risk of the occurrence of future events. As such, it would seem that the probability/magnitude test enunciated in *Basic* would necessarily apply. While the adopting release cited *Northway* and *Basic* extensively, it did not specifically refer to the probability/magnitude test. See SEC Release Nos. 33-10825; 34-89670 at 71. Logic dictates that risk factors be evaluated on that basis.

It is noteworthy that Item 105(a) is not an absolute disclosure requirement. It applies only “where appropriate” and requires the disclosure of factors that make the investment “speculative” or “risky”. However, there are many mature, established companies investments in which are not

speculative or risky and which provide risk factor disclosure even if not technically required. This is likely out of an abundance of caution, each company observing that most of the others do it.

C. MD&A

(1) *Disclosure of Trends and Uncertainties.*

Item 303 of Regulation S-K requires “Management’s Discussion and Analysis of Financial Condition and Results of Operations” (“MD&A”) which includes, among other things, discussion of:

- known trends or any known demands, commitments, events or uncertainties that will result in or that are reasonably likely to result in any material increase or decrease in liquidity.
- known material trends, favorable or unfavorable in capital resources and any reasonably likely material changes in the mix and relative cost of such resources.
- known trends or uncertainties that have had or that are reasonably likely to have a material favorable or unfavorable impact on net sales or revenues or income from continuing operations.
- critical accounting estimates that have had or are reasonably likely to have a material impact on the financial condition or results of operations of the registrant (Added by amendment to Item 303, effective February 10, 2021, mandatory for periods ending after August 9, 2021. See SEC Release No. 33-10890; 34-90459, discussed *infra*.)

In contrast to Item 105 and *Basic*, in which both probability and magnitude are, in theory, variable without limit, Item 303 fixes the probability standard at the “reasonably likely” level. On the surface, this could be read as an expression of the SEC’s view, generally, either that any matter with a lower level of probability is not material (irrespective of magnitude) or that a matter that is only reasonably likely is nevertheless sufficiently likely to warrant disclosure (if of sufficient magnitude). Neither reading is entirely correct, inasmuch as Item 303 has its own specific framework for disclosure.

(2) *The 1989 MD&A Release.*

In 1989, nine years after the formal introduction of MD&A as a disclosure requirement, the SEC issued Release Nos. 33-6835; 34-26831 (May 18, 1989) (the “1989 MD&A Release”), wherein the SEC, among other things, indicated that in determining whether or not disclosure is required under Item 303, the analysis is different from the usual analysis of materiality. The SEC provided the following guidance:

Where a trend, demand, commitment, event or uncertainty is known, management must make two assessments:

(1) Is the known trend, demand, commitment, event or uncertainty likely to come to fruition? If management determines that it is not reasonably likely to occur, no disclosure is required.

(2) If management cannot make that determination, it must evaluate objectively the consequences of the known trend, demand,

commitment, event or uncertainty, on the assumption that it will come to fruition. Disclosure is then required unless management determines that a material effect on the registrant’s financial condition or results of operations is not reasonably likely to occur.²⁷ (emphasis added)

[FN27]

27. MD&A mandates disclosure of specified forward-looking information, and specifies its own standard for disclosure – i.e., reasonably likely to have a material effect. This specific standard governs the circumstances in which Item 303 requires disclosure. The probability/magnitude test for materiality approved by the Supreme Court in *Basic, Inc., v. Levinson*, 108 S.Ct. 978 (1988), is inapposite to Item 303 disclosure.

SEC Release Nos. 33-6835; 34-26831 (emphasis added).

(3) *Undefined Terms.*

The SEC clarified the term “reasonably likely”, as used in Item 303, in Release Nos. 33-8056; 34-45321 by stating that “[t]his disclosure threshold is lower than ‘more likely than not.’” However, it may be instructive to examine the general meanings ascribed to related terms in the Reference Dictionaries:

- | | |
|---------------------|--|
| “reasonable” (adj.) | - being in agreement with right thinking or right judgment; within the bounds of common sense; not absurd, extreme or excessive; moderate, fair, rational. |
| “reasonably” (adv.) | - in a reasonable or rational manner, to a reasonable extent; fairly. |

While “likely” is generally synonymous with “probable” and, at a minimum, “more likely than not”, the modification of “likely” by the adverb “reasonably” would appear to lower the standard to something akin to “moderately likely” but not necessarily “more likely than not”, consistent with the SEC’s clarification.

Exhaustive analysis of case law interpreting this phraseology is beyond the scope of this note. However, the SEC’s interpretation of “reasonably likely” is consistent with U.S. Supreme Court cases involving the use of “reasonable likelihood” as a standard of proof, twice holding that “reasonable likelihood” is a standard that is greater than a mere possibility but is less than more likely than not. See *Boyde v. California*, 494 U.S. 370, 380 (1990); *Johnson v. Texas*, 509 U.S. 350, 367 (1993). See also *Strickland v. Washington*, 466 U.S. 668, 694 (1984) (involving the standard of a “reasonable probability”).

(4) *Observations.*

The SEC's guidance in the 1989 MD&A Release, particularly the two-step test quoted above (the "Two-Step Test"), is not a model of clarity. However, after parsing through it carefully, it is submitted that the requirements of Item 303 and the SEC's guidance should be interpreted as follows:

1. (a) First, management must examine the likelihood that the known trend, demand, commitment, event or uncertainty (hereinafter for convenience called the "uncertainty") will occur.
 - (b) If management can make a determination that the uncertainty is not reasonably likely to occur, the inquiry is complete and no disclosure is required.
2. (a) If management is not able to make the above negative determination, it must then examine the effect of the uncertainty on the registrant's financial condition, results of operations and/or liquidity (for convenience, any such effect being hereinafter called a "financial effect"), assuming that the uncertainty does occur—it is submitted that this must be aimed at, in *Basic* terminology, the absolute magnitude of such financial effect without regard to the probability thereof (or assuming a 100% probability).
 - (b) If management can make a determination that a material (considering magnitude only) financial effect is not reasonably likely to occur, the inquiry is complete and no disclosure is required.
 - (c) If management is not able to make the above negative determination, disclosure is required.

It appears that management must seek to make a determination that a material financial effect (considering magnitude only) is not reasonably likely to occur—that is, either (x) that the uncertainty is not reasonably likely to occur or (y) that the reasonably likely financial effect of such uncertainty is not of such magnitude that there is a substantial likelihood that a reasonable investor would attach importance thereto assuming that such uncertainty had in fact occurred or were certain to occur. In the absence of a negative determination described in either (x) or (y) above, disclosure is required. Put another way, if management can make a determination that the uncertainty is not reasonably likely to result in a financial effect of such magnitude that (assuming it occurred) there is a substantial likelihood that a reasonable investor would consider the uncertainty important in making an investment decision, then disclosure of the uncertainty is not required. If management is not able to make that negative determination, then disclosure is required.

The distinction between this analysis and that required under *Basic* is apparent. Under *Basic*, one must consider both magnitude and probability, and materiality in any particular case is effectively the product of both such variables. In Item 303, the SEC has mandated a fixed minimum level of probability as to future events or circumstances - "reasonably likely". Moreover, the SEC requires disclosure of an uncertainty the financial effect of which is material (considering magnitude only) even if management is not able to conclude that the uncertainty is reasonably likely to occur—disclosure is required if management is not able to reach the negative conclusion that the uncertainty is not reasonably likely to occur.

(5) *The 2020 MD&A Release.*

On November 19, 2020, the SEC adopted Release Nos. 33-10890; 34-90459 (the “2020 MD&A Release”), which became effective on February 10, 2021 (mandatorily applicable for the first fiscal year ending on or after August 9, 2021). The purpose of the amendments adopted in this release was to “modernize, simplify, and enhance certain financial disclosure requirements in Regulation S-K.” 2020 MD&A Release at 105. Such amendments, among other things, reorganize Item 303 and contain certain specific improvements and clarifications but do not change the general thrust of Item 303. With respect to the requirements to disclose trends and uncertainties, the SEC noted that it had received several comment letters suggesting the elimination of the Two-Step Test, described above. One commenter suggested that the proposed amendments to Item 303 at least state that the Two-Step Test has been superseded.

In lieu of eliminating or superseding the Two-Step Test, the SEC, in the 2020 MD&A Release although not in the specific amendments adopted, attempted to clarify the guidance sought to be given in the Two-Step Test. The SEC also noted the distinction between the disclosure requirements of Item 303 and the probability/magnitude test of *Basic*. In the view of the author of this note, the requirement to disclose trends and uncertainties under Item 303, as so sought to be clarified, may be summarized as follows:

Disclosure of a known trend or uncertainty is required if:

1. (a) the trend or uncertainty is not remote OR
(b) management cannot make an assessment as to the likelihood that the trend or uncertainty will come to fruition, AND
2. the trend or uncertainty would be reasonably likely to have a material effect on the company’s future results of operations or financial condition, if it actually came to fruition, AND
3. a reasonable investor would consider the disclosure of the trend or uncertainty (or the omission of such disclosure) as significantly altering the total mix of information available in the company’s disclosures.

This interpretation, as well as the 2020 MD&A Release itself, raises a few questions, including: (x) whether the determination of materiality in clause (2) above is made under the principles of *Northway* and *Basic* (but with regard to magnitude only); and (y) whether the determination in clause (3) above should be read to incorporate the notion of “substantial likelihood” as in *Northway* and *Basic*. In addition, it is necessary to know the meaning of “remote” which is used in the release without definition. The consensus definition contained in the Reference Dictionaries is “the chance of the future event or events occurring is slight”; and the consensus definition of “slight” is “small in amount, degree or size; of little importance or significance; insignificant; trivial; inconsiderable”. (Note also the use of the term “remote”, as in Item 305 of Regulation S-K and the reference therein to the Master Glossary in the Accounting Standards Codification, which is discussed in Part V.)

Since the 2020 MD&A Release has only recently become effective and has itself not yet been the subject of extensive commentary subsequent to its effectiveness, the relevant part of the release (pages

46-49) is set forth below *in haec verba*, leaving it to the readers of this note to determine the extent to which the 2020 MD&A Release resolved the ambiguities in the 1989 MD&A Release and the Two-Step Test:

As the Commission has previously stated with respect to the evaluation of whether a known trend or uncertainty is reasonably likely, "the development of MD&A disclosure should begin with management's identification and evaluation of what information . . . is important to providing investors and others an accurate understanding of the company's current and prospective financial position and operating results." When considering whether disclosure of a known event or uncertainty is required, the analysis is based on materiality and what would be considered important by a reasonable investor in making a voting or investment decision. The "reasonably likely" threshold does not require disclosure of any event that is known but for which fruition may be remote, nor does it set a bright-line percentage threshold by which disclosure is triggered. Rather, this threshold requires a thoughtful analysis that applies an objective assessment of the likelihood that an event will occur balanced with a materiality analysis regarding the need for disclosure regarding such event.

Taking these concepts into account, when applying the "reasonably likely" threshold, registrants should consider whether a known trend, demand, commitment, event, or uncertainty is likely to come to fruition. If such known trend, demand, commitment, event or uncertainty would reasonably be likely to have a material effect on the registrant's future results or financial condition, disclosure is required. Known trends, demands, commitments, events, or uncertainties that are not remote or where management cannot make an assessment as to the likelihood that they will come to fruition, and that would be reasonably likely to have a material effect on the registrant's future results or financial condition, were they to come to fruition, should be disclosed if a reasonable investor would consider omission of the information as significantly altering the mix of information made available in the registrant's disclosures. This analysis should be made objectively and with a view to providing investors with a clearer understanding of the potential material consequences of such known forward-looking events or uncertainties. Because the analysis does not call for disclosure of immaterial or remote future events, it should not result in voluminous disclosures or unnecessarily speculative information.

As noted above, some commenters also indicated that application of the two-step test as the Commission articulated it in 1989 may result in disclosure that is not material or present challenges to registrants, such as by requiring a registrant to prove a negative. This was not the intended result of that test, and we believe that the clarifications we

have provided above regarding the appropriate application of the analysis should alleviate these concerns. The "reasonably likely" threshold, which requires that management evaluate the consequences of the known trend, demand, commitment, event, or uncertainty, is grounded in whether disclosure of the event or uncertainty would be material to investors. We remind registrants that this approach is not intended to, nor does it require, registrants to affirm the non-existence or non-occurrence of a material future event. Instead, it requires management to make a thoughtful and objective evaluation, based on materiality, including where the fruition of future events is unknown.

We are not, as recommended by one commenter, adopting the probability/magnitude test of *Basic*. In *Basic*, the Supreme Court framed the issue of materiality of forward-looking disclosure as depending on a balancing of both "the indicated probability that the event will occur and the anticipated magnitude of the event in light of the totality of the company activity." We agree with commenters that the probability/magnitude test could result in disclosure of issues that are large in potential magnitude but low in probability. The probability/magnitude test in *Basic* was developed in the context of a potential merger, where the probability of the event, the potential timing, and the expected effects may be readily estimated. Some commenters have noted that the probability/magnitude test can be difficult to apply where there is uncertainty as to the probability, timing, and magnitude of the financial impact of future events. As articulated above, we believe that the "reasonably likely" threshold provides registrants with a tailored and meaningful framework from which to objectively analyze whether forward-looking information is required and provides specific guidance on how registrants should evaluate known events or uncertainties where the likelihood of fruition cannot be ascertained.

SEC Release Nos.33-10890; 34-90459 at 46-49 (emphasis added).

(6) *Digression.*

The discussion of Item 303 of Regulation S-K in this note would not be complete without brief mention of the controversies in the case law, as well as in legal and academic circles, as to whether or not Item 303 gives rise to a "duty to disclose" and/or a separate private right of action and whether or not the failure to disclose an uncertainty otherwise required to be disclosed by Item 303 gives rise to a cause of action under Section 11(a) or 12(a)(2) of the 1933 Act or Section 10(b) of the 1934 Act and Rule 10b-5 thereunder. 15 U.S.C. §§ 77k(a), 77l(a)(2), 78j; 17 C.F.R. § 240.10b-5 (2020). There is even controversy as to whether or not an apparent split among the Third and Ninth Circuit Courts of Appeal, on the one hand, and the Second Circuit Court of Appeal, on the other, is real.

After review of the sometimes confusing case law and other authorities, the author of this note offers, without discussion, the following simplistic analysis:

- Item 303 does indeed impose an obligation to disclose, but this obligation, in and of itself, should be enforceable only by the SEC.
- Section 11(a) of the 1933 Act imposes a duty to disclose information that is otherwise “required” to be disclosed (including under Item 303), but only to the extent that that information is “material” under *Northway* and *Basic*.
- Sections 11(a) and 12(a)(2) of the 1933 Act and Rule 10b-5 under the 1934 Act all impose similar (Section 12(a)(2) and Rule 10b-5 being textually identical in relevant part) obligations to disclose particular information (without regard to whether or not that information is otherwise “required” to be disclosed by Item 303 or otherwise) if (i) that information is “material” under *Northway* and *Basic* and (ii) the omission of that information would make other statements actually made in the document (including the financial statements), or the document as a whole, misleading.

For hearty discussion of these issues, reference is made to *Indiana Public Retirement System v. SAIC, Inc.*, 818 F.3d 85 (2d Cir. 2016) (cert. dismissed 2017 after settlement); *Stratte-McClure v. Morgan Stanley*, 776 F.3d 94 (2d Cir. 2015); *In re NVIDIA Corp. Securities Litigation*, 768 F.3d 1046 (9th Cir. 2014), cert. denied, *Cohen v. NVIDIA Corp.*, 135 S.Ct. 2349 (2015); *Oran v. Stafford*, 226 F.3d 275 (3rd Cir. 2000). See also the briefs filed in connection with the petition for *certiorari* of the SAIC (then known as *Leidos*) case, as well as “*The Leidos Mixup and the Misunderstood Duty to Disclose in Securities Law*” posted on July 21, 2017 by Matthew C. Turk and Karen E. Woody in the Harvard Law School Forum on Corporate Governance and Financial Regulation which additionally links to their paper under the same title.

In relevant part, the Second Circuit in *SAIC (Leidos)* appears to have held that a failure to disclose, as required by Item 303, is actionable under Rule 10b-5, without a finding that the omission made misleading any statement actually made in the disclosure document, as required by the express language of the rule. See *SAIC*, 818 F.3d at 93. This was in conflict with the decisions in *NVIDIA* and *Oran, supra*, and was one of the bases on which the Supreme Court granted *certiorari*. The *Leidos* case was settled in October 2017 before any decision by the Supreme Court, leaving the decision of the Second Circuit intact as the law in that circuit. It is worth noting that, while the defendant argued, among other things, that there can be no liability if an omission does not make misleading any statement that is actually made, the brief of the United States, acting through the SEC and the Department of Justice, as *amicus curiae*, in support of the decision of the Second Circuit, argued that:

[And] further disclosure was “necessary” to make those statements “not misleading” “in light of the circumstances,” 17 C.F.R. 240.10b-5(b), because a reasonable investor would understand the MD&A section of petitioner’s filing as implicitly representing that the issuer had disclosed all the information Item 303 required. ... A reasonable investor in turn would expect the MD&A section of a Form 10-K to disclose all the information that Item 303 requires, at least in the absence of language specifically disclaiming that implication. If ... petitioner omitted facts that Item 303 required to be disclosed, petitioner’s MD&A was the sort of misleading half-truth that may constitute actionable securities fraud if the other prerequisites to liability can be established.

Leidos, Inc. v. Indiana Public Retirement System, No. 16-00581, Br. for the U.S. as Amicus Curiae Supp. Resp'ts at 9-10 (citations omitted) (the "*Leidos Brief*").

The United States later acknowledged in its brief, consistently with *Stratte-McClure, supra*, that "[t]o proceed on a Section 10(b) claim, plaintiffs must prove both that the disclosure was required by Item 303 and that the omitted information was material under *Basic.*" *Id.* at 25.

D. Disclosures About Market Risks

(1) *Disclosure Requirement.*

Item 305 of Regulation S-K requires quantitative and qualitative information regarding each of an issuer's primary market risk exposure categories within each of its trading and non-trading portfolios. 17 C.F.R. § 229.305 (2020). Within each such portfolio, separate information is to be presented, to the extent material, for each market risk exposure category. *Id.* at (a)(1). However, Instruction (5) of General Instructions to Paragraphs 305(a) and 305(b) provides a specific methodology to determine the materiality of each market risk exposure category:

5. A. Under paragraphs 305(a) and 305(b), a materiality assessment should be made for each market risk exposure category within the trading and other than trading portfolios.
- B. For purposes of making the materiality assessment under Instruction 5.A. of the General Instructions to Paragraphs 305(a) and 305(b), registrants should evaluate both:
 - i. The materiality of the fair values of derivative financial instruments, other financial instruments, and derivative commodity instruments outstanding as of the end of the latest fiscal year; and
 - ii. The materiality of potential, near-term losses in future earnings, fair values, and/or cash flows from reasonably possible near-term changes in market rates or prices.
 - iii. If either paragraphs B.i. or B.ii. in this instruction of the General Instructions to Paragraphs 305(a) and 305(b) are material, the registrant should disclose quantitative and qualitative information about market risk, if such market risk for the particular market risk exposure category is material.

Id. at Instructions §5.A. (emphasis added).

In addition, Instruction 3.A. of Instructions to Paragraph 305(a), which relates to sensitivity analyses referred to in Item 305(a)(1)(ii), requires the registrant to select hypothetical changes in market rates or prices that are expected to reflect reasonably possible near-term changes in those rates and

prices, *id.* at Instruction 3.A. (emphasis added); and Instruction 4.A. of the same instructions, which relates to the value at risk disclosures referred to in Item 305(a)(1)(iii), requires the registrant to select confidence intervals that reflect reasonably possible near-term changes in market rates and prices, *id.* at Instructions 4.A. (emphasis added).

(2) *Defined Terms.*

“reasonably possible” - while not expressly defined in Item 305 or the instructions thereto, the term is defined by reference to the FASB Master Glossary referred to below, in which the term is defined as “[t]he chance of the future event or events occurring is more than remote but less than likely.”

No definitions of “remote” or “likely” are found in Item 305, but, as will be discussed in part V, such terms are given meaning in the Master Glossary of terms used in the standards issued by the Financial Accounting Standards Board (the “FASB”) in its Accounting Standards Codification.

(3) *Observations.*

Item 305 requires disclosure of a particular market risk, but only if that market risk is, of itself, “material”, as provided in Item 305(a)(1) and Item 305(b)(1). However, in order to determine if that condition is satisfied, one must look to Instruction 5 of the General Instructions to Paragraphs 305(a) and 305(b), shown above.

The terms “material” and “materiality” are used throughout General Instruction 5. However, it is not clear from the face of the text that they are used with the same meaning in all instances, particularly in light of the apparent tautology in paragraph 5.B.iii, above (both starting and ending with a dependent “if” clause). For guidance, one must examine the adopting release of Item 305, SEC Release Nos. 33-7386; 34-38223 (January 31, 1997), and the “Questions and Answers About the New ‘Market Risk’ Disclosure Rules”, published by the staffs of the Office of the Chief Accountant and the Division of Corporation Finance on July 31, 1997 (the “Q & A”). Based on that guidance, it seems clear that in Item 305:

- as in Item 303, the SEC has fixed a minimum level of probability, here at the “reasonably possible” level; this is as imprecise as the fixed “reasonably likely” level in Item 303, although it is clearly a lower level and, in this instance, modification by the adverb “reasonably” may serve to increase the level of possibility;
- the term “material” as used throughout Item 305, and particularly in Instruction 5, is used with the meaning adopted in *Northway* and *Basic* but in all cases considering magnitude only and without regard to probability; and
- the last dependent “if” clause in paragraph 5.B.iii was likely a drafting error and should be ignored (see Question 22 in the Q & A).

E. Other Non-Financial Regulations

It should be noted that many of the required disclosure items of Regulation S-K have materiality qualifiers built in, without any separate formula for determining materiality, while other provisions require specific disclosure without regard to materiality. Item 101. Description of Business has a multitude of materiality qualifiers as to aspects of business otherwise required to be disclosed. See 17 C.F.R. § 229.101 (2020). It is submitted that in all cases in which no such separate formula is set forth, the standard meaning as enunciated in *Northway, Basic* and Rule 405 and Rule 12b-2 should apply.

Item 103. Legal Proceedings, however, while requiring disclosure of material legal proceedings “other than ordinary routine litigation incidental to the business”, provides a few specific exclusionary and inclusionary exceptions. 17 C.F.R. § 229.103 (2020). These need not be recited here.

It is also worthy of note that Rule 408(a) in Regulation C under the 1933 Act requires that:

In addition to the information expressly required to be included in a registration statement, there shall be added such further material information, if any, as may be necessary to make the required statements, in the light of the circumstances under which they are made, not misleading.

17 C.F.R. § 230.408(a) (2020).

Here, again, “material” should be given the meaning enunciated in *Northway, Basic* and Rule 405.

F. Regulation S-X

Having now analyzed many of the SEC regulations that embody the concept of “materiality”, it is surprising and, perhaps, disappointing to observe that the definition of the term “material” as used in Regulation S-X, set forth in Rule 1-02(o), departs from the concept enunciated in *Northway, Basic*, Rule 405 and Rule 12b-2:

The term *material*, when used to qualify a requirement for the furnishing of information as to any subject, limits the information required to those matters about which an average prudent investor ought reasonably to be informed.

17 C.F.R. § 210.1-02(o) (2020) (emphasis added).

Here the criterion for materiality is shifted from (1) matters as to which there is a substantial likelihood that a reasonable investor would consider important to (2) matters as to which an average prudent investor ought reasonably to be informed. See *id.* (emphasis added).

No authoritative discussion has been found as to why there is a difference between the formulation contained in Rules 405 and 12b-2 and that contained in Regulation S-X, or as to the significance of such difference. The definition in Regulation S-X could be interpreted as changing the point of view from the investor (i.e., what the investor would consider important) to the point of view of

the issuer (i.e., what the issuer ought to disclose). However, while, presumably, the issuer ought to disclose the same information to every investor, the definition speaks of the “average prudent investor”, which suggests that the point of view has not shifted.

The definitions of the term “material” in Rule 405 under the 1933 Act and Rule 12b-2 under the 1934 Act were originally written as currently set forth in Regulation S-X but were revised in 1982 to follow *Northway*. See SEC Release Nos. 33-6383; 34-18524 (March 3, 1982, effective May 24, 1982). This suggests that, while the failure to revise the definition in Regulation S-X in similar fashion at the same time could have been intentional, it also could have been an oversight.

In any case, while the definition in Regulation S-X applies to disclosure requirements governed thereby, the liability provisions of the 1933 and 1934 Acts remain the same, whether the information is provided under Regulation S-X, S-K or any other requirement, and those liability provisions are interpreted under *Northway* and *Basic*.

G. SAB 99

On August 12, 1999, the staff of the SEC issued Staff Accounting Bulletin No. 99 – Materiality (1999) (“SAB 99”) in order, among other things, to provide guidance in applying thresholds in determining materiality in connection with a company’s financial statements. The staff had become aware that over time “rules of thumb” had developed to the effect that items that fell below certain thresholds (for example 5%) were generally not material. *Id.* at Topic 1. In SAB 99, the staff stated, in no uncertain terms, that exclusive reliance on any percentage or numerical threshold “has no basis in the accounting literature or the law.” *Id.* In this regard, SAB 99 is consistent with the rejection of bright-line tests in *Basic* and *Matrixx*.

First, the staff noted, without any disagreement, the *Northway* definition of materiality. See *id.* Second, the staff noted the definition adopted by the FASB in its Statement of Financial Accounting Concepts No. 2, Qualitative Characteristics of Accounting Information, which will be discussed further in part V of this note. See *id.* Suffice it to indicate here that, in SAB 99, the staff of the SEC considered the two definitions to be “in substance identical”. See *id.* Under both definitions, the assessment of the materiality of misstatements and omissions must be made in the context of the “secondary circumstances” (FASB) or the “total mix of information” (*Northway*) in the Company’s disclosures. In other words, both quantitative and qualitative information must be considered.

The staff then volunteered a non-exclusive list of qualitative considerations that “may well render material a quantitatively small misstatement of a financial ... item”:

- whether the misstatement arises from an item capable of precise measurement or whether it arises from an estimate and, if so, the degree of imprecision inherent in the estimate
- whether the misstatement masks a change in earnings or other trends
- whether the misstatement hides a failure to meet analysts’ consensus expectations for the enterprise
- whether the misstatement changes a loss into income or vice versa

- whether the misstatement concerns a segment or other portion of the registrant’s business that has been identified as playing a significant role in the registrant’s operations or profitability
- whether the misstatement affects the registrant's compliance with regulatory requirements
- whether the misstatement affects the registrant's compliance with loan covenants or other contractual requirements
- whether the misstatement has the effect of increasing management's compensation – for example, by satisfying requirements for the award of bonuses or other forms of incentive compensation
- whether the misstatement involves concealment of an unlawful transaction.

Id.

The staff then added to this list (a) consideration of the expected impact of the misstatement on the market price of a company’s securities and (b) consideration of whether the misstatement was significant to a material segment of the registrant’s business or even to a segment that is historically not material but is expected to grow. See *id.*

The staff noted that companies and their auditors should evaluate misstatements “in light of quantitative and qualitative factors”, (a) individually, without netting the effect thereof against the effect of other misstatements and (b) in the aggregate, to determine “whether, in relation to individual line item amounts, subtotals, or totals in the financial statements, they materially misstate the financial statements taken as a whole.” *Id.*

SAB 99 then addresses intentional misstatements of immaterial items, discussion of which is beyond the scope of this note, except to observe that intentional misstatements may (a) violate Sections 13(b)(2)-(7) of the 1934 Act (relating to keeping books and records and maintaining internal accounting controls), 15 U.S.C. § 78m(b)(2)-(7), (b) trigger the auditor’s obligations under Section 10A of the 1934 Act, 15 U.S.C. § 78j-1, and/or (c) constitute fraudulent financial reporting (which, in itself, among other things, would presumably be important to investors).

Whether or not cited by the parties, courts sometimes look to SAB 99 for guidance in determining materiality in the context of entertaining a motion to dismiss. See *ECA, Local 134 IBEW Joint Pension Trust of Chicago*, *supra* at 7; *IBEW Local Union No. 58 Pension Trust Fund & Annuity Fund v. Royal Bank of Scotland Group, PLC*, 783 F.3d 383 (2d Cir. 2015).

5. ACCOUNTING PRINCIPLES

A. The FASB

Under the authority of Section 19 of the 1933 Act, as amended by Section 108 of the Sarbanes-Oxley Act of 2002, the SEC has designated the FASB as the private sector accounting standard setting body for U.S. financial reporting purposes so that FASB’s statements of accounting principles are deemed “generally accepted” for purposes of the Securities Laws, all subject to ongoing monitoring by the SEC. See 15 U.S.C. § 77s(b); SEC Release Nos. 33-10532; 34-83875.

Before discussing the specifics of any FASB statements, however, it is first necessary to observe the general rule set forth in paragraph 105-10-05-6 of its Accounting Standards Codification (the “Codification” or the “ASC”), which is applicable to all accounting principles set forth in the Codification:

The provisions of the Codification need not be applied to immaterial items.

There is no definition of “material” or “immaterial” to be found in the Codification. However, the FASB has set forth definitions of the term “material” in two concept releases, discussed below in subparts C and D.

B. ASC 450

(1) *General.*

Accounting Series Codification, Subtopic 450- Contingencies sets forth requirements for the accrual and/or disclosure of “contingencies” (as defined).

(2) *Loss Contingencies.*

(a) Recognition

ASC 450-20-25-2 provides, in summary, that an estimated loss from a loss contingency shall be accrued by a charge to income if both of the following conditions are met:

- it is probable that an asset has been impaired or a liability has been incurred at the date of the financial statements (it being implicit in this condition that it must be probable that one or more future events will confirm the fact of the loss) and
- the amount of such loss can be reasonably estimated.

(b) Disclosure of Recognized Losses

ASC 450-20-50-1 indicates, in summary, that disclosure of an accrual made pursuant to ASC 450-20-25-2 may be necessary for the financial statements not to be misleading. It is submitted that disclosure of a loss contingency that is material may well be necessary, in any event, whether or not it is accrued, in a footnote or MD&A, or both. It is further submitted that if the loss contingency is not material it may be the company’s option whether or not to accrue it, and, if it is nevertheless accrued, disclosure may not be required, despite the accrual. In any case, it would seem that the disclosure issue requires a judgment as to whether or not the information in question is material.

(c) Disclosure of Unrecognized Loss Contingencies

ASC 450-20-50-3 provides, in summary, that disclosure of an unrecognized loss contingency shall be made if:

- there is at least a reasonable possibility that a loss may have been incurred but

- an accrual has not been made because either of the conditions set forth in ASC 450-20-25-2 has not been met (i.e. the loss is not probable or a reasonable estimate thereof cannot be made).

Under ASC 450-20-50-4, the disclosure of an unaccrued loss contingency shall include:

- the nature of the contingency and
- an estimate of the possible loss or range of loss or a statement that an estimate cannot be made.

(d) Unasserted Claims

ASC 450-20-50-6 provides that disclosure is not required of a loss contingency involving an unasserted claim if there has been no manifestation by a potential claimant of an awareness of such possible claim unless

- it is probable that a claim will be asserted and
- there is a reasonable possibility that the outcome will be unfavorable.

Under ASC 450-20-55-14, with respect to loss contingencies arising out of unasserted claims, two initial judgments must be made

- as to the degree of probability that a claim may be asserted and
- as to the possibility of an unfavorable outcome if the claim is asserted.

If an unfavorable outcome is probable and the amount of loss can be reasonably estimated, then accrual of the loss is required by ASC 450-20-25-2 and disclosure may be required under ASC 450-20-50-3.

Under ASC 450-20-55-15, if the judgment is that assertion is not probable, then no accrual or disclosure is required. On the other hand, if the judgment is that assertion is probable, then the degree of probability of an unfavorable outcome must be assessed.

Disclosure is then required, although accrual is not required, if either

- an unfavorable outcome is probable but the amount of loss cannot be reasonably estimated or
- an unfavorable outcome, while not probable, is nevertheless reasonably possible.

(e) Defined Terms

The FASB has provided in ASC 450-20-20 a glossary containing many relevant and helpful definitions.

“contingency” - an existing condition, situation, or set of circumstances involving uncertainty as to possible gain (gain contingency) or loss (loss contingency) to an entity that will ultimately be

	resolved when one or more future events occur or fail to occur.
<i>“loss contingency”</i>	- an existing condition, situation, or set of circumstances involving uncertainty as to possible loss to an entity that will ultimately be resolved when one or more future events occur or fail to occur. The term loss is used for convenience to include many charges against income that are commonly referred to as expenses and others that are commonly referred to as losses.
<i>“probable”</i>	- the future event or events are likely to occur.
<i>“reasonably possible”</i>	- the chance of the future event or events occurring is more than remote but less than likely.
<i>“remote”</i>	- the chance of the future event or events occurring is slight.

With respect to the definition of “probable”, it is necessary to know the meaning of “likely”, which the FASB did not itself define. There is no choice but to refer to the ordinary meaning given to that term in the Reference Dictionaries, as discussed in part III.

With respect to the definition of “remote”, it is necessary to examine the meaning of “slight” set forth in the Reference Dictionaries, as follows:

- small in amount, size or degree; of little importance or influence; insignificant; trivial; inconsiderable.

Of course, if the company could conclude that the loss contingency is not material (based on magnitude, probability and the “total mix of information” in the company’s disclosures), under the authority of ASC 105-10-05-6, no accrual or disclosure would be required.

It should be noted that the ASC Master Glossary contains two definitions of the term “probable.” The second such definition, which is used throughout the ASC, is identical to that contained in ASC 450-20-20, shown above, namely:

- The event or events are likely to occur.

The first such definition, which was used in ASC 840, Leases, was borrowed from the definition contained in the FASB’s Statement of Financial Concepts No. 6, Elements of Financial Statements, namely:

- that which can reasonably be expected or believed on the basis of available evidence or logic but is neither certain nor proved.

ASC Master Glossary (citing Webster’s New World Dictionary of the American Language, 2d College Ed.).

No difference in substance between the two definitions is apparent to the author of this note, given the meaning of “likely”; nor is any logical reason that ASC 840 contained its own definition, different on its face. Significantly, ASC 840 has been superseded by ASC 842, and the latter contains the abbreviated definition, as does ASC 450.

(3) *Observations*

There appears to be some ambiguity in ASC 450-20-55-14 and -15 as to exactly what and how probabilities are to be determined.

Examining first paragraph 14, the first sentence requires the entity to first determine the degree of probability that a claim will be asserted and then determine the possibility of an unfavorable outcome. The second sentence requires accrual of a loss under ASC 450-20-25-2 if an unfavorable outcome is probable (and the amount of the loss can be reasonably estimated). See ASC 450-20-55-14. This instruction is ambiguous because it is not clear whether the probability of an unfavorable outcome is to be determined:

- (a) in and of itself, assuming that a claim is asserted, or
- (b) in combination with the probability of a claim being asserted in the first place.

The probability contemplated in clause (a) above is difficult enough to determine. The probability contemplated in clause (b) would be the probability that a claim will be asserted *multiplied* by the probability of an unfavorable outcome (assuming that a claim has been asserted). For example, if there were (x) a 70% probability that a claim would be asserted and (y) a 50% probability of an unfavorable outcome (assuming that a claim were asserted), then, before any claim is asserted, there would be a 35% joint conditional probability (.7 x .5) of an unfavorable outcome.

The second sentence of paragraph 15 requires that, if it is determined that assertion of a claim is probable, then a second judgement must be made as to the degree of the probability of an unfavorable outcome. See 450-20-55-15. This instruction is subject to the same ambiguity as the first sentence of paragraph 14—it is not clear whether the probability of an unfavorable outcome is to be determined:

- (a) in and of itself, assuming that a claim is asserted, or
- (b) in combination with the probability of a claim being asserted in the first place.

As noted above, the probability contemplated by clause (b) would be the product of the probability of a claim being asserted and the probability of an unfavorable outcome (assuming that a claim has been asserted).

Given that the entity does not know whether or not a claim will be asserted, it would appear that a determination of the joint conditional probability would be appropriate, as contemplated in each clause

(b) above. This would be the correct mathematical approach.³ However, unless the assertion of a claim were a 100% certainty, this would reduce the probability of an unfavorable outcome in every case.

ASC 450-20-50-6, of course, is subject to the same ambiguity as ASC 450-20-55-14 and -15.

Discussion of the various methodologies to determine probabilities of future events or circumstances is beyond the scope of this note.

C. Concepts Statement No. 2

In its Statement of Financial Accounting Concepts No. 2, Qualitative Characteristics of Accounting Information (“Concepts Statement No. 2”) (1980), the FASB set forth the following definition of the term “material”:

The omission or misstatement of an item in a financial report is material if, in the light of surrounding circumstances, the magnitude of the item is such that it is probable that the judgement of a reasonable person relying upon the report would have been changed or influenced by the inclusion or correction of the item.

Concepts Statement No. 2 at 46 (emphasis added).

As previously mentioned, the SEC staff in SAB 99 suggested that this definition is substantively identical to the definition in *Northway*. It may be of interest, however, that this definition specifically refers to the judgement of a reasonable person being changed or influenced, while *Northway* specifically states that the standard “does not require proof of a substantial likelihood that disclosure of the omitted fact would have caused the reasonable investor to change his vote.” *Northway*, 426 U.S. at 449. Since the definition in Concepts Statement No. 2 does acknowledge the materiality of an item if its disclosure or correction would have “influenced” a reasonable person’s judgement, without necessarily requiring a change, the difference in language may not be significant, although it is submitted that it might have been preferable for the FASB to make its definition more consistent with the law. It may also be noteworthy that, while this definition specifically refers to the magnitude of the subject item, no reference is made to the probability of occurrence of a possible future item or, for that matter, the “total mix of information.” However, the combination of this definition and the provisions of ASC 450, which itself deals with various degrees of probability, does appear to be consistent to some extent with *Basic*. Finally, it is observed that this definition refers to a “reasonable person”, while *Northway* refers to a “reasonable investor”. This

³ The probability of the occurrence of two or more events is governed by the “multiplication rule” of probabilities. If events A and B are independent, the probability of event A and event B occurring is the product of the probability of A and the probability of B, or $P(A \text{ and } B) = P(A) \times P(B)$. If the events A and B are dependent, that is, for example, that B can occur only if A occurs (as in the case of unasserted claims), the probability of A and B occurring is the product of the probability of A and the probability of B (given that A has occurred), or $P(A \text{ and } B) = P(A) \times P(B | A)$. See Dimitri P. Bertsekas & John N. Tsitsiklis *Introduction to Probability*, Massachusetts Institute of Technology, Athena Scientific (2002); Charles .M. Grinstead & J. Laurie Snell, *Introduction to Probability*, American Mathematical Society, https://chance.dartmouth.edu/teaching_aids/books_articles/probability_book/amsbook.mac.pdf (last visited 3/19/21)

difference may or may not have been intentional, but, as discussed in part VII, the use of the term “investor” may presume at least some degree of sophistication in investing.

FASB concepts statements are not specific financial accounting principles or standards. Rather, “[c]oncepts statements are intended to set forth objectives and fundamental concepts that will be the basis for development of financial accounting and reporting guidance.” Concepts Statement No. 8 at iv, referred to below.

D. Concepts Statement No. 8

In September 2010, the FASB adopted Statement of Financial Accounting Concepts No. 8 (“Concepts Statement No. 8”) which, in Chapter 3 thereof entitled “Qualitative Characteristics of Useful Financial Information”, contained the following definition of materiality:

Information is material if omitting it or misstating it could influence decisions that users make on the basis of the financial information of a specific reporting entity. In other words, materiality is an entity-specific aspect of relevance based on the nature or magnitude or both of the items to which the information relates in the context of an individual entity’s financial report.

Concepts Statement No. 8 at 17, (emphasis added). The change in the definition from that contained in Concepts Statement No. 2 was the result of a project undertaken jointly with the International Accounting Standards Board to improve and converge their frameworks, and the use of the word “could” rather than “would”, as in Concepts Statements No. 2, was intentional.

After a multitude of comments from the SEC, investors and investor groups, as well as modifications proposed by the FASB in 2015, the FASB in November 2017 decided to modify the definition of materiality in Concepts Statement No. 8 to embody the concepts expressed in Concepts Statement No. 2, consistent with *Northway*. In August 2018, the FASB formally amended Concepts Statement No. 8 to, among other things, revert to the definition of materiality contained in Concepts Statement No. 2 in language identical to that quoted above.

E. ASC 275

(1) *General.*

Accounting Series Codification, Subtopic 275 “Risks and Uncertainties” may be worthy of brief mention. This Subtopic requires in the footnotes to the financial statements disclosures that “focus primarily on risks and uncertainties that could significantly affect the amounts reported in the financial statements in the near term or the near-term functioning of the reporting entity” stemming from:

- the nature of the entity’s operations;
- the use of estimates in the preparation of the entity’s financial statements;
- significant concentrations in certain aspects of the entity’s operations.

See ASC 275-10-05-2.

Many of these disclosures are generally contained in Note 1 to the financial statements. As to the use of estimates, the disclosure is required if:

- (a) it is reasonably possible that the estimate will change in the near term, and
- (b) the effect of the change would be material to the financial statements

See ASC 275-10-50-8 (emphasis added).

Interestingly, ASC 275-10-50-14 provides that the requirement for disclosure does not depend on the amount reported in the financial statements, but rather on the “materiality of the effect that using a different estimate would have had on the financial statements. Simply because an estimate resulted in ... a small financial statement amount, or no amount, does not mean that disclosure is not required under this subtopic.”

As to vulnerability arising out of concentrations, ASC 275-10-50-16 requires disclosure of a concentration if:

- (a) the concentration makes the entity vulnerable to the risk of a near-term severe impact and
- (b) it is at least reasonably possible that the events that could cause a severe impact will occur in the near term.

(2) *Defined Terms.*

Under ASC 275-10-20, the following, among other, definitions apply:

- | | |
|------------------------------|--|
| <i>“near term”</i> | - a period of time not to exceed one year from the date of the financial statements. |
| <i>“reasonably possible”</i> | - the chance of the future event or events occurring is more than remote but less than likely (identical to the definition in ASC 450-20-20). |
| <i>“severe impact”</i> | - a significant financially disruptive effect on the normal functioning of an entity. Severe impact is a higher threshold than material The concept of severe impact, however, includes matters that are less than catastrophic. Matters that are catastrophic include, for example, those that would result in bankruptcy. |

See ASC 275-10-20. Thus, Subtopic 275 is of interest for purposes of this note because it introduces, without significant guidance, new notions of “materiality” – the concept of “materiality to the financial statements” and the new orders of magnitude connoted by “severe impact” and “catastrophic”.

6. AUDITING STANDARDS

A. PCAOB – AS 2105

(1) *General.*

Auditing Standard 2105 of the Public Company Accounting Oversight Board (the “PCAOB”) “establishes requirements regarding the auditor’s consideration of materiality in planning and performing an audit.” AS 2105.01. Since the PCAOB is a non-profit corporation established by the Sarbanes-Oxley Act of 2002, and operates subject to the oversight of the SEC, its standards and requirements would appear to have the force of governmental regulations, such as SEC regulations.

(2) *The Standard.*

First, AS 2105 expressly recognizes the *Northway* definition of materiality for purposes of the Securities Laws.

Second, AS 2105 generally provides that:

[t]o obtain reasonable assurance about whether the financial statements are free of material misstatement, the auditor should plan and perform audit procedures to detect misstatements that, individually or in combination with other misstatements, would result in material misstatement of the financial statements. ... [I]t ordinarily is not practical to design audit procedures to detect misstatements that are material based solely on qualitative factors.”

AS 2105.03.

The thrust of the requirements of AS 2105 is that to plan the nature, timing and extent of audit procedures, the auditor, among other things, should establish a general materiality level relative to the financial statements as a whole. In addition, the auditor should establish special materiality levels for certain accounts for which there is a substantial likelihood that misstatements of lesser amounts than the general materiality level would influence the judgement of a reasonable investor.

(3) *Observations.*

Each materiality level established pursuant to AS 2105 is a fixed amount, determined by the auditor to be appropriate in light of the company’s particular circumstances, including without limitation its earnings. Thus, this fixed amount is a tool to enable the auditor to screen for possible misstatements that could be “material” under the Securities Laws. It is not a suggestion that that amount is the minimum amount that would be “material” under the Securities Laws. Indeed, in a footnote the PCAOB recognized that “[l]esser amounts of misstatements could influence the judgment of a reasonable investor because of qualitative factors, *e.g.*, because of the sensitivity of circumstances surrounding misstatements, such as conflicts of interest in related party transactions.” AS 2105.07.

B. AICPA – AU-C Section 320

(1) *General.*

AU-C Section 320 of the American Institute of Certified Public Accountants, the self-regulatory organization of public accounting firms (the “AICPA”), “addresses the auditor’s responsibility to apply the concept of materiality in planning and performing an audit of financial statements.” AU-C § 320.01.

(2) *The Standard.*

First, AU-C Section 320.02, like AS 2105, recognizes, among other things, that:

- misstatements, including omissions, are considered to be material if they, individually or in the aggregate, could reasonably be expected to influence the economic decisions of users made on the basis of the financial statements, and
- judgments about materiality are made in light of surrounding circumstances and are affected by the size or nature of a misstatement, or a combination of both,

thus embodying the general concepts expressed in *Northway* but without specifically referring to the decision or the law in general. See AU-C § 320.02 (emphasis added). It is noteworthy that the word “could” is used rather than, as in *Northway*, the word “would”, which raises the same concerns as Concepts Statement No. 8 initially raised. However, in December 2019 the statement in the first bullet point above was amended for financial statements for periods ending on or after December 15, 2021 to track *Northway* more closely, as follows:

misstatements, including omissions, are considered to be material if there is a substantial likelihood that, individually or in the aggregate, they would influence the judgement made by a reasonable user based on the financial statements

AU-C § 320.02 (emphasis added).

AU-C Section 320, like AS 2105, requires an auditor, in planning an audit, to make a judgment about the size of “misstatements that will be considered material”, noting that the established level “does not necessarily establish an amount below which uncorrected misstatements, individually or in the aggregate, will always be evaluated [by the auditor] as immaterial,” and that the auditor should consider the qualitative factors, such as “the nature of uncorrected misstatements, and the particular circumstances of their occurrence, when evaluating their effect on the financial statements.” See AU-C § 320.06. More specifically, AU-C Section 320 requires the auditor, among other things, to establish general and special materiality levels substantially the same as those required by the PCAOB in AS 2105.

(3) *Observations.*

Consistently with AS 2105, AU-C Section 320 uses the term “materiality” in the context of a methodology for assessing whether the financial statements as a whole contain misstatements or omissions that would influence investors’ decisions (as contemplated by *Northway*). The establishment

by the auditor of materiality levels for purposes of audit procedures is not an indication of what might be considered material under *Northway*.

Interestingly, Section 320.04 gives the auditor guidance as to the characteristics of the “reasonable user” of financial statements, which presumably is akin to the “reasonable investor” embodied in *Northway* and *Basic*, as discussed in part VII of this note. As amended in December 2019 (effective for financial statements for periods ending on or after December 15, 2021), subsection .04 reads as follows:

The auditor’s determination of materiality is a matter of professional judgment and is affected by the auditor’s perception of the financial information needs of users of the financial statements. For purposes of determining materiality, the auditor may assume that reasonable users

- (a) have a reasonable knowledge of business and economic activities and accounting and a willingness to study the information in the financial statements with reasonable diligence;
- (b) understand that financial statements are prepared, presented and audited to levels of materiality;
- (c) recognize the uncertainties inherent in the measurement of amounts based on the use of estimates, judgment, and the consideration of future events; and
- (d) make reasonable judgements based on the information in the financial statements.

AU-C § 320.04.

C. General Observations

In thinking about materiality levels under AS 2105 and AU-C Section 320, one should be reminded of the position of the Staff of the SEC as expressed in SAB 99 to the effect that exclusive reliance on any percentage or numerical threshold “has no basis in the accounting literature or the law.” SAB 99 at Topic 1.

It is submitted that, in order to minimize any possible confusion between the meaning of the term “material” under the Securities Laws and the usage of that same term in the auditing literature with respect to levels of materiality for purposes of an audit, it might have been preferable for the PCAOB and the AICPA to use different terminology.

7. THE REASONABLE INVESTOR

A. General

Having touched on the parameters of probability and magnitude, this note will now address the remaining variable in the *Northway/Basic* formulation of materiality—the “reasonable investor”. Who is

this person? What level of sophistication should be attributed to this person? Indeed, does this person exist?

B. Case Law

In a case prior to *Basic* dealing with the disclosure of preliminary merger negotiations, the U.S. Court of Appeals for the Seventh Circuit addressed an argument that any such disclosure, prior to an agreement in principle, could “befuddle the investors, leading them to think the outcome [is] more certain than it is.” *Flamm v. Eberstadt*, 814 F.2d 1169, 1175 (7th Cir. 1987) (“*Flamm*”). The court took issue with this argument, famously finding that:

The first of these reasons, that disclosure may confuse investors rather than illuminate their choices, is weak. It assumes that investors are nitwits, unable to appreciate—even when told—that mergers are risky propositions up until the closing. Almost all corporate ventures, from building a new plant to angling for a merger partner, may go well or poorly, with a probability attached to each outcome. To attribute to investors a child-like simplicity, an inability to grasp the probabilistic significance of negotiations, implies that they should not be told about new plants, new products, new managers, or any of the other changes in the life of the corporation. These new events—things with potential for boom or bust—are exactly the news on which sophisticated investors make most decisions; “old” news, with settled value, already is reflected in the price of the stock and so is no news at all. Doubtless some unsophisticated investors think that negotiations for a merger are the same thing as a completed merger, but such babes in the woods are not apt to follow contested tender offers day by day. Disclosures to the market as a whole cannot be limited to what is fit for rubes.

Id. at 1175.

Flamm was extensively cited with approval and quoted in *Basic*, in which the Supreme Court added:

The role of the materiality requirement is not to “attribute to investors a child-like simplicity, an inability to grasp the probabilistic significance of negotiations,” but to filter out essentially useless information that a reasonable investor would not consider significant, even as part of a larger “mix” of factors to consider in making his investment decision.

Basic 485 U.S. at 234 (citing *Flamm*, 814 F.2d at 1175; *Northway*, 426 U.S. at 448-49).

While courts, including the Supreme Court, have given guidance as to what the reasonable investor is not, there is no single judicial enunciation of what the reasonable investor is. Scholars have distinguished the “reasonable person” standard in tort law on the ground that a jury might not need any special sophistication or instructions in a simple negligence case, while, in certain cases, such as, medical malpractice, the lack of sophistication of members of the jury would be compensated for by expert

testimony. In such cases, the jury would be using a “reasonable professional” standard rather than “reasonable person” standard. See Amanda M. Rose, *The “Reasonable Investor” of Federal Securities Law: Insights from Tort Law’s “Reasonable Person” & Suggested Reforms*, 43 J. of Corp. L. 77 (2017).

Other scholars have also taken note of the selection by the courts of the term “investor” in securities cases rather than “person”, interpreting this selection, without any particular authority, to imply that the person is indeed an investor, with at least some basic knowledge of investing—that is, knowledge of the securities being purchased or sold, the companies in which such securities represent an interest and the markets in which they are traded. See James O. Hewitt, *Developing Concepts of Materiality and Disclosure*, 32 Bus. Law. 887 (1977).

Referring to the reasonable investor standard, one scholar has noted that:

The bar is high because the reasonable investor grasps market fundamentals—for example, the time value of money, the peril of trusting assumptions, and the potential for unpredictable difficulties to derail new products.

See Margaret V. Sachs, *Materiality and Social Change: The Case for Replacing “the Reasonable Investors” with “the Least Sophisticated Investor” in Inefficient Markets*, 81 Tul. L. Rev. 473 (2006) (citing *Levitin v. PaineWebber*, 159 F.3d 698, 702 (2d Cir. 1998); *Harris v. Ivax Corp.*, 182 F.3d 799, 807 (11th Cir. 1999); *Hillson Partners Ltd. P’ship v. Adage, Inc.*, 42 F.3d 204, 213 & n.7) (4th Cir. 1994)).

The characteristics of the reasonable investor are well summarized as follows:

In the many decades since the birth of the modern financial regulatory framework, regulators, scholars, and courts have not universally agreed upon the identity and defining characteristics of the reasonable investor. Nonetheless, a leading paradigm of the reasonable investor has emerged—the idealized investor—with a distinct profile that encompasses cognition, activism, wealth, and personage. ...

In sum, the reasonable investor, the central character of financial regulation, is frequently envisioned as a rational human being of average wealth and ordinary financial sophistication that invests passively for the long term.

Tom C. W. Lin, *Reasonable Investor(s)*, 95 Bos. U. L. Rev. 461, 466-68 (2015).

The description of the “reasonable user” of financial statements set forth in AICPA, AU-C Section 320.04, *supra* in part VI(B), would appear to be equally descriptive of the “reasonable investor”. It is perhaps unfortunate that no judicial decision has been found that describes the “reasonable investor” so completely and with such eloquence.

C. SEC Concept Release

As part of the SEC’s continuing evaluation of its disclosure requirements, as originally mandated in 2012 by the Jumpstart Our Business Startups Act, the SEC issued Release Nos. 33-10064; 34-77599, entitled “Business and Financial Disclosure Required by Regulation S-K” (the “Concept Release”), dated

April 13, 2016. The Concept Release discussed and invited specific comments on the full range of disclosures required by Regulation S-K under the 1933 Act and the 1934 Act. Of particular relevance to this note, the Concept Release discussed and invited comment on the definition of materiality (particularly in the context of whether or not disclosure requirements should be more principles-based and less rules-based), the different audiences to which disclosure is, or should be, directed and whether or not disclosures made in various different media should be tailored to the audience to which such media are primarily directed. Specifically, the SEC invited comment on the following, amid a myriad other, questions:

14. Should registrants assume some level of investor sophistication in preparing their disclosures? If so, what level or levels of sophistication? How should investor sophistication be measured? What are the risks or other disadvantages to investors if registrants either underestimate or overestimate the level of investor sophistication and resources when preparing their disclosures? Does disclosure protect all investors if it is tailored to a subset of the investor community?
15. Should we revise our rules to require disclosure that is formatted to provide information to various types of investors in a manner that will facilitate their use of disclosure for investment and voting decisions?
16. Commenters have suggested that disclosure should be written for a more sophisticated investor than current disclosure appears to contemplate, and that tailoring disclosure to less sophisticated investors contributes to excessive disclosure. Should our disclosure requirements be revised to address these views? If so, how could we revise our disclosure requirements, and which requirements should we revise, to encourage more appropriately targeted disclosure? If we revised our disclosure requirements to address these views, would there be any harm or costs to investors?
17. How do investors and other users of disclosure currently access and use this information? How does this vary across different subsets of the audience for the disclosure?
19. To what extent should the reliance of certain investors on market prices or third-party analyses, rather than using disclosure directly, be a factor in determining the type of investor to which disclosures should be targeted?
20. To what extent should we consider the needs of other market participants, such as professional securities analysts and other third parties, in revising our disclosure requirements? What would be their needs?

SEC Release No. 33-10064; 34-77599 at 51-52.

The SEC has not, to date, proposed any amendments to any of its regulations, including Regulation S-K, to address the issues raised by the foregoing requests for comment. Comprehensive review and analysis of the comments received by the SEC, which are available on the SEC's website, are

beyond the scope of this note. It is sufficient, for purposes hereof, to say that comments ranged from one extreme to the other. However, there seems to be a weighting toward a consensus that:

- the current definition of materiality should be retained; and
- in light of the primary purpose of the 1933 Act “to provide full and fair disclosure ...” (preamble to 1933 Act), “disclosure documents should be understandable to anyone with a general knowledge of accounting and finance”. (Council of Institutional Investors). Disclosure should not be a “geared toward the most unsophisticated investor, [and] all investors should be required to put in some effort to understand the information disclosed”. (New York Society of Certified Public Accountants). Similarly, “while U.S. capital market participants are dominated by sophisticated institutions such as mutual funds, ETFs, pension funds and hedge funds, retail investors represent an important segment of the investment public. Maintaining or even strengthening retail investors’ confidence in our capital markets are important goals insofar as broader market integrity is strengthened when those who are least-well positioned from a resource and sophistication perspective can feel safe investing. Doing so does not require a reduction in the complexity or completeness of the existing disclosure regime but does require that the system of disclosure be structured in a manner that permits retail investors low-cost access to the information most relevant to their decision making process.” (SEC Investor Advisory Committee)

Thus, there may be, perhaps, some degree of consistency between the views of some commenters, as described above, with the views of the behavioral economists, discussed below, to the extent that they show some sympathy for the plight of individual investors who, while not necessarily “rubes”, may not possess the level of sophistication attributed to the hypothetical “reasonable investor” by the courts.

D. Behavioral Economics

As discussed above, the “reasonable investor” is a hypothetical creature. Behavioral economists believe that few of such creatures exist in the real world.

In particular, in *Thinking, Fast and Slow* (2011), Daniel Kahneman, 2002 winner of the Nobel Memorial Prize in Economic Sciences (shared with Vernon L. Smith), analyzed human decision-making and made various observations, based on the prior work of other psychologists and his own research (with Amos Tversky, Vernon Smith and Richard H. Thaler, among others), including:

- the human mind operates on two levels:
 - System 1, which “operates automatically and quickly, with little or no effort and no sense of voluntary control”; System 1 produces the first response, without analysis; and
 - System 2, which “allocates attention to the effortful mental activities that demand it, including complex calculations”; System 2 analyzes the input and the responses produced by System 1 and may arrive at different conclusions; and
- while System 1 is in itself remarkable and can learn from experience, it is subject to inherent biases and can produce faulty conclusions; such biases include, among others:

- “loss aversion” -- the fear of loss is more powerful than the hope of gain (the average “loss aversion ratio” having been demonstrated to be about 2 to 1); this can result, for example, in a reluctance to sell an asset without (or in spite of) a good reason to do so;
- the “endowment effect” -- related to loss aversion, the reluctance of a person to sell an asset (other than one considered as held for sale or exchange, such as money or inventory) at a given price, even though the person, if he or she did not already have that asset, would be unlikely to purchase it at the same price;
- inertia -- related to the endowment effect, the tendency of people to stay with what they have; and
- the “pattern illusion” -- the tendency to see patterns in random events when none in fact exist.

Due to these biases, System 1, if unchecked by System 2, can produce flawed or irrational decisions.

Kahneman concluded, on the basis of his research, that the average human being, while “reasonable” and not necessarily “irrational”, makes predictable mistakes in day-to-day decisions. In contrast to the ideology of the Milton Friedman school of economics (that “[r]ational people should be free, and they should be responsible for taking care of themselves”), Kahneman argued that human beings “often need help to make more accurate judgments and better decisions, and in some cases policies and institutions can provide that help.” He also argued that average human beings “also need protection from others who deliberately exploit their weaknesses.”

44 *Loyola University Chicago Law Journal* (2013) contains a collection of papers delivered at a conference entitled *Behavioral Economics and Investor Protection* sponsored by the Loyola University Chicago Institute for Investor Protection and the Institute for Law and Economic Policy, as well as the text of an introductory speech by Kahneman. The thrust of the conference, based on the findings of Kahneman, was that the decision-making of non-professional investors is indeed imperfect and that the securities laws should be revamped so that these investors would be held to a standard lower than that of the hypothetical “reasonable investor”. Barbara Black, then Charles Harstock Professor of Law and Director, Corporate Law Center, University of Cincinnati College of Law, in her paper, entitled *Behavioral Economics and Investor Protection: Reasonable Investors, Efficient Markets*, made the following observations:

Behavioral economists, by contrast, do not observe real people investing in today’s markets behaving as the reasonable investors that federal securities law expects them to be. These cognitive errors affect decisions made by both retail investors and financial practitioners and go beyond issues of financial literacy. Studies show that many investors are not rational in their decision-making; there are observable biases resulting from departures from rational decision-making. Researchers have compiled an extensive catalogue of investors’ cognitive errors. These include: loss aversion (investors are reluctant to sell losing stocks even when advantageous for them to do so), overconfidence (investors, particularly male investors, are overconfident in their investment strategies), and representativeness heuristic (investors chase trends believing they have systematic causes). More generally, the nature of investing itself may induce investors to treat it as a game or as gambling.

To date, courts have not acknowledged this gap between judicial expectations about the behavior of reasonable investors and behavioral economists' views of investors' cognitive shortcomings.

Behavioral Economics and Investor Protection, 44 Loy. U. Chi. L. J. 1493, 1496-97 (2013) (citations omitted)

Black summarized her views thus:

The judicial view of a “reasonable investor” plays an important role in federal securities regulation. Courts express great confidence in the reasonable investor’s cognitive abilities, a view not shared by behavioral economists. Similarly, the efficient market hypothesis has exerted a powerful influence in securities regulation, although empirical evidence calls into question some of the basic assumptions underlying it. Unfortunately, to date, courts have acknowledged the discrepancy between legal theory and behavioral economics only in one situation: class certification of federal securities class actions. It is time for courts to address the gap between judicial expectations about the behavior of reasonable investors and behavioral economists’ views of investors’ cognitive shortcomings, consistent with the central purpose of federal securities regulation: protecting investors from fraud.

Id. at 1493.

Building on his work with Kahneman, Tversky and Smith, among others, Richard H. Thaler, 2012 winner of the Nobel Memorial Prize in Economic Sciences, in his book, *Misbehaving: The Making of Behavioral Economics* (2015), confirmed the findings of sometimes irrational decision-making in many contexts including, at the micro level, individual investment decisions and, at the macro level, markets themselves (demonstrating specific shortcomings in the “efficient market hypothesis”⁴). Like the participants in the Loyola conference referred to above, Thaler argued for ways to “nudge” human beings toward the direction of correct decisions.

Thaler also made insightful observations about the decision-making of professional investors, based on the “beauty contest” analogy of John Maynard Keynes. According to Thaler, and Keynes before him, professional investors make decisions not primarily on the basis of the characteristics and attributes of the issuer, in absolute terms, but, rather, are engaged in a “guessing game” relating to the investment decisions of other professional investors. Thaler’s simplified description of the process follows:

They [professional investors] are trying to buy stocks that will go up in value—or, in other words, stocks that they think *other* investors will *later* decide should be worth more. And these other investors, in turn, are making their own bets on others’ *future* valuations.

⁴ See *Halliburton Co. v. Erica P. John Fund, Inc.*, 573 U.S. 258, 272 (2014), wherein the Supreme Court discusses the “efficient capital markets hypothesis”.

Thaler then added:

Buying a stock that the market does not fully appreciate today is fine, as long as the rest of the market comes around to your point of view sooner rather than later! Remember another of Keynes' famous lines. "In the long run, we're all dead."

Misbehaving: The Making of Behavioral Economics at 214-15.

In his paper entitled *Behavioral Finance before Kahneman*, also contained in *44 Loyola University Chicago Law Journal* (2013), Richard A. Posner, then Judge, U.S. Court of Appeals for the Seventh Circuit and Senior Lecturer, University of Chicago Law School (now professor of law), also took note of Keynes' "beauty contest" analogy in his discussion of short term trading and momentum investing:

But behavioral finance is not limited to noting the presence of irrationality in financial markets. Its broader aim is to be realistic about how the people in those markets are apt to behave. So consider people who trade stocks, as distinct from people who buy and hold them for the long term. Traders are not primarily interested in the future corporate earnings of the companies whose stock they're trading: they're primarily interested in whether other traders think the stocks are likely to rise or fall in value; and those other traders likewise are interested in what still other traders think. A trader who thinks that many other traders consider a stock undervalued has a good reason to buy it whatever he may think the company's future earnings likely to be. Hence "momentum trading"—buying when others are buying, selling when others are selng. This is derided as "herd behavior," which may seem irrational, but is not, and not only among the (other) animals. (If you are an antelope, and you see other antelopes suddenly start to stampede, you are well advised to join them because they may well be fleeing from a lion or other predator.) Momentum trading is rational herd behavior when it is based on a rational conjecture about the behavior of other traders, though it will sometimes reflect also or instead the human tendency to see patterns where there aren't any (possibly because pattern spotting is an evolved human trait of great value in most situations).

Behavioral Finance before Kahneman, 44 Loy. U. Chi. L. J. 1341, 1343 (2013).

In sum, the behavioral economists would appear to exclude from the class of hypothetical "reasonable investors":

- the average individual investor, since this investor lacks the sophistication attributed to the reasonable investor by the courts and predictably makes irrational decisions; and

- the professional investor, in the words of Thaler (and Keynes), or at least the trader, in the words of Posner, since this investor does not rely primarily on information provided by the issuer but, rather, is engaged in an intricate guessing game.

E. Other Proposals for Reform

Numerous other legal and economic scholars have proposed changes in the Securities Laws relating to their primary purpose—the protection of investors. These proposals focus on a wide range of variables including information required to be disclosed and various methods of disclosure, especially in this age of the internet and social media, as well as the various classes of investors and possible differential disclosure (both by subject matter and means of disclosure) to such various classes. Many of these proposals include attention to the “reasonable investor”.

The Algorithmic Investor

One proposal involves the introduction of a new “algorithmic investor” typology in matching the increasing volume of automated electronic trading driven by artificial intelligence and recognizing the increased diversity in investor typologies. This would be accompanied by a

gradual policy shift away from broad categorical rules [and the homogenous reasonable investor] towards narrower, targeted rules to better protect investors in accordance with their distinct vulnerabilities and profiles. While it is important to protect every investor, it is also important to acknowledge that not every investor is the same, and thus not every investor needs the same type of protection.

See Tom C.W. Lin, *Reasonable Investor(s)*, 95 Bos. U. L. Rev. at 503. The author notes that SEC regulations already differentiate among investor typologies (*e.g.*, “accredited investors” and “qualified institutional buyers”), see *id.* at 500, as well as among issuers (*e.g.*, “well-known seasoned issuers”, “seasoned issuers”, “unseasoned reporting issuers” and “non-reporting issuers”), *id.* at 505.

Legislation or Rulemaking

Another proposal calls for the specification by Congress or the SEC of some definitive attributes of the “reasonable investor”. See Amanda M. Rose, *The “Reasonable Investor” of Federal Securities Law*, 43 J. of Corp. L. at 110-11. The author recognized two camps that are pushing for reform:

- those who would favor the trained, professional investor as the appropriate model for the reasonable investor, in light of the frailties of the retail investor who for the most part relies on the professional; and
- those who would push either to “recognize and incorporate behavioral biases into the reasonable investor standard” or to promote investor education. (The author noted that the frailties of retail investors recognized by this group would tend to support the argument that the professional investor should be the model.)

See *id.* at 90-92.

After discussion, the author concluded:

My objective here, however, is not to argue for particular definitions of the reasonable investor—that is a broad topic worthy of a separate paper, and about which much has already been written. Rather, it is simply to highlight the need for policymakers to develop *some* explicit definitions, preferably ones that fit with the regulatory goals of the federal securities laws and with market realities. This is a necessary first step to bring coherence to the reasonable investor standard.

Id. at 113.

8. PROPOSED BAYESIAN ANALYSIS

Citing the uncertainties regarding the interpretation and application of the “materiality” standard under U.S. law, particularly with respect to the meaning of “substantial likelihood” and the nebulous nature of the “reasonable investor”, as well as similar and other uncertainties under E.U. law, Kurt S. Schulzke and Gerlinde Berger-Walliser, in their article *Toward a Unified Theory of Materiality in Securities Law*, 56 Columbia Journal of Transnational Law 6 (2018), proposed a uniform methodology of determining materiality, harmonizing both U.S. and E.U. law.

The proposed methodology, based on Bayesian reasoning, would call for the following (in over-simplified terms):

1. identifying the primary factors in the “total mix of information”, within the meaning of *Northway* and *Basic*, that would be considered, in connection with a purchase or sale of a particular security, by a reasonable investor. For this purpose, “the reasonable investor should be assumed to have ‘reasonable knowledge of business and economic activities and accounting and a willingness to study the information in financial statements with reasonable diligence.’” Schulzke & Berger-Walliser, *supra*, at 57 (citing AICPA, AU-C section 340.04(a), noting consistency with *Northway* and *Basic*). Such factors would not include an omitted fact but would include a misstatement of fact. The authors suggest, as examples of such primary factors, those purportedly considered by Warren Buffet, including:

- return on investment;
- debt/equity ratio;
- profit consistency and growth;
- length of time being a public company;
- competitive advantage; and
- excess of “intrinsic value” over market capitalization;

Id.

2. looking through the eyes of the reasonable investor, assign company-specific “values” (which need not be numeric) to these factors. *Id.* at 59. “In a real case, variable values, weights and causal relationships should be chosen by the factfinder informed by available data, industry standards, and expert opinion”. *Id.*;

3. using Bayes' Rule, determine the "odds ratio" of the purchase or sale transaction in question being effected—that is, the probability (based on the values assigned to such factors) of the transaction being effected divided by the complementary probability of the transaction not being effected, see *id.* at 54;

4. including the omitted fact or the correct statement of the misstated fact in the "total mix of information" and assigning a value thereto, see *id.* at 53-54;

5. redetermining the "odds ratio" of the transaction being effected based on the new "total mix of information" (that is, including the omitted fact or correct statement of fact and the value assigned thereto), see *id.* at 54; and

6. comparing the prior odds ratio to the subsequent odds ratio, "with the difference between them used to decide when the misstatement or omission would significantly alter the total mix of information in a reasonable investor's mind" and, as a consequence, be "material" under *Northway* and *Basic*. *Id.* at 59.

Detailed discussion of the mathematical application of the Bayesian probabilistic methodology is beyond the scope of this note—and, perhaps, beyond the interest of the readers of this note – although it should be pointed out that "the infrastructure of materiality as articulated by the U.S. Supreme Court in *TSC* and *Basic* is a natural, implicit expression of Bayesian reasoning." *Id.* at 50. The proponents of the Bayesian analytical framework seem to acknowledge the difficulties in its application but state, nevertheless, that "[w]hatever the dispute resolution venue, courts, counsel, and corporate officers can learn to use the Bayesian materiality framework with a modest investment in training, software, and expert advice. ...Whether Bayesian analysis is a feasible alternative is based, in part, on the availability of reliable, user-friendly software." *Id.* at 68

Although the determination of the factors to be considered in the "total mix of information" and the assignment of values to such factors and to the omitted or misstated fact appear to be largely subjective, at least until such time as the factors and assignment of values thereto become standardized, this methodology does introduce structure and some objectivity into the analysis.

9. CONCLUDING OBSERVATIONS

Despite the volume of statutory and case law, SEC regulation, FASB statements and guidance and scholarly literature, materiality remains a multifaceted enigma, perhaps reminiscent of the Hydra of Greek mythology. There is no precise definition, no bright-line test, no magic formula. The assessment of materiality, while purporting to be objective, reflects the subjective judgment of human beings (even within the proposed Bayesian analytical framework)—whether prior to disclosure by representatives of issuers, underwriters or their advisors or after disclosure, in hindsight, by members of the jury. These human beings are themselves subject to the same biases and frailties as the investors sought to be protected. The assessment of materiality itself reflects judgments as to a host of variables that may include:

- an estimate of the probability of a possible future event or circumstance actually occurring or being realized;
- a prediction of the magnitude of the effect of such possible event or circumstance should it actually occur or be realized;

- the identification of the attributes of the hypothetical “reasonable investor” ;
- a judgment as to the mindset of this “reasonable investor” in order to assess whether or not there is a substantial likelihood that this person would consider such possible event or circumstance, in light of the aforesaid probability and magnitude, important in making an investment (or voting) decision; and
- if such event or circumstance is considered material, the degree of materiality thereof with a view to a further judgment as to the adequacy of its disclosure.

There are frequently no clear answers to these questions, and in many cases one may be tempted to err on the side of caution and make disclosure, but this, of course, runs the risk of burying investors “in an avalanche of trivial information”. *Northway*, at 448. Thus, individuals who are charged with making assessments of materiality face a difficult task. They ultimately may resort to the methodology employed by Justice Potter Stewart in his concurring opinion in *Jacobellis v. Ohio*, 378 U.S. 184 (1964) wherein the U.S. Supreme Court undertook the task of determining whether or not a particular motion picture was obscene and thus not protected by the First Amendment. Justice Stewart expressed his view that criminal obscenity laws are constitutionally limited to hard core pornography. He did not even attempt to define that shorthand description but, instead, famously remarked “I know it when I see it, and the motion picture involved in this case is not that.” (*Id* at 197)



This note was prepared by J. Anthony Terrell as of February 12, 2021. Mr. Terrell is of counsel to Bracewell LLP, resident in the New York Office. However, the views expressed herein are those of Mr. Terrell and do not necessarily reflect the views of the firm.

Mr. Terrell is a member of the American Bar Association and the International Bar Association and various sections and committees of each. This note does not necessarily represent the positions of any of such bar associations, sections or committees.

This note was prepared to keep clients and other interested parties informed of legal principles and developments that may affect or otherwise be of interest to them. The comments contained herein do not constitute legal opinion and should not be regarded as a substitute for legal advice.

©2021 J. Anthony Terrell. All Rights Reserved.