Revenue Recognition Rules for Bundled Sales in High Technology Undermine the Purpose of Section 10(B) of the Securities and Exchange Act

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Introduction

THIS COMMENT ADDRESSES THE PROBLEMS with the specialized revenue recognition rule Statement of Position 97-2 (“SOP 97-2”)¹ and its more recent relatives, Accounting Standards Update 2009-13² (“ASU 2009-13”) and Accounting Standards Update 2009-14³ (“ASU 2009-14”). These rules apply primarily to software companies but also apply to companies with software products.⁴ Under these rules, there are instances in which high technology companies are allowed to recognize all of the revenue from a bundled sale ⁵ even if a portion of the expenses for that sale may not be recognized until a

* Many thanks to Professors Shalanda Baker and Frank Ohara at the University of San Francisco for their thoughtful and thorough editing. Special thanks to David Fujimoto and the entire Law Review staff at the University of San Francisco School of Law for their tireless efforts in editing, proof-reading and cite checking this paper. My deepest thanks to Dennis J. Shea and Judge Denise de Bellefuille, who gave me my first opportunities in the legal field and reinforced my excitement about the legal profession.

⁵. See infra Part III.A.3.
future period.\footnote{See Douglas R. Carmichael, \textit{Software Revenue Recognition Under SOP 97-2}, CPA J., July 1998, at 44, 48, \textit{available at} http://www.nysscpa.org/cpajournal/1998/0798/features/f440798.htm (“SOP 97-2 effectively substitutes evaluation of multiple elements for assessment of the significance of remaining vendor obligations.”); \textit{Debrief on ASU 2009-14}, supra note 4, at 1 (“With these hardware/software combinations . . . now controlled by ASU 2009-13[,] . . . companies should be able to . . . recognize revenue sooner [than they could under SOP 97-2].”).} This is a break from more traditional accounting principles, which require revenues and accompanying expenses to be recognized in the same period.\footnote{\textit{Elements of Financial Statements}, Statement of Financial Accounting Concepts No. 6, ¶ 145 (Fin. Accounting Standards Bd. 1985) (“The goal of accrual accounting is to account in the periods in which [revenues, expenses, gains, losses] occur for the effects on an entity of transactions and other events and circumstances, to the extent that those financial effects are recognizable and realizable.”)} This recognition mismatch—the discrepancy in timing between when revenue for the transaction is reported and when expenses for the transaction are incurred—allows high technology companies to report inflated revenue, which does not accurately depict the company’s true earnings.\footnote{See infra Part III.A.3.} Such misreporting misleads investors because it may encourage them to invest in a company they may not otherwise deem investment worthy.\footnote{See infra Part III.B.}

In 1934, Congress enacted the Securities and Exchange Act of 1934 (“Act”),\footnote{\textit{Securities and Exchange Act of 1934}, ch. 404, title I, § 1, Pub. L. No. 73-291, 48 Stat. 881 (codified as amended at 15 U.S.C. §§ 78a–78pp (2012)).} which created the Securities and Exchange Commission (“SEC”)\footnote{Id. § 11.} whose mission is to protect investors.\footnote{Id. § 12.} Through the Act, Congress empowered the SEC with broad authority over all aspects of the securities industry.\footnote{See id.} “This includes the power to register, regulate, and oversee brokerage firms, transfer agents, and clearing agencies as well as the nation’s securities self regulatory [sic] organizations” (“SROs”).\footnote{The Investor’s Advocate: How the SEC Protects Investors, Maintains Market Integrity, and Facilitates Capital Formation, SEC. & EXCH. COMM’N, \textit{http://www.sec.gov/about/whatwedoc.shtml} (last visited Mar. 16, 2014) [hereinafter \textit{The Investor’s Advocate}].} The various securities exchanges, such as the New York Stock Exchange (“NYSE”), NASDAQ Stock Market, Chicago Board Options Exchange, and the Financial Industry Regulatory Authority are examples of SROs.\footnote{The Investor’s Advocate, supra note 14.} These SROs are non-governmental but they have the power to create and enforce fair and ethical industry standards.\footnote{See 15 U.S.C. § 78j-2(c) (2012).}
The SEC regulates publicly-held companies by requiring them to disclose “meaningful financial” and other information to the public.\textsuperscript{17} The purpose of the SEC is to “protect investors, maintain fair, orderly, and efficient markets, and facilitate capital formation.”\textsuperscript{18} The SEC website states: “As more and more first-time investors turn to the markets to help secure their futures, pay for homes, and send children to college, our investor protection mission is more compelling than ever.”\textsuperscript{19} Yet, SOP 97-2, ASU 2009-13, and ASU 2009-14 compromise investor protection by allowing a discrepancy between revenue as reported and revenue as earned.

Part I of this Comment briefly reviews revenue recognition methodology under traditional accounting principles. Business and economic activities are surrounded by uncertainty. Therefore, traditional accounting principles historically follow the conservative doctrine, \textsuperscript{20} which provides that uncertainties in revenue recognition are accounted for in the direction of understatement rather than overstatement.\textsuperscript{21} Part I also briefly reviews the role of the Financial Accounting Standards Board (“FASB”) and the Generally Accepted Accounting Principles (“GAAP”).

Part II introduces FASB’s rule, SOP 97-2, and describes when, how, and by whom SOP 97-2 can be used. This Part also introduces FASB’s newer rules, ASU 2009-13 and ASU 2009-14.

Part III addresses the problems that SOP 97-2, ASU 2009-13, and ASU 2009-14 pose. Specifically, this part examines the effects on a company’s shares and the increase in the number of financial restatements after these rules were implemented. Also, this part explores the dilemma of whether software in tangible products like a mobile smart phone should be covered by ASU 2009-13 or SOP 97-2.

Part IV examines the role of section 10(b) of the Act.\textsuperscript{22} Section 10(b) of the Act is meant to protect investors by preventing fraud\textsuperscript{23} and authorizes the SEC to regulate the use of “manipulative and deceptive devices.”\textsuperscript{24} This part argues that such devices may include financial statements.

\textsuperscript{17} The Investor’s Advocate, supra note 14.  
\textsuperscript{18} Id.  
\textsuperscript{19} Id.  
\textsuperscript{20} Infra, Part I.A.  
\textsuperscript{21} See infra, Part I.A.  
\textsuperscript{23} Id.  
\textsuperscript{24} Steve Thel, The Original Conceptions of Section 10(b) of the Securities Exchange Act, 42 STAN. L. REV. 385, 388 (1990); Stoneridge Inv. Partners, LLC v. Scientific-Atlanta, 552 U.S.
Part V addresses exactly how and why SOP 97-2, ASU 2009-13, and ASU 2009-14 undermine the purposes of section 10(b) by showing how they provide loopholes, which allow certain software companies to defraud investors. It also summarizes the implications of these rules.

Part VI recommends the adoption of a defer-all rule, in which companies must defer revenue for the entire transaction if revenue for one of the elements of the bundle has not been earned. In the alternative, the FASB should adopt a three-period rule, in which software companies must wait three quarterly periods before they can recognize revenue from bundled transactions if the income for one or more of the elements had not been earned. These recommendations would help strengthen securities regulation and protect the public.

I. Foundations of Revenue Recognition

Accounting practices are governed by the GAAP, which are developed by FASB, a seven-member independent board consisting of accounting professionals. The FASB, under the auspices of the SEC, authorizes and makes the accounting rules for firms doing business in the U.S. As such, GAAP is recognized as authoritative by the SEC and aims to improve the quality and transparency of accounting and financial-reporting standards and the standard setting process.

There are two levels of GAAP: authoritative and non-authoritative. The FASB Accounting Standards Codification (the “Codification”) is the source of authoritative U.S. GAAP applicable to...
nongovernmental entities. 29 “Rules and interpretive releases of the SEC under federal securities laws are also sources of authoritative GAAP for SEC registrants.”30 Additionally, “SEC staff issues Staff Accounting Bulletins that represent practices followed by the staff in administering SEC disclosure requirements, and it utilizes SEC Staff Announcements and Observer comments made at Emerging Issues Task Force meetings to publicly announce its views on certain accounting issues for SEC registrants.”31 Accounting and financial reporting practices are considered non-authoritative unless included in the Codification.32 The FASB may ratify or grandfather pre-codification standards—even if set forth by non-authoritative figures—into the Codification.33 All guidance and standards set forth in the Codification carry an equal level of authority.34

The Codification instructs entities to first consider the accounting principles in a source of authoritative GAAP (i.e. the Codification) for financial reporting guidance with respect to a specific transaction or event.35 If an event is not specified within a source of authoritative GAAP, then the entity should consider a source of authoritative GAAP that guides similar transactions and events. Finally, unless prohibited from doing so, the entity will consider non-authoritative GAAP from other sources.36 Sources of non-authoritative GAAP include, but are not limited to, sources that are widely recognized and prevalent in the industry such as FASB Concept Statements, American Institute of Certified Public Accountants (“AICPA”)37 Issues Papers, and Interna-

29.  Id. at 6 (defining a nongovernmental entity as “[an] entity that is not required to issue financial reports in accordance with guidance promulgated by the Governmental Accounting Standards Board or the Federal Accounting Standards Advisory Board”).
30.  Id.
31.  Id. at 6–7.
32.  Id. at 18.
34.  See Accounting Standards Update No. 2009-01, supra note 28, at 6.
35.  See id.
36.  See id. at 7.
37.  The AICPA is a member association that represents accountants. It sets non-authoritative and ethical standards for the accounting profession and sets U.S. auditing standards for the auditing of private companies; nonprofit organizations; and federal, state, and local governments. It develops and grades the Uniform CPA Examination and offers specialty credentials for CPAs that concentrate on personal financial planning, fraud and
tional Financial Reporting Standards of the International Accounting Standards Board.  

A. Traditional Revenue Recognition Policy

Early investors, managers, and accountants developed a conservative culture around recognizing revenue in financial reporting. Conservatism is a doctrine in financial reporting dictating that “possible errors in measurement [are accounted] in the direction of understatement rather than overstatement of net income and net assets.”

One of the principles guiding conservative financial reporting is called the matching principle, which states that expenses must be matched with the revenue that produced that expense. This means that companies offering products with multiple deliverables cannot recognize all of their revenue in one period. Instead these companies are required to defer revenue on some of those products to a future period in the event future expenses arise.

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See id.


Photo-Sonics, Inc. v. Comm’r, 357 F.2d 656, 657 (9th Cir. 1966) (citing 26 I.R.C. §§ 446, 471 (1954)).

Id.
B. Why SOP 97-2? History of Efforts to Standardize Revenue Recognition Practices

In the early 1980s, before the adoption of specific revenue recognition guidelines for the software industry, software companies differed in their revenue recognition approaches. Some used very conservative practices—recognizing revenue upon delivery of the item. Others used “decidedly aggressive” practices—recognizing revenue after the customer signed a purchase contract. During the early 1980s, since GAAP did not address revenue recognition by software companies, firms relied on industry practice.

The problem was that there were no consistent revenue recognition practices in the software industry. Lack of consistency or “diversity in practice” encouraged abuse or inaccuracy in financial reporting. Financial reporting abuse may include misreporting by understating costs or overstating revenue. Such abuse can negatively affect investors who rely on financial reporting to create an accurate portrayal of a company’s financial health. Thus, FASB tried to make accounting practices, by industry, as consistent as practicable. In 1982, a survey conducted by a computer services trade organization revealed that about 15 percent of large software companies identified contract signing as the critical event that justified recognizing revenue because that was the point when the customer became obligated to license the software rather than when the customer actually received the product. In 1987, the AICPA’s Accounting Standards Executive Committee (“ASE Committee”) unanimously determined that delivery of software (not contract signing) was the critical event for revenue recognition purposes since the legal signing of a contract was worth nothing without the actual ability to use the software.

II. Revenue Recognition Policies Try to Catch Up with Tech

Largely as an effort to halt the software industry’s financial reporting abuses and to clarify the applicable rules, AICPA created SOP
Despite the efforts to clarify revenue recognition, there can be confusion as to whom SOP 97-2 applies, how it is utilized, and when revenue can be recognized under the rule. However, more recent rules that apply to companies with “tangible products containing software and non-software components that function together to deliver the product’s essential functionality”—ASU 2009-13 and ASU 2009-14—make matters worse by relaxing SOP 97-2’s requirement that a vendor determine the fair value of software items by using Vendor-Specific Objective Evidence (“VSOE”) for undelivered elements of a bundled transaction.

A. Development of SOP 97-2

Literature released by AICPA is not an authoritative source of accounting guidance. But its contributions provide technical support, standard setting, and guidelines in conjunction with the FASB. Unless the SEC directs otherwise, all companies registered with the SEC must comply with the accounting standards set by FASB.

Prior to the development of SOP 97-2, SOP 91-1 was the authority on revenue recognition. SOP 91-1 applied the same revenue recognition criteria to both non-software and software products. But this proved difficult for software transactions that bundled a complex mix of products and services with a single fee for bundled transactions. Such difficulty is the rationale behind FASB’s break from conservative accounting practices via SOP 97-2.

51. See id.
52. See infra Parts II.B.1–3.
53. See infra Part II.C.
54. See infra Part II.B.2 (discussing VSOE).
55. See Commission Statement of Policy, supra note 25.
57. Id.
58. SOP 91-1 determined that the same basic criteria for revenue recognition that applied to non-software products should also apply to software products. It also adopted the same underlying criteria for delivery and collectability for software products as was applied to non-software products. SOP 91-1, however, did not clearly define the new standard, which caused financial reporting abuses to persist. Consequently, FASB created SOP 97-2 to define the standard in greater detail and add industry-relevant details. Carmichael, supra note 6, at 45.
59. Id.
60. Note that SOP 97-2 only applies in narrow circumstances. See infra Part II.B.
In October 1997, AICPA’s ASE Committee created SOP 97-2, Software Revenue Recognition, as a replacement for SOP 91-1.\(^\text{61}\) SOP 97-2 governed “software products that are essential to the function of any non-software product.”\(^\text{62}\) However, in October 2009, ASU 2009-14 removed certain products from the scope of SOP 97-2.\(^\text{63}\) This will be discussed in more detail later.\(^\text{64}\)

SOP 97-2 requires revenue to be “recognized in accordance with contract accounting\(^\text{65}\) when the arrangement requires significant production, modification, or customization of software.”\(^\text{66}\) However, when the transaction does not require significant modification of the software, a company may recognize the revenue of all elements of a bundled transaction (both software and non-software elements) if there is evidence of an agreement, delivery has occurred, the vendor’s price is fixed or determinable, and collectability is probable.\(^\text{67}\) SOP 97-2 serves as a narrow exception to the more traditional matching principle and is a break from conservative financial reporting because it allows software companies to recognize revenue before they recognize the expense for that revenue.

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61. See Carmichael, supra note 6, at 45.
63. See infra Part II.C.
64. See infra Part II.C.
65. Contract accounting is “[a] method of reporting profit or loss on certain long-term contracts by recognizing gross income and expenses in the tax year that the contract is completed.” Black’s Law Dictionary 22 (9th ed. 2009).
66. Petra & Slavin, supra note 65, at 38; Deloitte, Software Revenue Recognition: A Roadmap to Applying ASC 985-605, at 25 (2011) (“If an arrangement contains software as well as services that involve significant production, modification, or customization of the software, the services cannot be separately recognized from the software. In such cases, a vendor should apply contract accounting . . . to the entire arrangement.”) [hereinafter A Roadmap to Applying ASC 985-605].
SOP 97-2 MODEL:

Android phone
Expense $3.4 billion
Revenue 10.5 billion
Date: 2/19/2009

Upgrade/Warranty
Expense $2.5 billion
Revenue $5.1 billion
Date: Future

BUNDLE:
Android & Upgrade
Total Expense: $5.9 billion
Revenue: $15.6 billion
Date: 2/19/2009

B. Breadth and Scope of SOP 97-2

Some issues that have accompanied SOP 97-2 are related to its breadth and scope. For example, it is sometimes difficult to determine who can use SOP 97-2, when it can be used, and how it can be used. When the rule was first developed it appeared it would only affect software companies, companies with high tech products, or companies with a specific purpose of developing software. The policy failed to anticipate the magnitude and influence of software and high technology on non-software products and services. Thus, as we entered a new millennium, more and more companies found it necessary to evaluate their products and services to determine whether or not they fell under SOP 97-2.

Understanding the proper breadth and scope of SOP 97-2 is important because of the relative advantages and disadvantages companies have depending on whether it applies. Use of SOP 97-2 provides an advantage because companies can artificially inflate profits on their financial statements by recognizing all revenue upfront even if only

68. See Petra & Slavin, supra note 65, at 39.
69. See Greg Regan & Tim Regan, Software Revenue Recognition on the Rise, J. Acct., Dec. 2007, at 50, 50 (“When Statement of Position 97-2 . . . was issued in October 1997, it was clear that all software companies would transition to this new standard.”).
70. See id. (“When Statement of Position 97-2 . . . was issued in October 1997 . . . it was not clear how bright lines would blur for companies outside of the traditional software sector as technology evolved over the next decade.”).
71. Id. (discussing how a range of different companies must comply with, or consider, software revenue recognition rules as these companies increasingly rely on software technology).
part of the revenue from the bundle has been earned (i.e., costs for the transaction have not been incurred). Companies who must use traditional revenue recognition rules are at a disadvantage because they must defer the recognition of revenue until all of the revenue is earned (i.e., all costs have been incurred for the transaction), making their financial statements appear weaker than companies that fall under SOP 97-2.

1. Who Can Use SOP 97-2?

A company must use SOP 97-2 if they license, sell, lease, host, or market computer software. “[S]oftware and software-related elements of arrangements that include software that is more-than-incidental to the products or services in the arrangement as a whole” fall within SOP 97-2. To be clear, a service is covered by SOP 97-2 if software in the arrangement is essential to the functionality of that service. An exception applies for tangible products containing both software and non-software components that function together to deliver the product’s essential functionality. In such cases ASU 2009-13 and ASU 2009-14 will govern the transaction. But where the software is merely incidental to the function of the tangible product, SOP 97-2 applies.

To determine when SOP 97-2 applies, it helps to understand when ASU 2009-13 applies. In 2003, FASB created Emerging Issues Task Force Issue 00-21 (“EITF 00-21”) to govern multiple-deliverable arrangements. Certain Revenue Arrangements, supra note 3, ¶ 2(c).

72. See infra Part III.A.3.
73. SOP 97-2 only applies to hosting arrangements that give the customer the option to take possession of the software. In a typical hosting arrangement, a customer does not possess the software, but can access or use it on an as-needed basis over the Internet or through some other connection. Petra & Slavin, supra note 65, at 38.
74. Id.
75. “Software-related elements include software products and services . . . .” Certain Revenue Arrangements, supra note 3, ¶ 2(c).
76. Id. (struck-through material omitted).
77. Id.
78. See Debrief on ASU 2009-14, supra note 4, at 1.
79. Id.
80. See RALPH NEFF, RYAN DILLARD, G RANT T HORTON, D O Y OUR P RODUCTS F ALL UNDER SOFTWARE REVENUE RECOGNITION GUIDANCE? 3 (2011), http://revenuerecognition .web13.hubspot.com/Portals/219512/docs/RevRecGuidance.pdf (“Some arrangements include . . . nonessential software deliverables that are within the scope of [SOP 97-2].”); NAVIGATING THROUGH THE MAZE, supra note 70, at 61 (“Because the measurement software is essential to the device’s functionality, the measurement software and the device and the related training are excluded from the scope of ASC 985-605.”).
81. See RALPH NEFF, RYAN DILLARD, G RANT T HORTON, D O Y OUR P RODUCTS F ALL UNDER SOFTWARE REVENUE RECOGNITION GUIDANCE? 3 (2011), http://revenuerecognition .web13.hubspot.com/Portals/219512/docs/RevRecGuidance.pdf (“Some arrangements include . . . nonessential software deliverables that are within the scope of [SOP 97-2].”); NAVIGATING THROUGH THE MAZE, supra note 70, at 61 (“Because the measurement software is essential to the device’s functionality, the measurement software and the device and the related training are excluded from the scope of ASC 985-605.”).
ble products that include software incidental (but not essential) to the products and services as a whole. ASU 2009-13 replaced EITF 00-21 in October of 2009 and now governs “tangible products containing software components and non-software components that function together to deliver the product’s essential functionality.”

Now, in a bundled transaction software is essential to the function of a tangible product depending on an analysis of the following five factors set forth in ASU 2009-14: (1) “If sales of the tangible product without the software elements are infrequent, a rebuttable presumption exists that software elements are essential to the functionality of the tangible product;” (2) If similar products are only differentiated by whether the products contains the software, they are considered the same product under factor (1); (3) Software can also be sold standalone, but the separate sale of a software product shall not cause a presumption that the software is not essential to the tangible product’s functionality; (4) Software elements are not necessarily required to be embedded in the tangible product to be considered essential; and (5) Non-software elements must substantively contribute to the product’s functionality and may not merely be a mechanism to deliver the software to the customer.

Consider the Microsoft Corporation, which typically sells both the Windows Operating System (e.g., “Windows 8.1”) software and the Microsoft Office software (“Microsoft Office”) with its computer systems. Windows 8.1 would be considered essential to the computer system’s functionality while Microsoft Office would be considered merely incidental. This is because (1) Microsoft infrequently, if ever, sells computer systems without Windows 8.1. However, they frequently sell Microsoft Office without a computer system. (2) Since this factor pertains to tangible products referenced in factor (1), this factor does not


82. REVENUE ARRANGEMENTS WITH MULTIPLE DELIVERABLES, Emerging Issues Task Force Issue No. 00-21 (Fin. Accounting Standards Bd. 2003).
83. See Petra & Slavin, supra note 65, at 38; About the EITF, supra note 84.
84. Certain Revenue Arrangements, supra note 3.
85. Id. ¶ 4(a).
86. Id. ¶ 4(b).
87. Id. ¶ 4(c).
88. Id. ¶ 4(d).
89. Id. ¶ 4(e).
Windows 8.1 is unlikely to be sold standalone since it is useless without an accompanying computer system. However, Microsoft Office can be sold standalone since the software can be used in different lines of computers not just computers sold by Microsoft. (4) Windows 8.1 is required to be embedded or preloaded on all new computers in order for the computer to function. However, Microsoft Office does not need to be embedded in a computer. (5) The hardware elements of a computer substantively contribute to the functionality of both Windows 8.1 and Microsoft Office.

Thus, when applying ASU 2009-14’s five factors, Windows 8.1 would likely be deemed essential to the computer’s functionality while Microsoft Office would likely be deemed incidental to the computer’s functionality. Therefore, ASU 2009-14 would govern the sale of the Windows 8.1 software while SOP 97-2 would govern the sale of Microsoft Office. Note that SOP 97-2 governs the sale of Microsoft Office when it is bundled with a tangible product and is not essential to the product’s functionality. If the Microsoft Office software were bundled with other software products (e.g., software upgrades) then the bundled transaction would be purely software and also subject to SOP 97-2.

2. How Should SOP 97-2 Be Used?

Under SOP 97-2, a vendor must determine the fair value of software items by using Vendor-Specific Objective Evidence (“VSOE”), which “is limited to the price charged by the vendor for each element when it is sold separately.” VSOE is equated with the fair market value of an individual element of a bundle in a transaction. Therefore, to recognize all of the revenue from a multiple-deliverable sale, a company must be able to give the fair market value for each deliverable. The two standards that companies can use to mea-

90. See id. ¶ 4(b) (“If the only significant difference between similar products is that one product includes software that the other product does not, the products shall be considered the same product for the purpose of evaluating [the first factor].”).

91. Nefdt & Dillard, supra note 83, at 3 (“Some arrangements include software deliverables that are essential to the [tangible] product’s functionality that are within the scope of [ASU 2009-13], along with nonessential software deliverables that are within the scope of [SOP 97-2].”).

92. Petra & Slavin, supra note 65, at 38 (“If contract accounting is not required, SOP 97-2 requires that the vendor’s fee be allocated to the various elements based on vendor-specific objective evidence . . . of each element.”).

93. Id.

94. Id.

95. Id.
sure whether they may provide stand-alone value for each of their deliverables are (1) separate sales data for software products, and (2) competitors’ prices for non-software data.96

If a vendor has not determined VSOE for each element in the bundle then it must defer revenue for that bundle until either VSOE is determined for each element in the bundle or all elements have been delivered.97

However, if the item is a “non-software” item that does not fall under ASU 2009-13 or ASU 2009-14 then a company does not have to use VSOE to determine its fair value. Instead, the company can determine the item’s fair value based on a competitor’s prices for similar products and services, also known as third-party evidence (“TPE”). 98

3. When Should Revenue Be Recognized Under SOP 97-2?

Once a company or firm determines that it can recognize its revenue in accordance with SOP 97-2 (versus in accordance with contract accounting) the company will at some point need to determine when it is acceptable to recognize revenue from its multiple-deliverable transactions. Bundling can make it difficult to determine the proper time to book a sale and a company-related expense. Typically revenue is recognized when goods are delivered or when services are performed.99 However, these principles aren’t easily applied in the high-tech sector where principal elements (e.g., cell phones) are typically bundled with supporting elements (e.g., upgrades, warranties, and other services).100 The FASB guidelines suggest that if there is persuasive evidence that an agreement exists, delivery occurred, the vendor’s price is fixed or determinable, and collectability is probable,101 then a firm can safely recognize revenue from a bundled transaction.102

96. Regan & Regan, supra note 72, at 53.
97. Petra & Slavin, supra note 65, at 38.
98. Id. at 39.
99. Id. at 38.
100. See id. at 39.
102. Petra & Slavin, supra note 65, at 38; A Roadmap to Applying ASC 985-605, supra note 69, at 25.
C. ASU 2009-13 and ASU 2009-14 Alter the Landscape

In 2009, the FASB released ASU 2009-13 (formerly EITF 08-01) and ASU 2009-14 (formerly EITF 09-03). ASU 2009-13 removed certain products from the scope of SOP 97-2, specifically, “tangible products containing software components and non-software components that function together to deliver the product’s essential functionality.” The new rules give companies significant discretion to “determine the fair value of the undelivered portion of the ongoing obligation and [are] required only to defer revenue recognition on the undelivered portion of the sale.” Both ASU 2009-13 and ASU 2009-14 make revenue easier to recognize than under even SOP 97-2 because they eliminate the requirement for VSOE and permit use of the estimated selling price (“ESP”) of the undelivered portion if fair value evidence is unavailable. ESP is a more flexible standard than third-party evidence (“TPE”) or VSOE. ESP can potentially be applied to undelivered elements in an arrangement (permitting separation and acceleration of revenue recognition for items delivered). Finally, ESP allows pricing and discounting policies to be more flexible and more competitive than the rigid requirements of VSOE under SOP 97-2. The following figure illustrates the rank of various measures:

103. Jim McGleever, Getting Your Finance Processes in Shape for FASB’s New Revenue Recognition Rules, NetSuite, http://www.netsuite.com/portal/resource/articles/eitf-08-01-best-practices-for-adoption.shtml (last visited Apr. 24, 2014) (“EITF 08-01 . . . superseded EITF 00-21, which previously set forth the requirements that must be met for a company to recognize revenue from the sale of a delivered item that is a part of a multiple-element arrangement when other items have not yet been delivered.”).

104. Debrief on ASU 2009-14, supra note 4, at 1.

105. Id.


107. Debrief on ASU 2009-14, supra note 4, at 1.

108. Third-party evidence of selling price is “the price of the vendor’s or any competitor’s largely interchangeable products or services in a standalone sales to similarly situated customers.” Richard A. Cleaveland, Revenue Recognition (Topic 605) Multiple-Deliverable Arrangements A Consensus of the FASB Emerging Issues Task Force, EISNER AMPER (June 21, 2010), http://www.eisneramper.com/Revenue-Recognition-0610.aspx.

109. Debrief on ASU 2009-14, supra note 4, at 3.

110. Id. at 2 (“Since the lack of such evidence for undelivered items often prevents companies from recognizing revenue from undelivered elements, the use of estimated prices instead may permit many more elements to be recognized and potentially accelerating revenue recognition for delivered items.”).

111. Id.

112. McGleever, supra note 106.
III. Problems with SOP 97-2, ASU 2009-13, and ASU 2009-14

SOP 97-2, ASU 2009-13, and ASU 2009-14 are ambiguous rules that are particularly problematic when applied to bundled products.113 Violations of these rules lead to inaccurate financial reporting, which misleads investors.114 Immediately after SOP 97-2 was passed, many software companies began misreporting their earnings, which resulted in their having to later restate their earnings.115 Increases in restatements also followed the release of ASU 2009-13 and ASU 2009-14.116

The releases of ASU 2009-13 and ASU 2009-14 only exacerbated the problems presented by SOP 97-2 for the potential to mislead investors.

A. Bundled Products and Ambiguous Rules

When AICPA issued SOP 97-2 in 1997, the ASE committee adopted the requirement that revenue be fixed or determinable.117 The ASE committee determined that the nature of software arrangements caused a need for persuasive evidence of an arrangement, which is not the norm in all product sales.118

The ASE committee’s rationale for creating SOP 97-2 was to prevent practice abuses by providing “much more detailed and specific

114. *See infra* Part III.B.
115. *See infra* Part III.C.
116. *infra* Part III.C.
117. Carmichael, *infra* note 6, at 45.
118. *Id.*
guidance on how to account for multiple-element arrangements.”119 Initially, the SEC and AICPA subjected software companies to the same revenue recognition policies as companies that manufacture other products.120 However, “[these policies] proved difficult to apply to software arrangements involving complex mixes of products and services both specified and unspecified with a single fee for the bundled products and services.”121 The issue of recognizing revenue and expenses in different periods does not arise with the single sale of software products. For example, when a customer buys a computer at Best Buy, upon checkout the customer takes the computer home and Best Buy collects the customer’s money. At the checkout point, Best Buy has already incurred the costs of the computer so the product’s expense and revenue will be recognized in the same period. The same is true when a software company sells a service, such as a product repair warranty. The revenue for this service cannot be recognized until the company delivers the service.

1. Bundled Transactions Are the Root of the Problem

The main problem arises when a software company combines multiple elements, such as the computer and the software license, and sells them at the same time. This is called a bundled or multiple-element sale.122 The key issue here is discerning exactly when a software company should be allowed to recognize the revenue of its non-software deliverables. It is unclear whether the non-software deliverables fall under the scope of SOP 97-2 when they are bundled with the sale of software deliverables.123 “Under SOP 97-2, VSOE of fair value must be established for the non-software deliverables to avoid deferring revenue recognition.”124 A software company must defer its revenue if it cannot establish VSOE of fair value for non-software deliverables that have not been delivered.125

While companies that fall within SOP 97-2 must at least determine VSOE for deliverables that have not been delivered, companies
that are beyond the scope of SOP 97-2 and covered by ASU 2009-13 and ASU 2009-14 can avoid VSOE, altogether. They may look to ESP if fair value evidence is unavailable.126 ESP is a more flexible standard than both TPE and VSOE.127 may, in some instances be applied to undelivered elements in a bundle, which permits separation and acceleration of revenue recognition for items delivered.128 Finally, ESP allows pricing and discounting policies to be more flexible and more competitive than the rigid requirements of VSOE under SOP 97-2.129

2. In a Tangible Product the Line Between Essential and Nonessential Is Blurry

One problem is that a very blurry line exists between what is considered software in a tangible product that is essential versus non-essential to the product’s functionality.130 Thus, “[m]any high-tech companies struggle with determining whether their tangible products should be accounted for as a basic multiple-element arrangement as opposed to being accounted for under the software revenue recognition rules.”131 Although ASU 2009-14 sets forth the “essential to” the functionality requirement, determining which rules apply is not easy.132 For example, should software in a mobile smart phone be considered essential or nonessential to the functionality of the product? One may argue that it is non-essential to the functionality since a person could still make phone calls on a mobile smart phone without the particular vendor’s software. However, the software it holds arguably is essential to its function since most people purchase mobile smart phones for the games, applications, Internet browser, and other advanced features offered and not to simply make phone calls in the way that a landline phone is used. The lack of clarity surrounding SOP 97-

126. See Debrief on ASU 2009-14, supra note 4, at 2 (“[ASU 2009-14] eliminates the requirement for objective and reliable evidence of fair value in order to separate accounting units, permitting instead the use of estimated ‘selling prices’ for undelivered item [sic] if Fair Value evidence was unavailable.”).
127. Id. at 3.
128. Id.
129. Id.
130. See Nefdt & Dillard, supra note 83, at 3 (“Many high-tech companies struggle with determining whether their tangible products should be accounted for as a basic multiple-element arrangement as opposed to being accounted for under the software revenue recognition rules.”).
131. Id.
132. See id. (“Determining whether software in a tangible product is essential to its functionality requires management to exercise its judgment.”).
2, ASU 2009-13, and ASU 2009-14 may cause companies to fall out of compliance with GAAP.\(^\text{133}\)

3. **Equivocal Rules Provide a Clear Path to Violations**

The confusing nature of SOP 97-2, ASU 2009-13, and ASU 2009-14 gives software companies an easy excuse for violating the rules by misapplying them. Software companies that improperly apply the rules, whether intentionally or not, can avoid deferring their revenue to a future period. By recognizing the revenue from undelivered elements of a bundled sale too early, such companies overstate their current earnings and make their financial statements look healthier than they actually are.\(^\text{134}\) In this way, the intentional misapplication of revenue recognition rules functions to deceive and defraud investors and conflicts with the purposes of the Act.\(^\text{135}\) This problem is not unique to ill-intentioned software companies because the very existence of these rules allows software companies to legally overstate their earnings. Admittedly, software companies are different in that they may offer a complex mix of software and non-software products which are so interconnected that it may be difficult to determine differing points of sale and delivery.\(^\text{136}\) However, these difficulties do not justify the earnings overstatements allowed by SOP 97-2, ASU 2009-13, and

\(^{133}\) See Regan & Regan, *supra* note 72, at 51 (highlighting the example of NEC Corp., a company that was unable to adhere to SOP 97-2 requirements and was delisted from NASDAQ as a result) (“If companies are . . . unable to complete the requisite [SOP 97-2] analysis, they may be unable to prepare financial statements in accordance with GAAP.”); *Revenue Recognition: Hope to Cope with the New Standards*, *Revenue Recognition*, http://www.revenuerecognition.com/content/articles/9049/ (last visited Apr. 27, 2014) (“[FASB Chairman] Seidman, apparently acknowledging the potential for confusion in the upcoming standard shift [to the use of ASU 2009-13 and ASU 2009-14], said that the FASB planned on making a roadshow of this comment period, reaching out to key sectors via workshops . . . . ‘But there will be abuses [of the new standards]. Human nature never changes.’”).

\(^{134}\) See e.g., Barrie v. Intervoice-Brite, Inc., 397 F.3d 249, 256–58 (5th Cir. 2005) (investor-plaintiffs arguing that defendant’s supposedly strong financial statements were the result of recognizing revenue on sales of its software products in violation of U.S. GAAP and AICPA’s SOP 97-2); City of Royal Oak Ret. Sys. v. Juniper Networks, Inc., 880 F. Supp. 2d 1045, 1055 (N.D. Cal. 2012) (concluding that defendant provided sufficient disclosures to investors when defendant stated that “[a]s a result of the adoption of ASU 2009-13 and ASU 2009-14, net revenues for the three and six months ended in June 20, 2010, were approximately $53 million and $78 million higher than the net revenues that would have been recorded under the previous accounting rules”).

\(^{135}\) See *infra* Part V.

\(^{136}\) Petra & Slavin, *supra* note 65, at 38 (“The amount and timing of revenue recognition is complicated, however, by multiple-element arrangements that provide for multiple software deliverables [e.g., software products, upgrades or enhancements, postcontract customer support (PCS), or other services]. In hosting arrangements that are within the
ASU 2009-14. Software companies should not mislead investors just because they do not want to carry the extra burden of having to defer revenue until they deliver their products.

4. **ASU 2009-13 and ASU 2009-14 Allow Companies to Recognize Revenue Faster than Under Traditional Rules and SOP 97-2**

The narrowing of SOP 97-2’s scope did not solve the problems identified in this Comment and actually broadened the scope of the problems discussed. Recall that both ASU 2009-13 and ASU 2009-14 eliminate the requirement for VSOE and permit use of the more flexible estimated selling price (“ESP”) if fair value evidence is unavailable.137 ESP can potentially be applied to undelivered elements in an arrangement, consequently permitting the acceleration of revenue recognition for items delivered.138

This problem is more specifically set forth in the *Royal Oak*139 case where the plaintiff investors accused the defendants of section 10(b) violations because of their insufficient disclosures regarding the defendant company’s adoption of new accounting principles.140 Specifically, the plaintiffs claimed that the defendant’s statements about its revenue and operating margin growth were rendered misleading because defendants failed to adequately disclose the full impact of the Company’s early adoption of ASU 2009-13 and ASU 2009-14,141 which caused investors to think that reported earnings were higher than they actually were.142 The plaintiffs further alleged that “by transitioning to the new rules [ASU 2009-13 and ASU 2009-14], companies would be able to recognize revenue earlier than they could under the old rules”143 creating what appeared to be a revenue boost.144

The court ultimately determined that plaintiffs failed to plead sufficient facts to show that defendant’s disclosures were materially

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138. *Id.* at 2 (“Since the lack of such evidence for undelivered items often prevents companies from recognizing revenue from undelivered elements, the use of estimated prices instead may permit many more elements to be recognized and potentially accelerating revenue recognition for delivered items.”).
140. *Id.* at 1055–56.
141. *See id.* at 1065.
142. *Id.*
143. *Id.* at 1054.
144. *Id.* at 1055.
misleading statements under federal securities laws.\textsuperscript{145} Further, the court determined that the defendants made adequate disclosures of the new accounting practices by fully disclosing exactly how much larger its reported revenues were under the new accounting practices in its filings with the SEC.\textsuperscript{146}

However, several factors distinguish investors at large from the plaintiffs in this case. First, the defendants spoke directly to the plaintiffs in conference calls and identified their statements as “forward-looking” and accompanied such statements with cautionary language and explained “actual results could vary.”\textsuperscript{147} The typical investor participating in a public stock exchange would not have the luxury of participating in conference calls with a company to have the company contextualize the written opinions and statements contained in its annual financial report. Second, unlike in the \textit{Royal Oak} case where the court described the defendant’s forecasts as “vague, generalized assertions of corporate optimism or statements of mere puffing,”\textsuperscript{148} statements contained in an annual financial report are not generally taken to be assertions of corporate optimism. Instead, a reasonable investor would rely on the assertions contained in an annual financial report. Lastly, unlike in the \textit{Royal Oak} case, annual financial reports such as balance sheets are not forward-looking. Instead, they are backward-looking in that they describe a company’s current financial position, based on what occurred in the immediate past. Consequently, investors rely on annual financial reports to be a clear and accurate portrayal of the company’s financial health.\textsuperscript{150}

Further, disclosures in SEC filings are arguably inadequate, as it is common knowledge that companies typically include such disclosures in SEC filings that are hundreds of pages long.\textsuperscript{151} Additionally, such

\begin{footnotes}
\item[145.] Id. at 1067.
\item[146.] Id. at 1065–66.
\item[147.] Id. at 1062.
\item[148.] Id. at 1063 (internal quotation marks omitted).
\item[149.] Black’s Law Dictionary 163 (9th ed. 2009) (defining balance sheet as “[a] statement of an entity’s current financial position, disclosing the value of the entity’s assets, liabilities, and owners’ equity.”).
\item[150.] See The Investor’s Advocate, supra note 14.
\item[151.] The buried fact doctrine applies when the fact in question is hidden in a voluminous document or is disclosed in a piecemeal fashion that prevents a reasonable shareholder from realizing the “correlation and overall import of the various facts interspersed throughout . . .” the document. Kas v. Fin. Gen. Bankshares, Inc., 796 F.2d 508, 516 (D.C. Cir. 1986); see SEC v. Mozilo, No. CV-09-3994-JFW (MANx), 2010 WL 3656068, at *9 (C.D. Cal. 2010) (“[A] reasonable investor is not required to pore through all prior transcripts of earnings calls, review hundreds of prospectus supplements filed by indirect subsidiaries, or ‘connect the dots’ in a company’s various SEC filings.”).
\end{footnotes}
disclosures are typically in fine print or in a footnote that refers to another footnote or another document entirely. All of these facts would make it difficult for investors to actually comprehend or even notice the disclosures.

Therefore, the release of ASU 2009-13 and ASU 2009-14 broadens the scope of the problems originally presented by SOP 97-2. Companies are able to recognize revenue earlier than they could under both traditional rules and SOP 97-2. This creates what investors may perceive to be a revenue boost. This problem is not resolved when a company fully discloses its adoption of the accounting practices in its SEC filings for the reasons stated previously.

B. Effects on Shares

Revenue recognition policies are complicated by multiple-element arrangements that provide for multiple-software deliverables. These arrangements force companies to employ complicated and costly methods, such as VSOE analysis, to determine how to allocate a single fee for both products delivered in the present and services delivered in the future. Knowing when to recognize revenue is especially difficult since the time at which future services are performed is generally unpredictable and, depending on the product or service, can expand years into the future. Recall the previous example figures in Part II.A. If a software company such as Verizon sold multiple deliverables that included a cell phone with future upgrades and a warranty for the repair of any software malfunctions, then Verizon traditionally could not recognize the revenue for all of those deliverables at the time of shipment because this would violate the matching principle. However, under SOP 97-2 a company could recognize the revenue from a bundled sale upfront only if the cost of the subsequent expenses is known, or more formally, if VSOE substantiates the cost for each product.

But now, under ASU 2009-14, if we assume that the software that comes with the phone is essential to its functionality (the phone could not operate without the software and the company infrequently sells the hardware without the software), then ASU 2009-13 applies. Ac-

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152. Petra & Slavin, supra note 65, at 38.
154. See Petra & Slavin, supra note 65, at 38.
155. See Debrief on ASU 2009-14, supra note 4, at 1; Nefdt & Dillard, supra note 83, at 3 (“If software in a tangible product is essential to its functionality, the entire product, in-
Accordingly, the company may rely on ESP, which is a more flexible standard than both TPE and VSOE. ESP can be applied to undelivered elements in an arrangement and permits acceleration of revenue recognition for items delivered.

In terms of its effect on the prices of shares of stock, accelerated revenue recognition can be superficially beneficial to software companies because recognizing all of their revenue up front allows them to appear to shareholders as if they are flourishing. This effect is only helpful if their reports of increased revenue are in fact accurate. However, if a company cannot accurately gauge the scope or depth of their future expenses, then financial reports are more likely to be inaccurate and overstate their net revenue.

Inaccurate reporting is potentially devastating to shareholders and companies because those who invest in companies on the false belief that the company is flourishing are at serious risk of losing their investments later. When investors become aware that a company has overstated its growth, they are likely to remove their equity from the company’s books—by selling their shares of stock—to avoid any future dealings with that company.

including the software, is outside the scope of [SOP 97-2] and is instead within the scope of [ASU 2009-13].

156. See Debrief on ASU 2009-14, supra note 4, at 3.

157. Debrief on ASU 2009-14, supra note 4, at 2 (“Since the lack of such evidence for undelivered items often prevents companies from recognizing revenue from undelivered elements, the use of estimated prices instead may permit many more elements to be recognized and potentially accelerating revenue recognition for delivered items.”).

158. See Jennifer Altamuro et al., The Effects of Accelerated Revenue Recognition on Earnings Management and Earnings Informativeness: Evidence from SEC Staff Accounting Bulletin No. 101, 80 Acct. Rev. 373, 399 (2005) (“The revenue recognition practices targeted by SAB No. 101[, using accelerated revenue recognition,] have been used by some firms to manage earnings . . . .”); Lorraine Magrath & Leonard G. Weld, Abusive Earnings Management and Early Warning Signs, 72 CPA J. 50, 51 (2002), available at http://www.nyscpa.org/cpajournal/2002/0802/features/085002.htm (“Earnings management practices can be designed either to assist managers in fulfilling their obligations to stakeholders or to deceive investors. . . . [C]orporate managers . . . let the desire to meet earnings expectations override good business practices.”).

159. If the reports of increased revenue are inaccurate, companies can be harmed by their later efforts to make up the reported but unearned revenue. See Magrath & Weld, supra note 162, at 53 (“The seemingly common consequence of improper revenue recognition practices is that, once started, companies must continue earnings management activities in order to meet ever-increasing internal sales targets and analysts’ expectations . . . . Eventually, companies must engage in more blatant fraudulent activities . . . to perpetuate myths involving company ‘growth.’”).

160. See id. at 51 (“Regardless of fault, when earnings management and fraudulent accounting schemes are uncovered, the monetary losses can be staggering. Enron’s stock fell from its high of $90.75 to $0.68 after the SEC began investigating Enron’s accounting practices. After the collapse in the market value of its stock, Enron was forced to seek...
Often, changes in earnings are due to inaccurate financial reporting by companies that abuse or misapply SOP 97-2. Additionally, the mere nature of ASU 2009-13 and ASU 2009-14 may lead to technically legal financial reporting that nevertheless misstates a company’s earnings. In the past, once the SEC has become aware of this misreporting, companies have been forced to restate their financials. When a company restates its financials investors will likely become bearish about that company’s securities and may question the veracity of any earnings it reports in the future. Thus, firms should avoid practices that increase the likelihood of a restatement.

C. Restatements

As previously stated, financial report restatements are ordered by the SEC when companies inaccurately report their financial status. When the SEC released Staff Accounting Bulletin 101 (“SAB 101”) on December 3, 1999, the stock of many companies took a deep dive because it compelled many firms to restate their revenue downward, bankruptcy protection, resulting in the largest bankruptcy in U.S. history. A recent Financial Executives International (FEI) report indicates that the stock market lost more than $34 billion during the three-day period during which the three most egregious cases of abusive earnings management in 2000 (Lucent Technologies, Cendant, and MicroStrategy) surfaced.

161. See e.g., Barrie v. Intervoice-Brite, Inc., 397 F.3d 249, 256–58 (5th Cir. 2005) (investor-plaintiffs arguing that defendant’s supposedly strong financial statements were the result of recognizing revenue on sales of its software products in violation of U.S. GAAP and AICPA’s SOP 97-2); Regan & Regan, supra note 72, at 51 (“Such was the case with Tokyo-based NEC Corp. The information technology, mobile and electronic device company announced in September that it was unable to complete the analysis necessary under SOP 97-2 to provide vendor specific objective evidence (VSOE) to support recognition of revenue from certain types of software and maintenance and support services provided as part of multiple-element contracts.”); Alix Stuart, Why VSOE Spells Trouble, CFO (Jan. 1, 2008), http://www.cfo.com/printable/article.cfm/10328463/c_10346944 (“With sincere apologies to investors everywhere, NEC said its financial statements from 2000 to 2006 were now unreliable, and that it would accept delisting in New York.”).

162. See e.g., City of Royal Oak Ret. Sys. v. Juniper Networks, Inc., 880 F. Supp. 2d 1045 (N.D. Cal. 2012) (concluding that defendant provided sufficient disclosures to investors when defendant stated that “as a result of the adoption of ASU 2009-13 and ASU 2009-14, net revenues for the three and six months ended in June 20, 2010, were approximately $53 million and $78 million higher than the net revenues that would have been recorded under the previous accounting rules”).

163. See infra Part III.C.

164. An investor is bearish if he or she “believes that a particular security or market is headed downward. . . . Bears are generally pessimistic about the state of a given market.” Bear Definition, INVESTOPEDIA, http://www.investopedia.com/terms/b/bear.asp (last visited Apr. 23, 2014).

which encouraged investors to sell their stock. According to a securities lawsuit database at Stanford University, subsequent to SAB 101, revenue overstatement cases and securities class actions occurred more often than in previous years. Being ordered to restate a financial report can be financially damaging to a company because it causes investors to lose faith in the financial health of a company. Although incorrect financial reporting does not necessarily indicate fraud—it could simply mean that a company employed the wrong accounting principle—once a company loses face or exposes itself to the monetary risks that accompany securities fraud litigation, it can be very difficult to recover. The following chart details the restatement trend from 2001–2007:

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166. Id.
168. Higgins, supra note 169, at 42.
169. See Fred H.M. Gertsen et al., Avoiding Reputation Damage in Financial Restatements, 39 LONG RANGE PLAN. 429, 429 (2006), available at http://www.rsm.nl/fileadmin/default/content/rsml2/attachments/pdf1/avoiding%20reputation%20damage (“The incidence of companies restating their financial results has recently been increasing steadily each year. This has resulted in the public trust in large companies being eroded, and in some cases, most notably Enron, the restatement has triggered the company’s downfall.”); Magrath & Weld, supra note 162, at 51 (“Enron’s stock fell from its high of $90.75 to $0.68 after the SEC began investigating Enron’s accounting practices.”).
As illustrated, the need for restatements grew tremendously from 2001 through 2006. According to Audit Analytics,\textsuperscript{171} this result is primarily due to misstated debt, expense recording, revenue recognition, and classification errors.\textsuperscript{172}

Software companies’ restatement rate grew from 18 in 1997 to 74 in 1999.\textsuperscript{173} Although this number went back down to 66 in 2000, it was still up from its 1997 rate.\textsuperscript{174} See the figure\textsuperscript{175} below:

\begin{figure}
\centering
\includegraphics[width=\textwidth]{restatements.png}
\caption{Restatements by Industry (1997-2001)}
\end{figure}

The numbers in the figure reveal the impact of SOP 97-2. The figure indicates that immediately after SOP 97-2 was passed, software companies began increasingly misreporting their earnings, which resulted in their having to later restate their earnings.

ASU 2009-13 and ASU 2009-14 may also be contributing to an increase in restatements. In 2010, the year that the new rules were to take effect,\textsuperscript{176} restatements increased by 8 percent despite having decreased over the previous three years.\textsuperscript{177} And in 2011, restatements

\begin{footnotesize}
\begin{enumerate}
\item \textsuperscript{171} “Audit Analytics is an innovative on-line public company intelligence service available from the Ives Group Inc., a leading independent research provider focused on the accounting, insurance, regulatory, legal and investment communities.” About, Audit Analytics, http://www.auditanalytics.com/0000/ (last visited Mar. 13, 2014).
\item \textsuperscript{172} Robertson, supra note 175.
\item \textsuperscript{174} Id.
\item \textsuperscript{175} Id.
\item \textsuperscript{176} See Debrief on ASU 2009-14, supra note 4, at 2 (“ASU 2009-14 will be effective for fiscal years beginning June 15th 2010 and early adoption is possible.”).
\item \textsuperscript{177} Tammy Whitehouse, After 3 Years of Decline, Restatements Turn Up in 2010, Compliance Week (May 11, 2011), http://www.complianceweek.com/after-3-years-of-decline-re-statements-turn-up-in-2010/article/202518/.
\end{enumerate}
\end{footnotesize}
remained about 8 percent higher than 2009 levels, which includes increases over 2010 levels for companies listed on the NYSE.\textsuperscript{178}

The previous figure and statistics only reveal the misreporting that was discovered. However, more may go unnoticed. The increase in restatements may indicate that software companies took SOP 97-2 and then ASU 2009-13 and ASU 2009-14 as licenses to inflate their earnings by recognizing all of their revenue upfront. However, some of the restatements may be due, in part, to genuine confusion about when and how to apply these rules. Financial misreporting undermines the very purpose of the SEC, which is to protect the integrity of the securities market.

IV. The Role of § 10(b) of the Securities and Exchange Act

Section 10(b) of the Act is designed to protect investors from securities fraud.\textsuperscript{179} Such fraud may be perpetrated by the managers of publicly-owned corporations.\textsuperscript{180} Section 10(b) regulates securities fraud by stating, inter alia:

\begin{quote}
It shall be unlawful for any person, directly or indirectly, by use of any means or instrumentality of interstate commerce or of the mails, or of any facility of any national securities exchange. . . . (b) To use or employ, in connection with the purchase or sale of any security registered on a national securities exchange or any security not so registered . . . any manipulative or deceptive device or contrivance in contravention of such rules and regulations as the Commission may prescribe as necessary or appropriate in the public interest or for the protection of investors.\textsuperscript{181}
\end{quote}

Rule 10b-5,\textsuperscript{182} issued by the SEC under section 10(b), was implemented to protect the integrity of the securities market by prohibiting fraud or misreporting.\textsuperscript{183} Rule 10b-5 specifically regulates the use of “manipulative and deceptive devices.”\textsuperscript{184} “[T]he overriding purpose of

\textsuperscript{179} 15 U.S.C. § 78b (2012); \textit{The Investor’s Advocate, supra} note 14.
\textsuperscript{181} Id.
\textsuperscript{182} 17 C.F.R. § 240.10b-5 (2013).
\textsuperscript{183} 15 U.S.C. § 78b; \textit{The Investor’s Advocate, supra} note 14.
\textsuperscript{184} 17 C.F.R. § 240.10b-5.
Section 10(b) and Rule 10b-5 was to protect the purity of the securities market . . . .”185 The purity of the securities market depends on the availability of accurate information about publicly-traded companies. The income statement is an example of a tool that investors use to gain information about companies.

A company’s income statement is a device used to in essence all of the revenues, expenses, gains and losses that a business incurred during a given period.186 Investors rely on financial statements such as the income statement to provide an accurate and transparent portrayal of the company’s financial position.187 The information found on these statements can be the deciding factor for determining whether or not investors purchase debt or equity securities in a company. A company with high revenue is viewed as financially strong and therefore more likely to attract investors because the investors believe that the company can provide them with a high return on their investment. Investors will form an opposite opinion about a company with low revenue. Thus, an income statement is a very powerful device because it can literally make or break a company in the eyes of investors. As a result, corporate officers have a strong incentive to attract investors by using their financial statements to make their company look as strong as possible. Unfortunately, such pressures may encourage corporate officers to inflate their actual earnings,188 which is a clear violation of rule 10b-5 since it involves employing manipulative devices to influence the purchase or sale of a security.

For example, in 2011 Hewlett-Packard (“HP”) paid $11.1 billion for Autonomy, a software firm based in the United Kingdom.189 However, on November 20, 2012, HP revealed that it had to write down $5 billion of the acquisition price because of “serious accounting improprieties, misrepresentation and disclosure failures.”190 The announcement caused a one-day drop in stock price of “12 percent to a 10-year low of $11.71.”191 HP alleged that Autonomy willfully inflated revenue

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186. Black’s Law Dictionary 163 (9th Ed. 2009) (defining income statement as “[a] statement of all the revenues, expenses, gains, and losses that a business incurred during a given period”).
187. See The Investor’s Advocate, supra note 14.
188. See, e.g., McKenna, supra note 185.
189. Id.
190. Id.
on its financial statements to mislead potential investors and buyers.\textsuperscript{192} According to HP, Autonomy was selling some of its hardware products at a loss but booked the hardware sales as high-margin software sales.\textsuperscript{193} This example evidences the type of power that financial reporting and accounting practices have over investment decisions—even those made by sophisticated companies.

Securities fraud is further made possible by auditing firms who do not closely screen the financial statements of the firms they are auditing. For example, HP relied on one of the most reputable auditing firms in the industry, Deloitte LLP, to help it perform its due diligence during the acquisition process.\textsuperscript{194} Despite its efforts, Deloitte did not detect the material misstatements on Autonomy’s financials.\textsuperscript{195} HP chose Price Waterhouse Coopers LLP to help it investigate the claims of a senior member of Autonomy’s leadership team who blew the proverbial whistle by revealing “there had been a series of questionable accounting and business practices prior to the acquisition by HP.”\textsuperscript{196} Ernst & Young also signed off on the deal at the end of 2011 as HP’s auditor.\textsuperscript{197} HP also hired auditing firm KPMG to audit Deloitte’s work during the acquisition process.\textsuperscript{198} Despite review by two of the so-called “Big Four,” or the four most reputable auditing firms in the financial industry,\textsuperscript{199} Autonomy’s alleged fraud went unnoticed.\textsuperscript{200}

The harm caused by Autonomy is a direct result of financial misreporting in financial statements. SOP 97-2, ASU 2009-13, and ASU 2009-14 pose the same or similar harm because they make financial misreporting more likely. Thus, section 10(b) and rule 10b-5 should effectively function as a system of checks and balances against the type of securities fraud and/or deception that can be perpetuated through complex financial reporting and accounting practices like SOP 97-2, ASU 2009-13, and ASU 2009-14.

\textsuperscript{192} See id.
\textsuperscript{193} Id.
\textsuperscript{195} See McKenna, supra note 185.
\textsuperscript{196} Id.
\textsuperscript{197} Id.
\textsuperscript{198} Id.
\textsuperscript{199} See id.
\textsuperscript{200} Id.
V. SOP 97-2, ASU 2009-13, and ASU 2009-14 Directly Conflict with the Purpose of Section 10(b)

SOP 97-2, ASU 2009-13, and ASU 2009-14 allow software companies to use their financial statements as manipulative devices in connection with the purchase or sale of securities because these rules allow software companies to report revenue they have not earned. By reporting unearned revenue to potential investors, software companies are able to artificially inflate their financial statements. Once enhanced by unearned revenue, financial statements indirectly become manipulative devices.

Equity investors who invest in publicly traded corporations heavily rely on reported financials to make investment decisions and are drawn to high risk-adjusted returns or earnings figures. Specifically, equity investors want high returns in relation to the risk associated with their investments. This is evidenced by the mere fact that equity investors are investing their money in corporations rather than placing their money in a savings account or purchasing a certificate of deposit, both of which also offer financial returns but have lower risk and significantly lower returns. By making equity investments, investors assume higher risk in exchange for the potential to receive higher returns or earnings. Thus, equity investors sign up to assume some risk but such risk must make sense in light of the returns anticipated.

Financial statements help equity investors determine whether an equity investment makes sense because they provide a snapshot of the health of a company at the time of reporting or its recent revenue. So there is a substantial likelihood that a reasonable investor would consider accurate financial statements important in deciding how to invest their money. It is easy to see how financial statements can be

201. See supra Part III.B.
202. See The Investor’s Advocate, supra note 14 (“The laws and rules that govern the securities industry in the United States derive from a simple and straightforward concept: all investors, whether large institutions or private individuals, should have access to certain basic facts about an investment prior to buying it, and so long as they hold it. To achieve this, the SEC requires public companies to disclose meaningful financial and other information to the public. This provides a common pool of knowledge for all investors to use to judge for themselves whether to buy, sell, or hold a particular security. Only through the steady flow of timely, comprehensive, and accurate information can people make sound investment decisions.”).
203. Risk-Return Tradeoff Definition, INVESTOPEDIA, http://www.investopedia.com/terms/r/riskreturntradeoff.asp (last visited Apr. 25, 2014) (“The principle that potential return rises with an increase in risk. Low levels of uncertainty (low-risk) are associated with low potential returns, whereas high levels of uncertainty (high-risk) are associated with high potential returns.”).
directly employed by software companies as manipulative devices used in connection with the purchase or sale of securities in violation of rule 10b-5.

Initially, SOP 97-2, ASU 2009-13, and ASU 2009-14 may seem like a perfectly appropriate way to account for bundled or multiple-element products and services. However, in practice these rules function as an accounting loophole that is subject to widespread abuse. Such abuse may rise to the level of direct forms of securities fraud. Section 10(b) and rule 10b-5 appear to be more effective in regulating direct forms of securities fraud such as insider trading, short-selling abuses, mutual fund frauds, or Ponzi schemes. However, more indirect forms of securities fraud such as financial misreporting may escape the grip of section 10(b) and rule 10b-5 because SOP 97-2, ASU 2009-13, and ASU 2009-14, all promote lenient revenue recognition practices. As these rules stand now, companies may legally inflate their earnings by recognizing unearned revenue upfront.

Consequently, SOP 97-2, ASU 2009-13, and ASU 2009-14 directly conflict with an important purpose of section 10(b) and rule 10b-5, which is to prevent the direct or indirect use of any means or instrumentality to employ any manipulative device or contrivance in connection with the purchase or sale of any security registered or not registered, for the protection of investors.204

VI. Recommendations

The purpose of rule 10b-5 is to prevent investor fraud and reduce improprieties in the securities market.205 While the purpose of ASU 2009-13 and ASU 2009-14 is to narrow the scope of SOP 97-2,206 and the purpose of SOP 97-2 is to provide clarity about how to recognize revenue in multiple-element transactions, these rules have the incidental effect of undermining rule 10b-5.

The combination of earnings management techniques and the pressure imposed by Wall Street on managers to report high earnings makes it difficult for managers to avoid misstating earnings or padding expected earnings to compensate for inadequacies in sales.207

205. See 17 C.F.R. § 240.10b-5.
206. Debrief on ASU 2009-14, supra note 4, at 3.
207. Robert M. Bowen et al., Determinants of Revenue-reporting Practices for Internet Firms, 19 CONTEMP. ACCT. RES. 523, 525–26 (2002) (“[F]inancial press commentary, regulatory concerns, and empirical evidence suggest that managers of Internet firms have economic incentives to report relatively high levels of revenue. Incentives to influence stock prices
“Accounting systems are crucial to valuation.” Therefore, to help avoid misstatements, adoption of one of the following is proposed: (1) Software companies that choose to bundle their transactions must defer revenue for the entire transaction if revenue for one of the elements of the bundle has not been earned, or (2) software companies must wait three quarterly periods before they can recognize revenue from bundled transactions if the income for one or more of the elements had not been earned yet.

A. Proposal 1: The Defer-All Rule

Under this approach, software companies that choose to bundle their transactions would be required to defer revenue for the entire transaction if revenue for one of the elements of the bundle has not been earned. This rule would be the exact opposite of SOP 97-2, ASU 2009-13, and ASU 2009-14, which allow upfront recognition. In the case of ASU 2009-13 and ASU 2009-14, through the application of the ESP measure accounting managers may do little more than guess at the price of the undelivered elements. For example, assume a package includes computer software, a computer system, and a software upgrade. Assume the customer will redeem the upgrade in the future. At the time of sale, Company A earned the revenue for the software and the computer system because it delivered these items to the customer. Here, the cost of the transaction has already been factored in. However, the revenue for the software upgrade is not accurate because the cost of the upgrade has not been accounted for. Thus, under this rule, Company A would defer revenue from the entire bundle until it has incurred the cost associated with the revenue for the software upgrade (i.e. Company A gives the customer the software upgrade).

Companies that benefit from reporting their income upfront or at the time of sale are likely to oppose this defer-all rule because by


209. See supra Part II.C.
deferring recognition of their earnings until a later date, their financial statements look less attractive to potential investors. This proposal imposes very conservative reporting standards on bundled transactions by prohibiting Company A from estimating the selling price and/or recognizing any earnings until all items have been delivered. But if an item or service has not been delivered then the true revenue from the transaction has not been earned, because the cost has not been factored in. Conservative reporting standards are more likely to protect investors and keep the securities market pure and honest by requiring more accurate reporting of revenue that accounts for the cost of the transaction. Unlike SOP 97-2, ASU 2009-13, and ASU 2009-14, this method does not permit a company to legally inflate its earnings by recognizing unearned revenue upfront.

B. Proposal 2: The Three-Period Rule

Under this rule, software companies that bundle multiple-elements into one transaction would be required to wait three financial reporting periods\(^\text{210}\) before recognizing the revenue of the entire bundled transaction. This rule would only apply if revenue for one or more of the elements in the transaction has not been earned (e.g., delivered). For example, if Company A sold the same bundled transaction (the computer system, software, and future upgrade) to a customer, then Company A must either wait until (1) all elements of the bundle have been delivered, or (2) three financial reporting periods have passed, whichever occurs sooner. Unlike SOP 97-2, ASU 2009-13, and ASU 2009-14, this method does not allow a company to automatically recognize revenue simply because it bundled delivered items with non-delivered items. Nine months is a safe waiting period because it gives software companies a conservative amount of time to actually incur the expense. For example, given the ever-changing nature of the technology industry, Company A’s customer is likely to redeem the software upgrade within nine months, if at all.\(^\text{211}\) Since

\(^{210}\) Financial reports are submitted on a quarterly basis so three financial reporting periods is equivalent to nine (9) months. *Quarter (Q1, Q2, Q3, Q4) Definition*, INVESTOPEDIA, http://www.investopedia.com/terms/q/quarter.asp (last visited Apr. 23, 2014).

\(^{211}\) See e.g., David Smith, *iOS Version Stats*, DAVID SMITH BLOG (Apr. 23, 2014, 6:01 PM), http://david-smith.org/iosversionstats/ (showing that the percentage of Apple device users that upgraded their mobile platform to the latest version of iOS remained steady after approximately six weeks); David Smith, *iOS 5.1 Upgrade Stats*, DAVID SMITH BLOG (Mar. 10, 2012), http://david-smith.org/blog/2012/03/10/ios-5-dot-1-upgrade-stats/ (showing that the percentage of Apple device users that upgraded their mobile platform to iOS 5.1 remained steady over one month).
technology is constantly being updated and improved, a customer who wants the benefit of the upgrade is not likely to wait over nine months to claim this benefit. Therefore, the three-period rule is a respectable amount of time to impose on software companies.

Software companies will likely argue that three periods is entirely too long for a company to wait to report revenue because it weakens their financial statements and prevents them from reporting revenue from any non-software items they may have sold. However, if software companies like Company A do not want to be subjected to these proposed rules then they could always unbundle their transactions, where practicable, and sell each item separately.

This method would eliminate the practice under ASU 2009-13 and ASU 2009-14 of estimating the selling price upfront. Instead, companies wishing to apply SOP 97-2, ASU 2009-13, or ASU 2009-14 would need to wait at least three financial periods before they applied ESP measures to undelivered elements in a bundled transaction.

This method also reduces the risk of misrepresentation because a company that waits three periods to recognize revenue is less likely to need to employ the lenient ESP measures since such companies are more likely to have incurred the expense or delivered any remaining item or items. As a result, such companies could recognize the revenue from the software and the computer upfront but would have to defer recognition of the software upgrade.

While this suggestion does not give software companies the benefit of bundling transactions, it does allow them to recognize immediately at least some of their earnings. Such practice would protect investors because it only allows companies to recognize revenue that they have actually earned or are very likely to have earned, which reduces the possibility of legally reporting inflated or estimated earnings, a concern that outweighs any inconveniences to software companies.

Conclusion

Software companies are in a unique position in that they have the ability to create highly specialized and highly valued products. Software companies also enjoy the benefit of SOP 97-2, ASU 2009-13, and ASU 2009-14, which allows them to report revenue from bundled software sales upfront. However, products and services offered by software companies tend to involve a complex mix of items that can be delivered in the present and items that cannot be delivered until some time in the future. Such complexities complicate financial re-
porting practices and require software companies to spend a lot of money to make sure its reporting practices comply with GAAP. Such complexities create a risk of securities fraud in that they enable a software company to use one or more of its financial statements as a manipulative device or contrivance by inflating the company’s actual earnings. Thus, as previously argued, SOP 97-2, ASU 2009-13, and ASU 2009-14, should be eliminated and replaced with either: (1) the defer-all rule or (2) the three-period rule to reduce the risk of fraud by restoring the tradition of conservative financial reporting and accounting.

SOP 97-2, ASU 2009-13, and ASU 2009-14 are not necessary loopholes for software companies—especially since the loopholes are at the expense of the public. Although the elimination of these rules may inconvenience software companies, this inconvenience is outweighed by the increased accuracy and transparency that would result from the elimination of these rules. A securities regulatory regime that favors accuracy and transparency in financial reporting, the purpose of which is to protect investors from securities fraud and uphold the integrity of the securities market, requires the elimination of policies like SOP 97-2, ASU 2009-13, and ASU 2009-14.

Ultimately by focusing on creating distinguished technology, reporting accurately, and by giving less focus to creating the illusion of high revenues, software firms can gain invaluable social capital and trust from investors. However, to do this software firms must realize that accounting and valuation practice is as much an art as it is a science.

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213. Lee, supra note 208.