2012

Differences in Interim Financial Reporting: GAAP vs. IFRS

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DIFFERENCES IN INTERIM FINANCIAL REPORTING:

GAAP VS. IFRS

A Thesis Submitted

in Partial Fulfillment

of the Requirements for the Designation

University Honors with Distinction

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May 2012

This Study by: Benjamin Carton

Entitled: Differences in Interim Financial Reporting: GAAP vs. IFRS

has been approved as meeting the thesis or project requirement for the Designation

University Honors with Distinction.

5/2/12

Date

Mark Bauman, Honors Thesis/Project Advisor

5/7/12

Date

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Introduction

In order to remain competitive and reach new customers, more and more companies are beginning to operate multi-nationally. This has resulted in a number of positive effects ranging from increased product availability and choice to lower production costs to a new pool of potential investors. Unfortunately, the globalization of companies has also resulted in some negative effects. A negative effect created with globalization is based on the positive effect of the increased investor pool. This negative effect is the difficulty in comparability of financial statements.

When investors are trying to decide what companies they should invest in, one of the first sources of information they consider are the financial statements of the companies. Financial statements provide investors with a wealth of information about how the company operates, its level of performance, and its financial condition. They also provide insight about what can be expected from the company in the future. All of this information is beneficial, but it may be significantly less valuable when the rules for reporting this information are different for companies that are headquartered in different countries.

Currently, the United States has one set of accounting rules called generally accepted accounting principles (GAAP). Almost all countries outside of the United States use a different set of accounting rules called International Financial Reporting Standards (IFRS). These two sets of rules are extremely comprehensive. The important point here is that there are several significant differences between them that affect the way certain items are presented and/or measured in financial statements. Two important distinctions are between the discrete and the integral basis and between quarterly and semiannual reports. When there are differences such as these, it is difficult for investors to make a consistent comparison between companies that use the different rules.

This thesis examines the different accounting standards on the topic of interim financial reporting. It answers the question: What are the differences in accounting reporting standards on interim financial reporting between GAAP and IFRS? As the world becomes more globalized, it is likely that GAAP and IFRS will eventually be merged into one universal set of accounting rules. In order to arrive at this combined set of rules, the differences must first be understood and evaluated. Based on existing theory and research, I have argued which specific approach is preferable. I have recommended that the discrete basis be used to prepare quarterly interim financial reports.

Literature Review

If a reporting period is shorter than a full fiscal year, it is considered to be an interim period. According to International Accounting Standard 34(IAS 34), Interim Financial Reporting,

> An interim financial report shall include, at a minimum, the following components:
> (a) condensed balance sheet;
> (b) condensed income statement;
> (c) condensed statement showing either (i) all changes in equity or (ii) changes in equity other than those arising from capital transactions with owners and distributions to owners;
> (d) condensed cash flow statement; and
> (e) selected explanatory notes.[1]

[1] IASC Foundation Staff. 2009. *IAS 34 interim financial reporting* (London: IFRS Foundation).

This information must be provided in order to help investors and creditors. It was found that "timely and reliable interim financial reporting improves the ability of investors, creditors, and others to understand an entity's capacity to generate earnings and cash flows and its financial condition and liquidity."[2] Estimates are relied upon more during interim financial reporting than regular annual reporting. These estimates can bring about a certain level of risk that is inherent in interim financial reporting. (See Appendix for estimation examples)

If a firm makes estimates for expenses for the interim period, the firm's stock price in the efficient market will reflect the estimate of earnings calculated using the estimated expenses. The estimate of expenses can be high or low. If the estimate is low and actual earnings do not reach the forecasted level in subsequent interim periods, there will be a significant decrease in the value of the stock. On the other hand, if the company was being conservative and overestimated the expenses, there will be an unreasonable increase in stock price. Investors do not like to see such volatility in stock price. Investors prefer to see steady constant growth in share price. A reduction in the amount of estimation used can help reduce the price volatility.

Every interim financial report for companies outside of the United States does not necessarily have to follow IAS 34.

> IAS 34 applies if an entity is required or elects to publish an interim financial report in accordance with International Financial Reporting Standards (IFRSs). [IAS 34.1] Such an interim report may be a complete set of financial statements prepared at the interim reporting date (and, therefore, complying in full with IFRSs) or a condensed interim financial report prepared in compliance with IAS 34.[3]

The simple fact that a company prepares its annual financial reports according to IFRS does not require them to follow IAS 34 when preparing an interim financial report. IAS 34 does not specify who should prepare interim reports or how often they should be prepared. Instead, it

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[2] Ibid.

[3] Deloitte. 2007. *Interim financial reporting: A guide to IAS 34* (London: Deloitte).

encourages companies "to provide interim financial reports at least as of the end of the first half of their financial year and to make their interim financial reports available no later than 60 days after the end of the interim period."[4]

Interim reporting is addressed in GAAP by FASB ASC Topic 270, Interim Reporting. This code explains what is required for reporting: "revenue, costs and expenses, costs associated with revenue, all other costs and expenses, seasonal revenue, costs, or expenses, extraordinary items, unusual and infrequent items, disposals of components, and accounting changes in interim periods."[5] This list specifies the content of an interim report, but not the frequency or basis for reporting.

The U.S. Securities and Exchange Commission (SEC) is the federal agency that regulates companies with publically traded securities. Under the Securities Exchange Act of 1934, publically-traded companies are required to file quarterly reports on Form 10-Q within forty-five days of the fiscal quarter end. Quarterly reporting requirements for Form 10-Q are for more extensive than the requirements under ASC Topic 270. Reported information is intended to provide investors and creditors with timely information about the company's operations and events that have occurred during the period.[6] These requirements by the SEC introduce a significant difference between GAAP and IFRS: public U.S. companies are required to file detailed *quarterly* reports but IFRS companies are not. IFRS companies are free to choose either quarterly or semiannual reports.

Mensah and Werner (2008) examined the effects of interim financial reporting on the stock prices of companies in the United States, Canada, Great Britain, and Australia. Their

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[4] Ibid.

[5] Financial Accounting Standards Board. *Accounting standards codification 270 interim reporting* (Norwalk, CT: Financial Accounting Foundation).

[6] Ernst & Young. 2011. *2011 SEC quarterly reports – form 10-Q* (New York: Ernst & Young).

research examined the choices these companies made in filing their interim reports where the standards are not specific. One of their observations was that "Great Britain and Australia chose the semi-annual reporting interval, while Canada chose to conform to the quarterly interim reporting requirement of the United States."[7] Because Canada is located so close to America, it is reasonable to believe that Canadian companies wanted to be similar to American companies. Having more similarity would allow them to attract more investors and to be more comparable. Great Britain and Australia do not appear to have this same motivation which resulted in their companies using the semiannual interval.

There are four main public accounting companies. These companies, known as "The Big Four," are Ernst & Young, Deloitte Touche Tohmatsu, PricewaterhouseCoopers, and KPMG. The Big Four serve as auditors for many companies based in the United States and internationally. Given their nature, they must know the differences between GAAP and IFRS. In an attempt to educate their clients, employees, and the general public, each company has published a manual that explains the differences in the standards.

Ernst & Young's manual states that both standards are fairly similar except when it comes to certain costs. Under GAAP,

> Each interim period is viewed as an integral part of an annual period. As a result, certain costs that benefit more than one interim period may be allocated among those periods, resulting in deferral or accrual of certain costs. For example, certain inventory cost variances may be deferred on the basis that the interim statements are an integral part of an annual period.[8]

In contrast, according to IFRS,

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[7] Yaw M. Mensah and Robert H. Werner, "The capital market implications of the frequency of interim financial reporting: an international analysis," *Review of Quantitative Finance and Accounting* (2008) 31:74.
[8] Ernst & Young. 2010. *US GAAP vs. IFRS: The basics* (New York: Ernst & Young).

> Each interim period is viewed as a discrete reporting period. A cost that does not meet the definition of an asset at the end of an interim period is not deferred and a liability recognized at an interim reporting date must represent an existing obligation. For example, inventory cost variances that do not meet the definition of an asset cannot be deferred. However, income taxes are accounted for based on an annual effective tax rate (similar to US GAAP).[9]

These differences are not exhaustive but provide a sound foundation for the beginning of a discussion on how the standards differ.

Mensah and Werner (2008) also examined the difference between the discrete basis and the integral basis.

> Under the discrete basis, the interim report is prepared as if the earnings to be measured are for a discrete accounting period independent of the earnings of other periods. Under the integral basis, the interim report is prepared as if the earnings to be measured are merely "a preliminary and partial approximation of the income attributable to the current year."[10]

Great Britain and Australia use the discrete basis for their reports, while the United States and Canada use the integral basis.

Semiannually vs. quarterly.

The necessity of interim reports was defined by one conclusion from the study by Hopwood and McKeown (1985). Based on their research of previous studies, they found that "the market does perceive that interim earnings have informational content."[11] Having interim financial reports is definitely a positive for investors and the market in general. Interim reports provide a look into the company more frequently than annually, which helps investors and analysts make informed investment decisions.

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[9] Ibid.
[10] Mensah, "The capital market," 74.
[11] William S. Hopwood and James C. McKeown. "The incremental informational content of interim expenses over interim sales." *Journal of Accounting Research* 23, no. 1 (1985): 162.

Specific advantages of using a semiannual basis for interim reports were identified by Mensah and Werner (2008).

> The principal arguments in favor of preparing external interim reports on a semi-annual rather a quarterly basis are the following: (1) quarterly reports are likely to be unreliable predictors of the full fiscal-year results due to seasonal factors that cannot always be successfully de-seasonalized by external users of the financial statements; and (2) many of the period cost allocation problems involved in preparing interim reports can be mitigated in the context of semi-annual reports but are exacerbated when quarterly reports are prepared. Significantly, both Great Britain and Australia chose the discrete basis for preparing the semi-annual interim reports.[12]

These arguments are consistent with the opinions of many that have looked at the issue of quarterly or semiannual interim reports. The seasonality issue in particular is present in many other research papers.

Schiller and de Vegt (2010) also examined the advantages and disadvantages of semiannual interim reporting: "The introduction of interim reporting improves accounting quality if the market receives either information with a higher degree of faithfulness at some given date or if the market receives a report with a given degree of faithfulness more timely, i.e. at an earlier date."[13] They also found that "interim reporting never reduces accounting quality when investors are naïve."[14] The study only considered semiannual reporting and did not examine the effects of quarterly reporting. It is impossible to say if the results would have been the exact same for quarterly reports. However, it seems likely that a similar result would have occurred if the study had examined quarterly reporting compared to annual reporting. The benefit of at least some level of interim financial reporting is clear. This further drives the issue of identifying whether semiannual or quarterly reporting is best.

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[12] Mensah, "The capital market," 76.
[13] Ulf Schiller and Marcel de Vegt. "Interim reporting and accounting quality." Universität Bern, 2010: 8.
[14] Ibid., 10.

An attempt at obtaining empirical evidence about the benefits of either quarterly or semiannual was performed by Mensah and Werner (2008). They found that "quarterly reporting appears to accentuate capital market volatility in the United States and Canada as compared to the capital markets in Great Britain and Australia."[15] Great Britain and Australia filed semiannual reports instead of quarterly reports. An important distinction was made by Mensah and Werner (2008) to specify that it is unclear whether the capital market volatility was a positive result or a negative result. This uncertainty was present when the International Accounting Standards Board chose not to specify the frequency of interim reporting. A suggestion by Mensah and Werner (2008) suggests the following reason for the ambiguity:

> Implicit in this permissive attitude is uncertainty about the relative benefits of the greater timeliness of the interim reports versus the possible greater error in the estimates made in interim quarterly reports. By demonstrating that the quarterly reports appear to contribute to greater stock price volatility, this study has pointed out the need for more careful studies of the comparative benefits of alternative interim reporting regimes.[16]

They recommended that further research be performed to help indicate whether or not the volatility was beneficial to investors.

Seasonality and cyclicality have been an important argument for many researchers. The topic was covered by Butler et al. (2007):

> While one effect of increased reporting frequency is to provide elements of annual information more quickly, it is also possible that interim reporting releases additional information beyond what can be learned from annual numbers. For example, a decline in earnings in a single quarter might be due to a one-time exogenous shock, whereas a steady decline in quarterly earnings could suggest longer-term concerns. Information in the trend or seasonal pattern of quarterly earnings is lost when earnings are aggregated into one annual number.[17]

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[15] Mensah, "The capital market," 103.
[16] Ibid., 103.
[17] Butler, Mary, Arthur Kraft and Ira S. Weiss. "The effect of reporting frequency on the timeliness of earnings: The cases of voluntary and mandatory interim reports." *Journal of Accounting and Economics*, no. 43 (2007): 188.

This viewpoint did not include semiannual reports as an alternative to annual reports. Some trends not apparent with annual reports may be seen with semiannual reports. However, quarterly reports have the highest probability of displaying the cyclicality.

A solution to the issue of interim reports, particularly quarterly reports, displaying too much volatility and cyclicality was discussed in ACS 270-10-45-11 and was also introduced by Bunea-Bontas (2009): "If the retailer wishes to demonstrate the cyclicality of its revenues, it may include, as additional information, revenue for the 12 months ending on the interim reporting date and comparative information for corresponding previous 12-month period."[18] There should not be a rule that prohibits companies from including more information than is required. If they were concerned with the potential reactions from investors and analysts because of a seasonal period, information for the annual period ending on the date of the interim report should be included.

The use of estimates in interim financial statements was discussed by Kumar (2001): "Interim financial statements are those that cover a period of less than the full financial year. The basic objective is to provide frequent and timely assessments of performance of an enterprise. It is recognized that time is of essence in preparing and presenting them to shareholders and public, and that shortening of the reporting period would mean greater use of estimates."[19] This suggests that if quarterly reporting was used, more estimation would be required. Using more estimates is typically not beneficial when compared to using actual data. However, it may become a question

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[18] Christina Aurora Bunea-Bontas. "Interim financial reporting in the perspective of harmonization of the Romanian accountancy with the international financial reporting standards." *MPRA,* no. 16249, 2009. http://mpra.ub.uni-muenchen.de/16249/. Mensah, "The capital market," 103.
[19] P.S. Kumar. "When a year is too long." *The Hindu Business Line.* Last modified November 2001. http://www.thehindubusinessline.com/.

of how much more estimation would be needed for quarterly reporting than for semiannual reporting.

A significant portion of the estimation used in interim reports is related to forecasting. Two ways forecasting is affected by a higher frequency of interim reports were discussed by Butler et al. (2007):

> More frequent reporting reduces the information gap between the market's expectation of earnings and the expectation conditional on full information, thereby reducing the rents to activities such as forecasting. On the other hand, disclosures by firms can complement work done by analysts through reducing the cost of analysis and enabling analysts to improve forecasts and stock recommendations.[20]

The perspective of the financial analyst is taken by this section of the research performed by Butler et al. (2007). Analysts are at a slight disadvantage by increased reports because the amount of private information is decreased when more frequent reports are made public. Investors on the other hand enjoy the increase in information. An advantage is gained by the analysts through the reduction in the effort and cost of preparing forecasts.

A discussion on the Transparency Directive (TD) in the European Union by PricewaterhouseCoopers (2007) included the requirements for semiannual reporting. The discussion specified these reports would include "a condensed set of financial statements, an interim management report, and statements made by persons responsible within their issuer."[21] The events reported in the interim management report would be the same as those addressed in the Interim Management Statement (discussed below). Specific rules were laid out for the amounts reported in the condensed financial statements: "Where the issuer is required to prepare consolidated accounts, the condensed set of financial statements shall be prepared in accordance

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[20] Butler, "The effect," 187.
[21] PricewaterhouseCoopers, 2007. *The EU transparency directive* (New York: PricewaterhouseCoopers), 8.

with EU-adopted IAS 34. Where the issuer is not required to prepare consolidated accounts, the condensed set of financial statements shall at least contain: a condensed balance sheet, a condensed profit and loss account, and explanatory notes on these accounts." [22]

In contrast to the previous arguments for semiannual reporting, Mensah and Werner (2008) also discussed the arguments for quarterly reports:

> The evolution of interim reporting in the United States from semiannual to quarterly reporting appears to be based on the beliefs that: (1) the benefits to investors of the greater timeliness of the quarterly statements outweigh any potential problems of predicting the full year results from the quarterly reports; and (2) the period cost allocation problems involved in preparing quarterly reports can be mitigated by preparing the interim report on the integral basis.[23]

The strength of the timeliness argument is very apparent by how often it appears in other research. Advantages of increased timeliness in reports were discussed by Schiller and de Vegt (2010).

A clear benefit that arises with shorter periods between financial reports is the advantage of more timely information. The advantage from a manager's perspective was given by Schiller and de Vegt (2010): "If a manager has early financial information, the introduction of interim reporting leads to an increased timeliness if the information is disclosed at the interim stage rather than at the end of the fiscal year."[24] The assumption present in the quote was the presence of a single manager in the firm, which resulted in him or her knowing more about the company than any other individual. This is a nice theoretical assumption; however, in reality when there are several managers, it does not always hold true. It is extremely difficult for a manager to realize the full extent of his or her impact on the whole firm. Financial reports help bring the

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[22] Ibid., 8.
[23] Mensah, "The capital market," 76.
[24] Schiller, "Interim reporting and accounting quality," 2.

impact into a more visible form. More frequent reports are beneficial because they allow managers to see this impact more frequently.

A large contribution to the research on quarterly interim reports was published in 2007. The focus of Butler et al. (2007) was "the relation between reporting frequency and how quickly earnings information is reflected in price during the current reporting period, i.e., intraperiod timeliness (IPT). Reporting frequency is expected to affect IPT directly because, as interim earnings reports become more frequent, the information in annual earnings is anticipated sooner"[25] This study was somewhat narrowly defined because it only focused on one way to define timeliness, IPT. The results of the study are significant because they found "little evidence of a difference in timeliness between firms reporting quarterly and those reporting semiannually, even after controlling for self-selection."[26] They did find differences that suggested the price was reflected sooner when quarterly reports were filed, but it was not a large enough difference to reject their hypothesis that there was no difference.

One aspect of the study by Butler et al. (2007) was measuring the differences between companies that voluntarily reported quarterly and those that were required to report quarterly. They found "evidence of a significant relation between voluntary changes in reporting frequency and changes in timeliness. Firms that voluntarily increase reporting frequency have significantly greater IPT after the reporting change than before the change."[27] These findings suggest that requiring companies to report more frequently would not produce the timeliness benefits. While timeliness may not be affected according to this study, "changes in disclosure frequency can

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[25] Butler, "The effect," 183.
[26] Ibid., 183.
[27] Ibid., 183.

affect other important parameters in addition to timeliness (e.g., liquidity, cost of capital)."[28] Some of these other benefits were measured during the study. For voluntary changers, it was found that "following the increase in frequency, there is an improvement in performance (increases in mean and median ROA are significant at the 15% and 10% levels, respectively) and a reduction in risk (decrease in average scaled return volatility is significant at the 15% level)."[29]

Other research findings mentioned by Butler et al. (2007) identified that "after firms institute quarterly reporting, stock market volatility around annual earnings announcements is lower than it was before the firms increased reporting frequency."[30] Their study did not examine this effect because of the focus on IPT. These other findings show that even though a study on IPT may not show that there are benefits to quarterly reports, there are other ways to measure the effect of interim reports on timeliness.

Measuring results over a long period of time can present interesting results. Changes in IPT over time were found by Butler et al. (2007). At the beginning of their study, there were several companies that reported increases in IPT with quarterly reporting. As time went on, the number of increases fell off. Enlightenment on these results was suggested by the authors: "One potential explanation for the continual decline in the difference between the IPT of firms reporting semiannually and those reporting quarterly is that, as the 1970 mandate for quarterly reporting neared, firms that benefited most from increased reporting frequency were already reporting quarterly."[31] Benefits of timeliness are clearly present in the rationale of this explanation. While the results of the study may not have suggested benefits of quarterly

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[28] Ibid., 184.
[29] Ibid., 206.
[30] Ibid., 187.
[31] Ibid., 203.

reporting, Butler et al. believed there was an advantage to be gained through the use of quarterly reporting.

As a move is made toward a merger between GAAP and IFRS, it is important to identify when alterations to the sets of standards have been proposed in the past. A discussion of the changes to accounting standards in the European Union that were proposed in 2007 was discussed by Schiller and de Vegt (2010): "Initially, the proposal of the Transparency Directive stated that full U.S.-style quarterly reporting should be brought into the EU. However, lobbying groups rejected this approach in the fear of a short-term view on company performance by both companies and investors."[32] The use of lobbying to prevent quarterly reporting from becoming a standard in the European Union shows the difficulty that will be faced if and when a merger between GAAP and IFRS rules is required.

After the initial attempt of the TD was rejected, a second attempt at comparability in financial statements was made in the European Union with the revised TD. A major part of the revision was the introduction of Interim Management Statements (IMS). An IMS is required to provide an "explanation of material events and transactions that have taken place during the relevant period and their impact on the financial position of the issuer."[33] An additional requirement for an IMS is a "general description of the financial position and performance of the issuer and its controlled undertakings during the relevant period."[34] The timing requirements of the release of the IMS specify it must be reported "between ten weeks after the beginning and six weeks before the end of the relevant six month period."[35] These requirements can be waived if

[32] Schiller, "Interim reporting and accounting quality," 1.
[33] Ernst & Young, 2009. *Interim management statements: Achieving comparability in Europe* (London: Ernst & Young), 4.
[34] Ernst & Young, *Interim management*, 4.
[35] PricewaterhouseCoopers, *The EU*, 4.

the company publishes a quarterly financial report. Therefore, an IMS is essentially a simplified substitute for a quarterly report.

An investigation of the effects IMSs would have on the companies of the four largest European stock exchanges was performed by Ernst & Young (2009). They found that due to the flexibility that was allowed through the TD, companies in different countries prepared their IMS in different ways: "Germany, for example, has required that certain companies, which included those surveyed, prepare IAS 34 compliant financial statements together with a management report."[36] When there were no specific directions provided, only one of six countries required companies to follow IAS 34. It is also interesting that even though the companies were not required to follow IAS 34, companies in Belgium, France, Germany, the United Kingdom, and the Netherlands all disclosed some amount of total revenue and operating profit through IAS 34 compliant interim financial reports.[37] Spain was the only country that had no disclosures that were compliant.

Evidence that flexibility does not lead to consistency has been shown by the observation that there are "variations in the way companies approach IMS, including quarterly financial reports, and there is no clear market consensus of what IMS should include."[38] The research by Ernst & Young (2009) shows more definite rules for filing interim reports are necessary for the future. Simply requiring some sort of quarterly report was not enough to achieve comparability in the EU.

Clearly there has been a general fear of too much reliance on short-term profits and company performance. With the amount of estimation that is required for an interim report, the

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[36] Ernst & Young, *Interim management*, 5.
[37] Ibid., 8.
[38] Ibid., 5.

question raised by the lobbying groups in the EU is a valid one: How short of a period is too short? The answer to this question is not clear cut, even after extensive research. Once the GAAP/IFRS merger occurs, I believe it will still require several years of operation under the new standards to observe if the rules are effective and accomplish the desired goals.

Integral vs. discrete.

Interim reporting has been enforced for a very long time. The use of the integral method throughout U.S. history was discussed by Schiller and de Vegt (2010): "Since 1923, interim reporting is mandatory for all newly registered companies at the New York Stock Exchange. Nevertheless, it lasted until 1973 that quarterly reports have been defined as an integral part of the annual reporting process."[39] Use of the discrete basis was discussed as a potential basis in 1973, but the integral basis was still preferred overall by companies. It is very interesting that the initial interpretation of interim reporting in the United States defaulted to an integral basis. This is a good potential explanation for the reason GAAP still treats interim reporting as an integral part of a fiscal year instead of a discrete period.

The use of estimation, which is more apparent with quarterly reports, is also more apparent in the integral view. The rules of the integral basis were discussed by Bunea-Bontas (2007): "Under this perspective, deferrals, accruals and estimates reported in each interim period reflect the accountant's belief of what is likely to transpire relative to the results of operations for the entire year. Essentially, interim-period allocations are components of interim accounting reports prepared by the integral approach."[40] By basing the deferrals, accruals, and estimates in the interim report on what is expected to occur over the entire year, the amount of estimation

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[39] Schiller, "Interim reporting and accounting quality," 1.
[40] Bunea-Bontas, "Interim financial reporting."

utilized lends its way to the estimated results potentially being very different from the actual results. The discrete method helps to reduce some of this estimation risk.

By most definitions, while GAAP is said to follow the integral method, IFRS is said to follow the discrete method. Bunea-Bontas (2007) had a slightly different interpretation:

> The IASB approach is a balanced one, following a combination of discrete and integral direction. In many cases IAS 34 supports the discrete approach (the accounting treatment of the income tax, of the salary taxes of the employer), but, some other times, supports the integral approach (the application of the same accounting policy as in the case of the financial annual situations, excepting the changes of accounting policy after the estimation of the most recent annual financial situation). Unlike IASB, FASB through APB Opinion Number 28, entirely chose the integral view, each interim period being viewed as integral part of the annual period.[41]

This interpretation suggests that a compromise between GAAP and IFRS may be easier than if IFRS solely used the discrete method. If the international rules already allow for a combination between the two methods, it would be easier to accept a compromise than forcing one side to switch their view completely.

An interesting and valuable perspective can be gained by taking a more high-level view of financial reports. By going above interim financial reports to annual financial reports, it is possible to see what Bunea-Bontas (2007) brought up in her paper: "In a real sense, annual financial reports are also interim reports prepared on a discrete basis. After all, the going concern assumption underlying normal financial statements assume reporting entities have indefinite lives."[42] As most events and periods in society revolve around a 365-day period, it seems fitting to have annual reports for companies. However, it is important to realize that this distinction is not much different from deciding between quarterly and semiannual interim reports. It could have been decided that a report every four years or biennial reports were preferred in order to

[41] Ibid.
[42] Ibid.

reduce the amount of estimation used in calculating the data that is presented. The concept for deciding the frequency of interim reports is the same as the decision that was made to present annual reports. It all comes down to deciding how long to wait. The concerns about the amount of estimation involved with interim reports may subside after the rules have become ingrained in the normal operations of business after a period of time. Concerns may subside because there will no longer be a debate about which frequency to use. Once there is a clear rule specifying what is required, it will be unnecessary to argue that a different frequency would be better when dealing with estimation.

A succinct summary of both the discrete view and integral view was provided by Bunea-Bontas (2007). When she discussed the discrete view as a separate accounting period, she pointed out some important governing rules: "The same principles used to report deferrals, accruals and estimated items in the annual report would also be employed in preparing interim reports. In accordance with the discrete approach, there generally would be no allocation to other interim periods of expenses incurred in one interim period."[43] The principles used for either quarterly or semiannual interim reports should use the same methods of allocation as the annual report. Using the same method of allocation helps to calm some debates about the amount of estimation required with the interim reports.

Kumar (2001) clearly specified a significant advantage of the discrete method: "The main advantage/benefit of the discrete method is that, in the interim results, the trends in earnings that is, the ups and the downs become visible, which is of paramount importance to the investing community."[44] Some critics argue that the discrete method brings up more volatility in income which creates more volatility in the market price. Kumar and others believe that seeing the

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[43] Bunea-Bontas, "Interim financial reporting."
[44] Kumar, "When a year is too long."

changes in income from period to period is extremely helpful. Seasonality and cyclicality was discussed as an important factor in the quarterly vs. semiannual debate. Addressing the issue on both sides of the differences between GAAP and IFRS shows that the topic is of paramount importance.

One way to reduce the stock price volatility previously discussed is through the use of income smoothing. Income smoothing, used by a majority of firms, is a significant risk associated with interim financial reports. Managers make use of estimates and accruals to reduce the fluctuation in net income from period to period. Within the rules of GAAP and IFRS, income can be deferred until later periods when managers expect decreased revenues. Expenses can also be deferred until later periods when there are expected increases in revenues. Investors must always be aware of the tools available to firms that can affect the stock price. Different accounting techniques can be used to manipulate the financial statements to arrive at figures managers believe investors and market analysts want to see instead of showing the volatility that may be associated with actual figures. There are different views on the advantages and disadvantages of seeing the changes in earnings and performance from period to period. Some investors and analysts like to be able to see the changes, while others think it distorts the image of the firm over the course of the year. The seasonality issue was discussed by Bunea-Bontas (2007) from both viewpoints as it relates to the integral and discrete methods:

> Those who adopt the integral view claim that, in the case of the results reported for each period, it is necessary to have a unique recognition of the expenses in order to avoid the creation of some misleading oscillations; on the other hand, those who follow the discrete view claim that the harmonization of the interim results with estimating purposes may have unwilling effects, that may hide some evolving tendencies or turning points.[45]

[45] Bunea-Bontas, "Interim financial reporting."

Estimation has already been discussed as an issue in interim reports. Allocating expenses specifically has introduced additional sources of estimation risk. More estimation is required for the allocation of expenses under the integral method than the discrete method, as was identified by Kumar (2001):

> In the integral method, expenses are accounted for the interim period on the basis of forecasted annual sales. While, under the discrete method, each interim period is taken as a distinct, compartmentalized period in respect of accounting, as in the case of annual financial statements where each year is treated as a separate unit of measurement distinct from the preceding and the succeeding years.[46]

Some of the concerns about too much estimation being used may be partially resolved by adopting the discrete method because it requires a smaller amount of estimation. An identical argument was previously made to show that the discrete method is superior to the integral method when considering deferrals, accruals, and general estimates of interim reports.

The ways interim expenses were allocated according to the integral basis and the discrete basis were investigated by Hopwood and McKeown (1985): "The integral view allocates costs on the basis of the pattern of interim sales. This suggests that knowledge of sales is sufficient to derive earnings. This discrete view treats each interim period as an independent reporting interval, in which case criteria for allocating total annual costs are somewhat arbitrary."[47] Examining the effects of integral compared to discrete is different from the view of expenses. Issues arise when there are certain expenses, such as year-end bonuses, that are paid in a certain period but are related to another period. Income volatility can result when expenses are not fully matched with the periods they are related to.

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[46] Kumar, "When a year is too long."
[47] Hopwood, "The incremental informational," 161.

One component to the merger between U.S. GAAP and IFRS that should be considered is the effect of allocating costs between discrete and integral periods. Hopwood and McKeown (1985) suggested that "perhaps much of the present controversy surrounding alternative interim reporting methods would be better oriented toward modifying, or eliminating altogether, existing interim expense allocation methods."[48] Their study found that "expense numbers do in fact contribute to the informational content of interim earnings. Moreover, sales per share also seem to convey informational content beyond that which is already captured by the expense numbers."[49] More focus than has been given to the expenses seems deserved based on these findings.

Conclusion and Recommendation

This thesis investigated how GAAP and IFRS standards differ on interim financial reporting. I examined the different approaches to the frequency of reporting in order to determine what frequency is best. My thesis also investigated the differences between the discrete basis and the integral basis. After extensive research on the differences between GAAP and IFRS on the topic of interim financial reporting, I have come to a recommendation for the merger of the two sets of rules. This conclusion happens to be a compromise between the two sets of governing rules. When GAAP and IFRS are merged, the frequency of interim reports should be quarterly and the basis of interim reports should be the discrete basis.

My recommendation for the frequency and the basis of the reports has been partially based on the premise suggested by Bunea-Bontas (2007) for the motive of interim financial reports: "The motive is that reliable interim financial reporting improves the ability of investors, creditors and others to understand an enterprise's capacity to generate earnings and cash flows

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[48] Ibid., 162.
[49] Ibid., 167.

and its financial condition and liquidity."[50] This motive is a good foundation for the desirable characteristics of an interim financial report.

Quarterly interim reports offer a significant advantage over semiannual interim reports on the basis of timely information. Investors and market analysts appreciate having more timely information. Investors are better able to see what has changed with the companies they are currently investing in, as well as their prospective investments. Receiving detailed company information every three months is much more beneficial than every six months. In a world where stock prices are constantly changing, up-to-date information is essential. So much can change in six months that the information from semiannual reports may no longer be relevant to the company and can mislead investors.

The results of Butler et al. (2007) suggest that this argument for timeliness is not valid when considering IPT. Even though they found that firms that were required to report quarterly did not receive any IPT benefits, the firms that switched voluntarily did benefit. If all firms are required to report quarterly, there will be some benefits seen in the firms that had previously been reporting semiannually but had not yet voluntarily switched. No downside in timeliness with quarterly reporting was found by their study. It is possible that the reason no significant increases in IPT were found is that the companies that benefitted from quarterly reports had already switched. With the evidence showing that voluntary quarterly reporters were experiencing increases in IPT, it is logical to believe that many companies had already identified the benefits quarterly reports can have on timeliness.

Many companies experience seasonal or cyclical periods throughout the fiscal year. To some, these periods are irrelevant in the long-run. Under this opinion, it is best to smooth the

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[50] Bunea-Bontas, "Interim financial reporting."

image of the company and show performance as steady throughout the year. Others believe that it is important to showcase these variations in order to provide a more accurate picture of company performance. With a background in finance, I fall in line with those that believe cyclicality is an important trend to observe and report. This furthers my suggestion for quarterly reports because they are more likely to display these trends than semiannual reports.

For those concerned with distortion of company performance due to cyclicality, information other than just that of the interim period can be presented. Bunea-Bontas (2007) discussed the following solution that was presented by ASC 270-10-45-11. Just as companies present comparative financial statements, extra information about the previous interim periods or prior years can easily be included to show that there is a rebound from a poor seasonal quarter. This extra information can range from additional notes in the current report to complete sets of prior reports.

A downside to the use of quarterly reporting instead of semiannual reporting is the amount of time that is needed to prepare the reports. It is very time and resource intensive to prepare an interim report for any interval of time. While there is less information to process with a quarterly report, it must be done more often than a semiannual report. However, this small downside is not enough to overcome the benefits provided with the quarterly reports.

Cost allocation has been discussed as another potential downside of quarterly reports. Breaking a fiscal year into four parts may present some issues with expenses that occur only once a year. These issues would only be slightly higher than with breaking the year into two parts for a semiannual report. Some compromise on the basis of the interim financial reports will help alleviate the allocation issue. However, there will always be difficulties associated with allocating costs, even on an annual basis.

The discrete basis is a preferred style because it helps to reduce some of the concerns with the amount of estimation involved in interim reports. By allocating expenses incurred in a period to only that period, there does not need to be estimation about when certain assets will be utilized. The integral basis allocates costs based on estimation of what will occur over the entire year. Deferrals, accruals, and estimates are all affected by predicting what will happen during the entire year. Reporting these numbers based solely on what is expected to happen is very optimistic and not typically conservative. It is more accurate to report the expenses that are incurred at the time they are incurred.

An argument can be made that the integral basis better matches expenses with the revenues they help produce. With interim reports a justification cannot be made that defers recognition of an expense incurred in that period simply because it is believed to help produce future estimated revenues. It may later be realized that the expenses did help produce revenues, but it is not conservative to assume that those revenues will be realized when there is no evidence to support the assumption. Disclosure notes can be added to interim statements to indicate expected revenues created by the expenses to offer an explanation to investors as to why net income is decreased.

Being able to see the volatility and ups and downs of a company's performance is beneficial and is present with the discrete basis more than the integral basis. The smoothing of income once again comes into question as it did in the debate between quarterly and semiannual interim reports. The use of estimation over the entire year with the integral basis spreads data out in a smooth manner that hides the cyclicality of the company from investors and analysts. As previously stated, I believe it is important to identify these trends. My beliefs are supported by

Kumar (2001) who also identified these trends as a specific advantage to the discrete basis. This further suggests the use of the discrete basis for the interim reports.

As Bunea-Bontas (2007) described, the discrete approach used under IAS 34 does not require discrete treatment for every number. By allowing for the matching of accounting policy to the fiscal year for interim reports, a certain degree of the integral basis may be accepted. I would not recommend changing this to require a complete use of the discrete basis. The rationale for the use of the same accounting policy is very sound and should remain part of the standard. Certain items, such as property, plant, and equipment are allocated over many periods and are not expensed when they are incurred. The flexible discrete approach that allows for the matching of accounting policy to the fiscal year for interim reports addressed these issues and allows for proper treatment of the items.

The going concern concept in accounting states that a company will remain in business indefinitely. No liquidation, bankruptcy, or any other event that would close the business is expected to occur. When annual reports are considered, the going concern implies that each report is an interim report prepared on a discrete basis as defined by IAS 34. Each individual fiscal year is separated from the indefinite life of the company. With exceptions being made for the items discussed above, sales and expenses are allocated only to the year in which they are incurred. This is a reflection of the discrete basis being used for annual reports. If there is a provision for matching accounting policy with the discrete or integral basis, it makes sense that interim reports are prepared on the same basis as annual reports. Using the discrete basis allows for this treatment and makes interim reports more similar to annual reports.

Conformance to a merged set of accounting standards and rules is not going to be easy. There are some fortunate situations where the differences between GAAP and IFRS are very slight or non-existent, but in the other situations there will be significant turmoil. Unless there are plans that provide for a gradual adoption or some other provision, companies will likely report massive changes in their financial statements when the merger rules are enforced. These financial statement changes will incite uproar from everyone affected. Adapting to changes is never easy or completed quickly and resistance to quarterly interim financial reports on the integral basis has already been seen in the European Union. The United States has used the integral basis as a default since interim reports were first required in 1923; changing this will not be an easy task. It is expected that future resistance will be stronger and will last longer. In the grand scheme of things, preparing quarterly interim financial reports on the discrete basis will hopefully not be met with intense resistance. If my recommendation is utilized, companies, investors, and market analysts will be in a better position to compare different businesses across borders.

Comparability of companies across the entire globe will be achievable when financial reports are prepared according to the same set of rules. A lot of time and effort are still required in order to complete the recommended merged rules. The implementation of the rules will require even more time than the development. My recommendation is just one piece of the merger between GAAP and IFRS rules, but it can help to show the possibilities of compromise between the different standards.

Appendix

This first excerpt provides an example of how estimates are needed under the integral approach, using annual bonuses as an example.

Some inherent problems are associated with determining the results of operations for time periods of less than one year, especially with regard to expenses that do not occur evenly throughout the year. Two approaches can be followed in preparing interim reports: (1) treat the interim period as a **discrete** accounting period, standing on its own, or (2) treat it as an **integral** portion of a longer period. Considering the annual bonus a company pays to key employees in December of each year illustrates the distinction between these two approaches. Under the *discrete* period approach, the company reports the entire bonus as an expense in December, reducing fourth quarter income only. Under the *integral* part of an annual period approach, a company accrues a portion of the bonus to be paid in December as an expense in each of the first three quarters of the year. Obviously, application of the integral approach requires estimating the annual bonus early in the year and developing a method for allocating the bonus to the four quarters of the year. The advantage of this approach is that there is less volatility in quarterly earnings as irregularly occurring costs are spread over the entire year.

Appendix

The next excerpt provides an example in which estimates are not needed – firms can anticipate property taxes with a high degree of accuracy.

Other Costs and Expenses

A company should charge costs and expenses not directly matched with revenues to income in the interim period in which they occur unless they can be identified with activities or benefits of other interim periods. In that case, the cost should be allocated among interim periods on a reasonable basis through the use of accruals and deferrals. For example, assume that a company required to prepare quarterly financial statements pays annual property taxes of $100,000 on April 10. One-fourth of the estimated property tax should be accrued as expense in the first quarter of the year. When it makes the payment, it should apply one-fourth against the accrued property tax payable from the previous quarter and charge one-fourth to second-quarter income. The company should defer one-half of the payment as a prepaid expense to be allocated to the third and fourth quarters of the year. The following journal entries demonstrate the procedures for ensuring that the company recognizes one-fourth of the annual payment as expense in each quarter of the year.

March 31:

Property Tax Expense 25,000
    Accrued Property Tax Payable 25,000

To accrue one-fourth of the estimated annual property tax as expense for the quarter ended March 31.

Appendix

April 10:

Accrued Property Tax Payable 25,000
Property Tax Expense 25,000
Prepaid Property Tax (Current Asset) 50,000
Cash 100,000

To record the payment of the annual property tax, recognize one-fourth as property tax expense for the quarter ending June 30, and defer one-half as a prepaid expense.

September 30

Property Tax Expense 25,000
Prepaid Property Tax 25,000

To record property tax expense for the quarter ended September 30.

December 31

Property Tax Expense 25,000
Prepaid Property Tax Expense 25,000

To record property tax expense for the quarter ended December 31.

Other items requiring similar treatment include annual major repairs and advertising. In addition, a number of adjustments such as bad debt expense, executive bonuses, and quantity discounts based on annual sales volume that are normally made at year-end actually relate to the entire year. To the extent that the company can estimate annual amounts, it should make adjustments at the end of each interim period so that the interim periods bear a reasonable portion of the expected annual amount.

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