THE COMPARISON STUDY OF ACCOUNTING STANDARDS:
IMPLEMENTATION ON PHARMACEUTICAL COMPANY

Sigit Handoyo
Fakultas Ekonomi Universitas Islam Indonesia
e-mail: sihando@yahoo.com

Abstract

Difference on characteristics in various countries will influence the implementation of accounting standard. Such conditions may include economic, social, cultural, and political conditions. As there are differences of accounting standard between one country and another, there also will be dissimilarities of financial reporting disclosure. Consequently, different accounting standard implementation will cause barriers to the users of financial report from a company, particularly multinational enterprises, in foreign country. This article will analyse some differences in some posts as the result of unalike implementation of accounting standard, which will influence the number of rupiahs and dollars presented in the financial report. The samples of the research are four well-known pharmacy companies from four different countries namely Boehringer Ingelheim in Germany, Pfizer in United States of America, CSL Ltd. in Australia, and PT. Kalbe Farma Tbk. in Indonesia. Those samples represent the implementation of four different reporting standard i.e. HGB (Handelsgesetzbuch), US GAAP, IFRS, and PSAK. Furthermore, this study will discuss the possibility of implementing harmonization as the consequence of difficulties faced by the users of financial report in comparing company performance caused by dissimilarities of accounting standard in those countries.

Keywords: Accounting Standard, HGB, US GAAP, IFRS, PSAK

Abstrak

Perbedaan karakteristik berbagai negara akan berpengaruh terhadap Standar Akuntansi yang akan diterapkan. Kondisi-kondisi tersebut dapat meliputi kondisi ekonomi, sosial, kultural maupun politik. Karena terdapat perbedaan standar akuntansi antara yang satu dengan yang lainnya maka juga terdapat perbedaan dalam penyajian pada laporan keuangan. Perbedaan-perbedaan yang akan timbul dari penerapan standar akuntansi yang berbeda akan menyebabkan hambatan bagi para pengguna laporan keuangan suatu perusahaan, terutama multinational enterprises, yang berada di negara lain. Dalam artikel ini akan dianalisa beberapa perbedaan beberapa pos akibat dari penerapan standar akuntansi yang berbeda yang akan mempengaruhi jumlah rupiah/dolar yang disajikan dalam laporan keuangan dimana sampel yang diambil dan dianalisa adalah empat buah perusahaan farmasi terkemuka dari empat Negara: Boehringer Ingelheim di Jerman, Pfizer di Amerika, CSL Ltd. di Australia, dan PT. Kalbe Farma Tbk. di Indonesia yang mewakili penerapan empat standar pelaporan yang berbeda yaitu HGB (Handelsgesetzbuch), US GAAP, IFRS, dan PSAK. Lebih lanjut, juga akan diulas mengenai kemungkinan penerapan harmonisasi sebagai akibat dari kesulitan para pengguna laporan keuangan dalam membandingkan performance perusahaan sebagai akibat dari penerapan standar akuntansi yang berbeda dari ketiga negara tersebut.

Kata kunci: Accounting Standard, HGB, US GAAP, IFRS, PSAK
INTRODUCTION

The difference of accounting standard of a country is influenced by those conditions of its country itself, such as economy, culture as well as politics. Those differences would influence the process in setting up the standard of each country as well. As the different in performing on financial statements, it is necessary to adjust those financial statements into a standard that would be accepted in every country. However, not all of countries require adjustment in financial statements. As a consequence, stakeholder in other country would face some difficulties to use financial statements from the other if they employee different accounting standard in financial reporting.

This article will examine four pharmaceutical companies sourced from different countries which employee their own accounting standards to report the financial report. There are Boehringer Ingelheim from Germany, Pfizer from the US, CSL Ltd from Australia, and PT. Kalbe Frama Tbk. from Indonesia. Because of the differences in their country of origins, they report their financial accounting in accordance to different standards. Specifically, Boehringer Ingelheim reports their financial statements in accordance to the German Commercial Code (HGB), while Pfizer, CSL Ltd, and PT. Kalbe Farma Tbk. report their financial statements in accordance to the US GAAP, IFRS and PSAK respectively.

In his research, Gray (1988) had found that one of the reasons for international differences in financial reporting is the cultural differences between countries. For example, the accounting authority and enforcement agencies in Germany are made up of statutory control and uniformity. While the US, Australia and Indonesia, have professional authorities that offer flexibilities. On the other hand, in the context of accounting measurement and disclosure, Germany has a more conservatism approach and a preference to limit disclosure to those closely involved in the business than three other countries. However, since the US and Australia are capital based systems, their accounting measurements tend to be optimistic and are required to provide transparent disclosures. While Indonesia is more conservative than the US and Australia in comparison. One reason for Germany’s conservative approach is because of their providers of finance. Most capital are sourced from credit based financial institutions rather than the capital market system as it is in the US, Australia, and Indonesia. Therefore, banks and creditors carry more importance to their country than shareholders.

These national and culture differences would have significant impact on the financial statements. Specifically, it would be predicted that Boehringer Ingelheim would have a more conservative profit figure, asset values, and profitability ratios than similar companies from the US, Australia, and Indonesia.

DIFFERENCES BETWEEN STANDARDS

In this section, we identify two accounting differences between the three countries. In particular, firstly it will be identified how the accounting treatment for goodwill and intangibles are different from the US GAAP, German commercial code (HGB/Handelsgesetzbuch), IFRS and PSAK. Furthermore, as most pharmaceutical companies are intensively involved in research and development, it will also be examined the accounting treatment for R&D between the three companies.
Table 1: Comparison of Accounting Standard on Goodwill and Intangibles, Research and Development

<table>
<thead>
<tr>
<th>Boehringer Ingelheim (Germany) (HGB)</th>
<th>Pfizer (U.S.) (US GAAP)</th>
<th>CSL Ltd (Australia) (FRS)</th>
<th>PT. Kalbe Farma (Indonesia) (PSAK)</th>
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<tbody>
<tr>
<td><strong>Goodwill and Intangibles</strong></td>
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<tr>
<td>Goodwill is to be amortized over four years or according to the anticipated period of usefulness.</td>
<td>After 2001, by the establishment of SFAS 142, amortization of goodwill was abolished and annual impairment test was required.</td>
<td>Goodwill is capitalized. However, the amortization of goodwill is not permitted. It is open for impairment testing.</td>
<td>Goodwill is capitalized and amortized over 5 years or according to the anticipated period of usefulness not more than 20 years. Impairment testing is open.</td>
</tr>
<tr>
<td>Intangible assets are to be capitalized only at cost once it is probable that the assets' benefits will flow to the enterprise and its cost can be reliably measured</td>
<td>Intangible assets with finite life are amortized over its estimated useful life. Cost basis is required for that. Meanwhile, indefinite life intangible assets are not amortized, but tested annually for impairment under SFAS 142 (the same as goodwill, because goodwill is also identified as an indefinite life asset).</td>
<td>Intangible assets should be recognized where it is probable that benefits will flow to the enterprise and cost can be measured reliably. Intangible assets for which there is an active market can be carried at fair value and revaluation is acceptable. Intangibles with finite useful lives should be amortized. Annual impairment tests are otherwise required.</td>
<td>Intangible assets should be recognized where it is probable that benefits will flow to the enterprise and cost can be measured reliably otherwise costs are expensed as incurred. Intangibles with finite useful lives should be amortized. Revaluation is prohibited.</td>
</tr>
<tr>
<td><strong>Research and Development</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Under the German commercial code, the research and development must be expensed once incurred. However, development costs that relate directly to a specific customer production order are capitalized as inventory.</td>
<td>Research costs are expensed as incurred. Development cost does not include the maintenance or enhancement of ongoing operations must be capitalized. If internally generated intangible asset arises from the development phase of a project it must be capitalized if the enterprise is able to demonstrate: 1) the technical feasibility of completing the intangible asset so that it will be available for use or sale; 2) its intention to complete the intangible asset and use or sell it; 3) its ability to use or sell the intangible asset; 4) How the intangible asset will generate probable future economic benefits. Among other things, the enterprise should demonstrate the existence of a market for the output of intangible 5) the availability of adequate technical, financial and other resources to complete the development and to use or sell the intangible assets 6) its ability to measure reliably the expenditure attributable to the intangible asset during its development</td>
<td>Research costs are incurred. Development costs must be capitalized. If internally generated intangible asset arises from the development phase of a project it must be capitalized if the enterprise is able to demonstrate: 1) the technical feasibility of completing the intangible asset so that it will be available for use or sale; 2) its intention to complete the intangible asset and use or sell it; 3) its ability to use or sell the intangible asset; 4) How the intangible asset will generate probable future economic benefits. Among other things, the enterprise should demonstrate the existence of a market for the output of intangible 5) the availability of adequate technical, financial and other resources to complete the development and to use or sell the intangible assets 6) its ability to measure reliably the expenditure attributable to the intangible asset during its development</td>
<td>Research costs and development costs are treated as expense at all as incurred. Development cost must be capitalized. If internally generated intangible asset arises from the development phase of a project it must be capitalized if the enterprise is able to demonstrate: 1) the technical feasibility of completing the intangible asset so that it will be available for use or sale; 2) its intention to complete the intangible asset and use or sell it; 3) its ability to use or sell the intangible asset; 4) How the intangible asset will generate probable future economic benefits. Among other things, the enterprise should demonstrate the existence of a market for the output of intangible 5) the availability of adequate technical, financial and other resources to complete the development and to use or sell the intangible assets 6) its ability to measure reliably the expenditure attributable to the intangible asset during its development</td>
</tr>
</tbody>
</table>
IMPACT ON RATIO ANALYSIS

Table 2: Comparison of Financial Ratio Computation

<table>
<thead>
<tr>
<th>Ratios</th>
<th>Boehringer Ingelheim (Germany)</th>
<th>Pfizer (U.S.)</th>
<th>CSL Ltd (Australia)</th>
<th>PT. Kalbe Farma Tbk (Indonesia)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gross Margin</td>
<td>16.29%</td>
<td>40%</td>
<td>16%</td>
<td>17.6%</td>
</tr>
<tr>
<td>ROA</td>
<td>14.43%</td>
<td>16.7%</td>
<td>8.7%</td>
<td>23%</td>
</tr>
<tr>
<td>ROE</td>
<td>33.80%</td>
<td>28.20%</td>
<td>17%</td>
<td>25.4%</td>
</tr>
<tr>
<td>Current Ratio</td>
<td>1.098</td>
<td>2.2</td>
<td>2.26</td>
<td>5.04</td>
</tr>
<tr>
<td>Quick Ratio</td>
<td>0.79</td>
<td>1.91</td>
<td>1.33</td>
<td>3.46</td>
</tr>
<tr>
<td>Debt to equity</td>
<td>1.047</td>
<td>0.58</td>
<td>0.73</td>
<td>0.13</td>
</tr>
<tr>
<td>Interest coverage</td>
<td>15.66</td>
<td>42.25</td>
<td>11.02</td>
<td>15.2</td>
</tr>
</tbody>
</table>

In this section, it will be examined the profitability, liquidity, and leverage ratios of the three pharmaceutical firms. A total of 7 ratios are calculated in accordance to their accounting standards for the year 2006. A summary of these ratios are at the table 2.

**Boehringer Ingelheim (German Pharmaceutical firm)**

In the context of this report, there are three main differences between the German GAAP and IFRS. There are differences in the accounting treatment for goodwill, intangibles, and R&D. Because of these differences, the net income figure as well as the balance sheet items for Boehringer Ingelheim would be different if it had implemented IFRS. For example, the amortization of goodwill under the German GAAP and charging the development cost as an expense rather than capitalizing it would overstate the firm’s expenses and therefore understate the firm’s net income. Moreover, valuing intangibles at cost rather than at fair value would also have an impact towards the balance sheet figure. Therefore, the three main differences in accounting treatment would subsequently have an impact on the above ratios. More discussion will be figured out below:

**Impact of goodwill**

Under the HGB German financial code, acquired goodwill is amortized over four years or according to the anticipated period of usefulness. However, the treatment of amortizing goodwill is no longer allowed in IFRS, instead it is subject to an impairment test. According to the 2006 annual report of Boehringer Ingelheim, they amortized their goodwill for 10 years. As a result, the expenses figure for Boehringer Ingelheim will be overstated and therefore understating net income if they had implemented IFRS (assuming there is no impairment in goodwill when implementing IFRS). As accounting relies on the double entry system, the balance sheet figures will also be affected. In particular, the equity figure will increase due to the increase in net income, and the non-current asset figure will also increase due to the absence of accumulated amortization.

Clearly, changes to figures from the income statement and the balance sheet would affect the ratio as well. For the year 2006, the amortization of goodwill is €48m, which would indicate that profits would be overstated by €48m if it had implemented IFRS. The current gross margin for Boehringer Ingelheim is 16.29%. If they had implemented IFRS, it would be higher than that. If goodwill were never amortized nor had any value impairment, ROA would be lower than 14.43% (Assets increased as well as earnings).

Also note that as earnings is understated, the equity value of the firm is also understated. However, the return on equity of the firm will not be affected because the numerator and denominator of the formula will increase with same amount. The return on equity will be the same as the current 33.08% under the German commercial code. Moreover, the debt to equity ratio will be lower than 1.047.
The interest coverage ratio on the other hand will increase and more than 15.66. Finally, there will be no effects on the current ratio and quick ratio.

**Impact of intangibles**

The accounting treatment for intangibles under the German GAAP is always value them at cost, whereas under IFRS, intangibles can be held at fair value as long as it has an active market. This implies that Boehringer Ingelheim had recorded its intangible asset at cost for which can be revalued upwards or downwards if it had implemented IFRS. In other words, the intangible assets in Boehringer Ingelheim’s balance sheet may be understated or overstated. If the asset is revalued upwards, the surplus arising from the revaluation is taken directly to the revaluation reserves within equity except to the extent that the surplus reverses a previous revaluation deficit on the same asset charged in the income statement, in which case the credit to the extent is recognized in the income statement. Any deficit on revaluation is charged in the income statement except to the extent that it reverses a previous revaluation deficit on the same asset, in which case it is taken directly to the revaluation reserve.

If Boehringer Ingelheim implements IFRS now, that would indicate no previous revaluations had occurred. Therefore, an upward revaluation on intangibles would increase both assets and equity figures resulting to the reduction on the ROE, ROA, and the debt to the equity ratio. However, if there is any deficit on revaluation, expenses will increase and profits will be eventually declined thus reducing the gross margin, ROE, and Interest coverage ratio. The ROA, current ratio and the quick ratio is expected to remain stable. Since the revaluation of assets involves an expert and professional judgments, it would be difficult to predict the actual adjustments that will be made.

**Impact of research and development cost**

Similar to the German commercial code, the international standard requires firms research costs are expensed once incurred. However, unlike the HGB, development cost can be capitalized provided it meets the requirement stated in the standard. Under the German commercial code, the development cost will be expensed as incurred except for development costs that are directly related to specific customer production. This implies that Boehringer Ingelheim’s expenses might be overstated if it had implemented IFRS. This therefore, would understate the profit figure resulting in lower ROE, ROA, and interest coverage ratio. Since research and development cost are proved to be significant for pharmaceutical firms, changes to accounting standards would be an important issue.

From the estimates above, favorable outcomes is evident in the financial statements as well as ratios if Boehringer Ingelheim implements IFRS. This also indicates that the German financial code or the HGB in general is rather conservative than IFRS.

**Pfizer (US Pharmaceutical firm)**

**Impact of goodwill**

Since US GAAP and IFRS have similar rules concerning goodwill, which it requires annually impairment test instead of amortization, the reconciliation of the financial statement from US GAAP to IFRS will not impact the amount of goodwill put on the balance sheet. Therefore, the calculated ratio will not be affected because of goodwill.

**Intangible assets**

Even though intangible assets treatment under US GAAP is the same as IFRS (they amortized the finite life intangible assets and tested the existence of impairment cost for the indefinite life intangible assets), the US GAAP requires cost basis for the intangibles and prohibits revaluation. In fact, IFRS allows the revaluation. Consequently, it will impact the financial statement if the company reconciles the financial statement into IFRS standard. The revaluation could lead the value of the intangible assets higher or lower than previous value. As a result, the amortization of intangible assets could also become higher or
lower as well. So, this will create an increase or decrease of total expenses, which in turn, will produce understated or overstated net income. Moreover, the revaluation can lead to the increase or decrease in the assets’ value.

Thus, understated net income causes lower ratios of gross margin, ROA, ROE and interest coverage ratio. Meanwhile, overstated net income also brings about positive effect on these four ratios. Since asset revaluation can only be performed by the experts, this report might not provide the calculation estimation.

Research and development (R&D)

As required by US GAAP, this company expensed all of the research and development costs as incurred. The costs consisting of its proprietary R&D efforts and costs incurred in relating with third party collaboration efforts configured 21.05% of total costs and expenses. In addition, acquisition-related in-process R&D charges were also expensed immediately by the company. So, the total R&D costs contributed 23.9% to total costs and expenses.

If the company converted the R&D treatment into IFRS standard which allows the capitalization of development costs, it might lead to a significant decrease of the total costs and expenses. Accordingly, net income would rise in a large amount as well. Besides, the total amount of assets will increase because of the addition of development capitalization. This would influence positively the financial ratios for gross margin, ROA, ROE and interest coverage ratio.

Since the company did not provide information relating to the detail of R&D costs in its Notes to Consolidated Financial Statements, the calculation effect of the reconciliation to IFRS could not be presented. However, if it is assumed that 15% of the total 23.9% R&D costs could be capitalized, it would contribute an increase of 6.5% of net income. Therefore, gross margin could increase to 42.6% from 40%, ROA could be 17.7% from 16.75, ROE could be 30% from 28.20% and interest coverage ratio could be 44.70 from 42.25.

Thus, from the analysis above, it can be seen that the reconciliation of the accounting standard from US GAAP to IFRS leads to the considerably changes on the financial ratios which can also represent the performance of the company.

PT Kalbe Farma Tbk (Indonesian Pharmaceutical Firm)
Impact of goodwill

Both PSAK and IFRS capitalize goodwill. However, PSAK allows goodwill to be amortized while IFRS prohibits amortizing its costs. In this case, Goodwill is amortized over 20 years by PT. Kalbe Farma Tbk. Thus, income of PT. Kalbe Farma Tbk would be overstated in compare with applying IFRS. Gross Margin would be less than 17.6% if PT. Kalbe Farma Tbk employed IFRS in its report. Furthermore, this impact would affect on the increasing of equity of company as the increasing of net income.

Intangible assets

Since the treatment of intangible assets both PSAK and IFRS are the same, it is not able to be compared rigidly. Revaluation is permitted under IFRS while PSAK does not permit revaluation. This would carry the consequence that if PT. Kalbe Farma Tbk. employees IFRS, income would be either lower or higher so that ROE, ROA and gross margin would be influenced. Brands, patents are amortized into 20 years, meanwhile software costs is amortized into 5 years by PT. Kalbe Farma Tbk. Furthermore, indefinite intangible assets useful life is not amortized under IFRS instead of impairment test, the value of assets may either under-valued or over-valued. This would carry the implication of the lower or higher in equity. Thus, ROE and ROA would be changing more or less than 23% and 25.4%.

Research and development (R&D)

Both IFRS and PSAK are similar treatment on research and development costs. Research costs and development costs are treated as expense at all as incurred. This
would carry a consequence in the ratio bearing expenses and costs as a basic of computation. If PSAK allowed capitalization of research costs, net income would be higher than carry out expense as the treatment. Thus, gross margin would be higher than 17.6%. Developments cost, under both PSAK and IFRS, must be capitalized if internally generated intangible asset arises from the development phase of a project it must be capitalized if the enterprise is able to demonstrate some criteria. If PSAK is compared with US GAAP treatment on research and development costs, which is treats those costs as expenses, income under PSAK would be understated meaning its may influence gross margin, ROE, and ROA.

FURTHER DISCUSSION

Previously, it is examined the differences in accounting practices for three countries in regards to goodwill, intangibles, and R&D. The driver of these differences may be driven by a number of factors namely culture, legal systems, providers of finance, taxation, and other external influences. For example, Germany is a country where their legal system is based from the codified Roman law. Because of this, rules for accounting practice are dependent on the German Law, which are created by the statutory. Whereas in common law countries such as the US and Australia, accounting rules are created by accountants themselves.

Referring to the debt to equity ratio for Beohringer Ingelheim, the firm consists of more debt than equity compared to Pfizer, CSL Ltd and PT. Kalbe Farma Tbk. This is entirely consistent with the theory that Germany is a ‘credit’ based country where capital mostly comes from debt. Furthermore, their shareholders are mostly dominated by bankers, governments and founding families. Therefore, those financial reporting has been large invested for the purpose of protecting creditors and Governments as opposed to private investors. This also explains why German accounting tends to be conservative.

The US, Australia and Indonesia on the other hand, are an ‘equity’ based country which relies on private shareholders for finance. This is also evident from the low debt to equity ratios for both Pfizer, CSL Ltd and PT. Kalbe Farma Tbk. The large number of listed firms especially in the US and Australia’s Stock exchange also signals their need to need for equity finance. Because of the large number of private shareholders having less access to the firm has led to the increase pressure for disclosure, audit, and fair information. This explains their ‘less conservative’ nature in accounting and strong auditing profession.

POSSIBILITY OF INTERNATIONAL HARMONIZATION IN THE FUTURE FOR THOSE COUNTRIES

As world is becoming more globalised, there is a need for one set of accounting standards that are understood worldwide. Clearly, creating international harmonization would provide benefits to companies, investors, and national governments. For example, reduction of cost when preparing set of accounts, reduction in the risk of uncertainty and misunderstanding, comparability between firms and subsidiaries, less need for investors to learn different accounting standards, encouraging international flows of capital across borders and so on.

The process of harmonizing accounting practices seems to be the solution for every problem in the realm of accounting. However, there are also several major forces that go against the process of harmonization. It is believed that culture is an obstacle towards harmonization. The accounting rules in Germany for example, are based from the German law which is created by the government itself. This implies that the German government has extensive power to influence accounting policies. Besides, financial institutions such as banks have a significant role in providing capital to German firms rather than public equity owners leading to the tendency of conservatism. Therefore, these factors would create difficulties when harmonizing the German accounting practices to the international standard. This may also apply to countries that have strong cultural backgrounds.
Meanwhile, the US is a very well-known country for its large economic influences to the world. Even though its accounting practices originally came from the UK, the US develops its own accounting rules since the 20th century. It has the biggest capital stock market in the world; large number of MNE’s operates in the US attracting large branches of accounting firms; and the most extensive accounting regulation in the world. Additionally, many countries in the world adopt the US GAAP. Hence, being a strong country that has a strong influence to the world seems unlikely to converge to the international standard. Instead, there would influence others to follow their accounting rules.

On the contrary, Australia is a Commonwealth country influenced greatly by the British which also includes the accounting regulation. Supported by its long history with the British, Australia has a similar culture value and legal systems with Britain, and overall, it is reasonably believed that Australia can accept and adopt IFRS as a whole.

In 1957 the Indonesian Accountant Association (IAI) was established. This body has job to arrange Indonesia standard in order to apply domestically. Indonesia has three important phases relating to the accounting standard development. First of all is the establishment of the Indonesia capital market in 1973 as the answer of the changing business in the world. Secondly, in 1984 The Indonesian Accounting Principle Committee was established. This committee revised the Indonesian Accounting Standard to be matched with the business environment. Thirdly, in 1994 Indonesia supported harmonization declared by International Accounting Standard. As a consequence, Indonesia should consider International Accounting Standard as reference in formulating accounting standard meaning that Indonesia is doing convergence in its standard to International Standard. Indonesia plans to be engaging convergence to IFRS until 2012 when Indonesia declared to employee IFRS as a standard in reporting of listed companies.

CONCLUSION
From the analysis above, it can be concluded that companies especially MNE’s needs to comply with the accounting standard where they operate. Moreover, they also need to provide additional reports in accordance with the international accounting standard. Each country has its own accounting rules and regulation which might vary from one to the other. As a result, this limits firms from pursuing their business activities globally. Therefore, there is a need for harmonization of accounting standards necessary to provide relevant information in the interests of global stakeholders.

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