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Comparison of U.S. Generally Accepted Accounting Principles with International Financial Reporting Standards

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Abstract: Each country has its own mutually accepted accounting standards, which are the rules that companies in these countries must follow when preparing accounting entries and financial statements. Accounting standards ensure the standardization of economic activities recorded by enterprises, and also provide a common index for fair evaluation of the financial status and operating results of enterprises. Nowadays, the accounting standards widely used in the world are generally divided into two categories: U.S. Generally Accepted Accounting Principles and International Financial Reporting Standards. This paper discusses the measurement differences under diverse accounting standards by taking the division of R&D expenditures, inventory management and the preparation of cash flow statements as examples through theoretical analysis and overview. This paper finds that despite the many differences between GAAP and IFRS, GAAP also shows a trend of convergence with IFRS in recent years under the background of the continuous development of the international financial system.

Keywords: International Financial Reporting Standards, U.S. Generally Accepted Accounting Principles, R&D expenditures, inventory management, cash flow statement

1. Introduction

Generally Accepted Accounting Principles (GAAP) is a generally accepted accounting principle, which was published in 1937 Accounting Research Bulletin No. 1 by American Accounting Procedure (CPA), pioneered by government agencies or industry organizations to issue "general accounting." Between 1973 and 2000, the International Accounting Standards Committee (IASC) published International Accounting Standards (IAS). The IASC was succeeded by the International Accounting Standards Board (IASB) in 2001. The International Accounting rules Board (IASB) has since updated several of its global accounting rules and replaced them with new International Financial Reporting Standards (IFRS). In general, U.S. Generally Accepted Accounting Principles are set by the Financial Accounting Standards Board (FASB) and are followed by most companies in the United States while the International Accounting Standards Board (IASB) has established International Financial Reporting Standards (IFRS), which are used in many European Union (EU) nations as well as those in Asia and South America. This paper specifically studies the difference between capitalization and expense of research and develop expenditures, the difference between the last-in and last-out method in inventory management and the difference between the classification of interest and dividend in cash flow statements under two accounting standards. What kind of

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accounting policy the enterprise pursues decides how to survive and develop in the future. Under the trend of economic globalization, the degree of interdependence of the international economy is deepening, so optimizing and gradually unifying accounting policies can better meet the needs of economic development under the background of globalization. This paper provides theoretical value for accounting practitioners to understand the basic accounting standards in today's world and cultivate international vision.

2. Examples and Analysis of Specific Differences

The main distinction between the two accounting systems is that GAAP is based on regulations, whereas IFRS is based on principles. GAAP sets specific guidelines for all possible situations. The advantage of this standard is that the provisions are very specific and operable, but the disadvantage is also obvious: the accounting standard system is more complicated. Compared to GAAP, IFRS provides much less overall detail, it prescribes broad rules rather than restricting specific business processes. Consequently, the IFRS' theoretical foundation and guiding principles provide more room for interpretation and may more accurately reflect the economics of commercial operations. But it also leaves more room for manoeuvre. For example, Accounting Standards Codification(ASC) No.842 which under GAAP system indicates that if the lease term is for a major part of the remaining economic life of the underlying asset, the lease is accounted for as a financing lease, otherwise it will be recorded as an operating lease, while under IFRS 16, it takes a different approach. In light of who actually bears the risks and rewards of ownership, it makes a distinction between a capital lease and an operating lease. As a result, it can be shown that rule-based models are more likely to reflect the transaction's form, whereas principles-based models are more likely to reflect its essence.

2.1. The Differences Between Capitalization and Expensing of R&D Expenditures

Research and development (R&D) expenditure mainly refers to the asset depreciation, material consumption, personnel wages and various expenses incurred by enterprises in the process of research and development. With the onset of the Internet era and the rapid development of the high-tech industry, the competition between businesses has gradually changed into a competition of enterprise product and process innovation. Businesses across industries will devote more financial and material resources to R&D projects in order to ensure and achieve sustainable management and long-term development [1].

Under GAAP, research and development costs are generally expenses. By contrast, IFRS allows for a greater degree of capitalization of development costs.

The all-expensed processing method is relatively simple and has strong operability, which is convenient for enterprise financial personnel to learn and operate, and the research and development expenditure can offset the current taxable income, which is conducive to reducing the development cost of enterprises. However, recognizing all expenses as expenses in some cases goes against the principles of authenticity and matching cost and income. The relevant enterprise's current income cannot be significantly impacted by the current research and development costs, therefore problems like overstated future profits are a common occurrence. This treatment of research and development expenses prevents the effective reflection of an enterprise's intangible assets, and this approach also decreases the accuracy of the valuation of firm assets [2].

If the previous approach of fully expensing research and development had been adopted, that part of the expenditure would have been carried forward to expenses if the research and development had failed; However, if the research and development is successful and the patent right is formed, then when the patent right brings profits to the enterprise in the future period, the corresponding cost cannot be carried forward due to the absence of corresponding intangible assets, and accounting

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information distortion will occur in this treatment method. Therefore, conditional capitalization of R&D expenses is more consistent with the principle of matching revenue and expenses. So it ensures that the assets of enterprises will not be underestimated.

However, conditional capitalization of R&D costs is not entirely without its drawbacks. This gives some executives the opportunity to manipulate the situation by inflating the value of intangible assets to flatter the financial statements. This will bring many adverse effects to the enterprise, and even lead to the bankruptcy of the company. At the same time, conditional capitalization of R&D expenses requires accounting practitioners of enterprises to have a higher professional quality to make judgments, which requires enterprises to spend more on staff training.

All in all, the development of science and technology has brought about rapid changes in the economic environment, and we have come to an era where knowledge has the right to speak. Therefore, it is the most direct and effective way for enterprises to increase R&D investment to form scientific and technological achievements to enhance their core competitiveness. The capitalization of R&D expenditure is more in line with the current era because it encourages businesses to actively innovate. However, it also introduces new, high standards for the level of accounting staff of businesses, which also reflects the professional level of practitioner must advance with the times. So under the general trend, that is why politicians have lobbied America's Financial Accounting Standards Board to allow companies to capitalize the research and development expenditures.

2.2. Different Methods of Inventory Management

In inventory management, there are first-in-first-out method(FIFO), last-in-first-out method(LIFO) and weighted average method. International Accounting Standards No.2 indicates that IFRS bans the LIFO inventory accounting methods. While ASC No.330 points out that GAAP rules allow for LIFO.

There is an example: Assume that the inventory entry and exit of enterprise A in July 2023 is as shown in table 1, the sales income of enterprise this month is 5,000,000 yuan, and the income tax rate is 25%.

Table 1: The inventory entry and exit of enterprise A in July 2023.

date	abstract	be put in storage			delivery of cargo from storage			balance		
		quantity	unit price	amount	quantity	unit price	amount	quantity	unit price	amount
1st	balance							5,000	100	500,000
5th	entry	2,000	200	400,000				7,000		
10th	exit				4,000			3,000		
17th	entry	4,000	400	1,600,000				7,000		
20th	exit				5,000			2,000		
25th	entry	4,000	500	2,000,000				6,000		
total		10,000		4,000,000	9,000			6,000		

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Table 2: Profit under FIFO and LIFO.

	FIFO	LIFO
Sales revenue	5,000,000	5,000,000
Cost of goods sold	1,700,000	2,300,000
Period expenses	1,000,000	1,000,000
Gross profit	2,300,000	1,700,000
Income tax	575,000	425,000
Net profit	1,725,000	1,275,000

Through table 2, it can be seen that Under the FIFO method, the inventory on the ending balance sheet reflects the recently purchased portion and is closer to the market value of the inventory. Under the LIFO method, the inventory sold in the current period is the recently purchased part.

When the market price is rising, using LIFO method to calculate the cost of issuing inventory will pay less income tax, which is beneficial to enterprises. If the market price is on a downward trend, then the calculation of the first in first out method is beneficial to the enterprise [3].

2.3. Different Classification of Interest and Dividend in Cash Flow Statement

There are three elements to consider while creating the cash flow statement: cash flow from financing activities, cash flow from investment activities, and cash flow from operating operations.In accordance with GAAP and IFRS, the company's division of interest earned or paid and dividends is also different when preparing the cash flow statement.

While US GAAP states that interest paid and interest received should both be classified as operating activities, international standards are more flexible and assume that companies can choose their own classification policies as they see fit. Interest paid may be placed in the operating or financing portion of the cash flow statement, while interest received may be placed in the operating or investment portion.

Dividends are no different. According to Gaap, dividends received should be attributed to the operating element and dividends paid to the financing portion. Companies can select how to classify dividends when adhering to IFRS. Dividends received or paid can be allocated to the operating or investment element, and vice versa for the financing portion [4].

3. The Convergence of GAAP to IFRS

In the general trend of international convergence of accounting standards, compared with GAAP, IFRS has been more widely used in the world. According to the information disclosed by the BvD(Bureau van Dijk) financial database, there are about 7,935 listed companies in 107 countries and regions in the world who disclosed financial reports strictly in accordance with IFRS in the most recent fiscal year, and the exchanges listed by these companies are all major international stock exchanges. In addition, there are 3,411 companies that partially use IFRS for their financial disclosures. Therefore, from the perspective of the actual application of accounting standards, compared with the US GAAP, IFRS has a wider application range in the world [5]. In an effort to encourage the convergence of GAAP and IFRS, the US Securities and Exchange Commission (SEC) and the US Accounting Standards Board (FASB) have started actively seeking collaboration with the IASB. The Norwalk Agreement, which was agreed by the FASB and IASB in October 2002, proposes to do away with significant disparities between GAAP and IFRS by the year 2005. In February 2006, the FASB and the IASB signed the 2006-2008 Memorandum of Understanding, further demonstrating their commitment to achieving convergence of financial accounting standards. By approving a law that permits foreign corporations listed in the United States to utilize IFRS for financial reporting in

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November 2007, the SEC made a significant contribution to the convergence of accounting standards [6].

4. Conclusion

This paper mainly discusses the differences between GAAP and IFRS in the division of R&D expenditures, inventory management and the preparation of cash flow statements, and finally summarizes the convergence trend of the two accounting standards in recent years. Although IFRS also has many disadvantages, it is a more widely recognized standard that, over time, will be more effective and economical, more transparent, and more accurately capture the essence of a business's financial activities. As a result, the adoption of global standards by U.S. companies can enhance the comparability of financial reporting and the uniformity of global markets, which also provides new business opportunities for U.S. companies. Every country is making efforts for the convergence of accounting policies, and the unification of accounting policies in the world has been the general trend. In the aspect of improvement, this paper lacks the ability of planning and layout, and needs more theoretical support and in-depth analysis in problem analysis.

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