Research on Enterprise Macroeconomics and Value Standards

Yinjin Xiao
New Era University College, Malaysia

***Abstract*—** This paper focuses on developing corporate financial knowledge through research and decision making, balancing financial theory with a practical problem solving approach, completing decisions on the evaluation and selection of assets, valuation of securities, costs, leverage and finance, with the main task being its risk-reward trade-off in financial decisions. Also study budgets and budget control systems from a corporate perspective. Demonstrate the ability to access relevant financial information via the Internet or laboratory resources, the correctness of product costs calculated based on assumptions made based on the strength and optimal timing of assumptions supported by relevant theories, and appropriately demonstrate and discuss the different effects on unit product costs of traditional methods and activity-based costing used to allocate overhead costs. Acquire the quality of IFRS and GAAP analysis, identify the similarities and differences between IFRS and GAAP, and determine under which model financial reporting more truly reflects the true value of assets, the ability to use data models, and the ability to accurately understand and use "Surplus Management under U.S. GAAP and International Accounting Standards".

***Keywords*—** Earnings managemen,Return on Assets,Cashflow,Long-term solvency ratio,Short-term solvency ratio,Operational capability,Market value.

I. THE APPLICATION OF ACTIVITY-BASED COSTING IN AN INSURANCE COMPANY

AX Life Insurance Company is the oldest insurance company in the United States, which sells individual life insurance products, individual annuities and group annuities. Have a functional organizational structure including sales, marketing, finance, IT and service departments. Financial support staff provide budgeting and financial analysis support to various departments.

Although insurance is one of the most regulated industries in the world, there are more and more new entrants and most market players offer similar products, hence the industry is highly competitive. As a result, most insurers are price takers rather than price makers.

This means that they are forced to sell insurance at a price prevailing in the market, and cost control is critical to make the business profitable. Therefore, it is important for insurance companies to understand their cost structure, the underlying cost drivers and develop a robust cost allocation system for business decision making.

The overall costs of insurance companies in general can be categorised as sales related expenses and management related expenses. The sales related expenses (or say acquisition expenses) refer to the costs arising from issuing insurance policies, such as:

- salaries & benefits for staff of sales and marketing departments
- sales commissions paid to agents or channels
- advertisement or sales campaign costs
- underwriting expenses
- policy issuance fee

The management related expenses (or say maintenance expenses) are costs for back office operations, which mainly include:

- salaries & benefits for staff of administrative departments
- customer service fee
- claim management fee
- IT related expenditure
- investment management fee
- administration expenses (e.g. office expenses, travel & entertainment fee, audit & consulting fee, telecom & postage fee, logistics fee)
- depreciation of tangible assets

The insurance company set the premiums of insurance products at a level sufficient to cover claims, sales and administrative costs, and most importantly provide a desired profit margin.

1. Problem Identification

After careful discussion and study in our group, we suppose that the main problems facing the company are as follows:

1.1 Unreasonable cost allocation methodology

Expense allocation is based on general factors such as premium, assets, etc., rather than particular cost drivers. Secondly, all cost centers in the same functional center adopt a single allocation basis. Thirdly, the cost data is

collected in the cost center level but allocated at the functional center level, which contributes to the mismatch between collectors and users. This phenomenon makes it difficult to collect cost drivers. Even if one party collects them but the other party does not use them, which leads to the inconsistency between the allocation basis and cost drivers.

The unreasonable allocation method leads to inaccurate cost data, which in turn results in the wrong actuarial pricing of insurance products and product profitability analysis, which further causes wrong decision-making on channel sales strategy, solvency risk and even regulatory compliance risk.

1.2 Weak system

AXE life lacks advanced IT systems to allocate expense to insurance products. The cost allocation is performed by outdated spreadsheets. Due to outdated technology, a number of manual interventions are required to process the allocation.

The allocation process doesn't synchronize with the accounting process and cannot be completed at one time. Not completing the allocation in a day, the system is inefficient, time-consuming which leads to the company's delayed cost data.

Since the allocation process is completed in a long period up to 3 days, the product cost cannot be provided to the actuarial department in time, which affects other business processes such as product actuarial pricing and product profit analysis.

With the low level IT technology and delayed cost data, it is difficult for executive management to respond quickly to the ever-changing market. Lean management requires that product development, business sales, customer service, data analysis and other processes respond immediately, and business need be processed without delay.

In a word, there is a strong homogeneity of products in the insurance industry without high-tech barriers and with low cost of imitation, which is quite different from manufacturing industry.

1.3 Lack of internal control

There is lack of proper review in cost rationality in the various financial processes in AXE insurance company.

Due to limited time for the analysis in input and output process, the basis for the expense allocation is reviewed on an annual basis.

There is no analysis, tracking and assessment of the variance between actual cost and budget. Budget control may become a mere formality due to the lack of budget variance analysis.

No one is responsible for product cost, product sales cost and product service cost, all of which may be out of control. Inadequate and delayed reports of product cost leads to the lack of communication with the executive management, which in turn results in less review and supervision from senior management.

2. Proposed Solutions

Considering the characteristics of the insurance industry, our group discussed and analyzed the situation of the company, and put forward relevant suggestions.

2.1 The alternatives and factors to be considered in developing expense allocation system

The first alternative is developing the expense allocation system by the AXE life company staff. The benefits of this alternatives are as follows. The system suits to the particular need of AXE Life.

Secondly, if there will be some problems, it is easier to find a staff to solve. Thirdly, annual maintenance fee can be saved.

What is more, staff can acquire opportunity to improve their skills. The costs are that longer period of developing time are needed and the risk of developing failure exists.

The third alternative is to develop a system by outsourcing instead by its staff. The cost is that the cost to develop by outsourcing is very high compared to developing by its staff or purchasing.

The cost to maintain and amend is another large sum of money. The benefits are that the system may fit more in with the special need of AXE life compared to the purchased system and the possibility of developing failure is lower compared to developing by its staff.

The second alternative is purchasing a system in the open market. The costs are that the annual maintenance fee is needed and some functions of the system may be not suitable to AXE life.

The benefits are that the purchasing cost may be lower than the AXE life developing cost and the installation time period is short.

A number of factors to be considered are as below. In the development of a new expense allocation system,

cost behavior should be analyzed thoroughly first, considering whether it is direct cost or indirect cost, variable or fixed cos.

Next, resource drivers and cost drivers should be also considered. Furthermore, employees' attitude towards change is critical to the success of implementing an innovation. Finally, additional training may be required to help understand what they may need to do in order to achieve the goal.

2.2 Industry comparison – Manufacturing vs Insurance

For a common entrepreneur, the expenses in a broad sense include: (1) direct costs, such as direct materials, direct labor, etc., can be directly assigned to specific products; (2) indirect costs, i.e., manufacturing overhead, can be allocated to specific products; (3) financial expenses, management expenses, and sales expenses, cannot be included in product cost since they are regarded as period expense.

Generally speaking, if all the expenses are allocated to the products, the cost of the products will be inaccurate and overstated. The overpriced product based on the unreasonable cost is unattractive in the fiercely competitive market.

Notwithstanding, product pricing performed by the actuary licensed by the professional institute in the industry of insurance is different from the traditional industry.

The premiums of insurance products are determined at a level that sufficient to cover all future claims, sales and administrative costs, and provide a profit margin under the projections with current best estimated assumptions and consideration of time value. In pricing, the expense costs are considered by allowing an expense loading on net premium.

Then the pricing actuaries test product profitability under the determined premium rate and expense assumptions.

In order to make the product profitability data more reliable and support Executives decision making, it is essential that all expense costs of all departments should be counted and well allocated to products.

2.3 Suggestions on current expense allocation system

Allocation basis in red of the following table (table 1, Panel D) is identified as inconsistent with the activities that drive costs.

That suggested allocation bases which are consistent with the cost drivers are given in the final column in the following table.

Table 1. Panel D: Cost Driver Information, Current Allocations

Department/Function	Description of Activities	Cost Driver	Products Supported	Allocation	Suggestion
Marketing					
Marketing Management	Manage marketing dept.	Marketing Campaigns	All	Sales	
Marketing Department Staff	Marketing campaigns	Marketing Campaigns	All	Sales	
Happy Retirement Annuity Campaign	Costs for media campaign	Media campaign	Happy Retirement Annuity	Sales	Direct to happy retirement
Secure Life Insurance Campaign	Media campaign for secure life product	Media campaign	Secure Life	Sales	Direct to secure life
Total Company Ad Campaign	Media campaign for company	Media campaign	All	Sales	
Customer Service – Life					
New Business Management	Manage new business	New policy volume	Life (all)	Sales	New policy volume
Applications	Review applications	Number of applications	Life (all)	Sales	Number of applications
Underwriting	Underwriting applications	Number of applications	Life (all)	Sales	Number of applications
Policy Issuance	Issuing new policies	Number of policies issued	Life (all)	Sales	Number of policies issued
e-Issuance	Tech support for e-applications	Number of e-applications	Life (all)	Sales	Number of e-applications
Customer Service Management	Manage customer service	Number of policies	All	Premium	Number of policies
Call Center	Staff in call center	Number of phone calls	All	Premium	Number of phone calls
Life Insurance Inforce Maintenance	Servicing life policies	Number of policies	Life (all)	Premium, life	Number of policies
Claims Management	Manage staff for claims	Number of claims	Life (all)	Premium, life	Number of claims
Life Insurance Claims Adjusters	Adjudicate claims	Number of claims	Life (all)	Premium, life	Number of claims
Life Insurance Claims	Issue claim checks	Number of claims	Life (all)	Premium, life	Number of claims
Customer Service – Annuity					
New Business Management	Manage new business issuance	New policies sold	Annuities (all)	Sales	New policies number
Applications	Reviewing applications	Number of applications	Annuities (all)	Sales	Number of applications
Policy Issuance	Staff issuing new policies	Number of policies issued	Annuities (all)	Sales	Number of policies issued
e-Issuance	Tech support for e-applications	Number of e-applications	Annuities (all)	Sales	Number of e-applications
Annuity Inforce Maintenance	Service all annuity products	Number of policies	Annuities (all)	Premium, annuity	Number of policies
Annuity Surrenders	Issue surrenders	Number of surrenders	Annuities (all)	Premium, annuity	Number of surrenders

Information Technology					
IT Management	Manage staff for IT	Number of systems/projects	All	Assets	Number of systems/projects
Financial Management Systems	Managing financial systems	Number of systems/projects	All	Assets	Number of systems/projects
Human Resource Systems	Manage HR systems	Number of systems/projects	All	Assets	Number of systems/projects
Life Insurance Claims Systems	Managing life claim system	Number of systems/projects	Life	Assets	Number of systems/projects
Life Policy Systems	Managing life systems	Number of systems/projects	Life	Assets	Number of systems/projects
Annuity Systems	Managing annuity systems	Number of systems/projects	Annuity	Assets	Number of systems/projects
Annuity Projects	Projects for annuity products	Project hours	Annuity	Assets	Project hours
Life Insurance Projects	Projects for life products	Project hours	Life	Assets	Project hours
Financial Systems Update	Project for upgrading financial system	Project hours	All	Assets	Project hours
Controller	Accounting staff	Number of reports	All	Assets	Number of reports
Actuarial	Actuarial staff	Number of reports	All	Assets	Number of reports
Financial Planning and Analysis	Financial analysts and budget analysts	Number of analysis and reports	All	Assets	Number of analysis and reports
Expense Management	Cost accounting staff	Number of reports	All	Assets	Number of reports
Human Resources					
HR Management	Manage staff	Employees	All	Assets	Employees
Compensation and Payroll	Executive and employee compensation	Employees	All	Assets	Employees
Staffing and Recruiting	Recruit for all company positions	Open positions	All	Assets	Open positions
Sales					
Sales Management	Manage sales function for company	Sales	Life and annuity (all)	Sales	
East Region	East coast sales staff and management	Sales for region	Life and annuity (all)	Sales	Sales for region
Midwest Region	Midwest sales staff and management	Sales for region	Life and annuity (all)	Sales	Sales for region
South Region	Sales staff and management for south	Sales for region	Life and annuity (all)	Sales	Sales for region
West Region	Sales staff and management for west coast	Sales for region	Life and annuity (all)	Sales	Sales for region
Facilities					
Facilities Management	Manage staff for Facilities	Number of employees/sq. ft.	All	Assets	Number of employees/sq. ft.
Facilities Staff	Maintenance and other Facility staff	Number of employees/sq. ft.	All	Assets	Number of employees/sq. ft.
Corporate Unallocated Rent	Rent for entire corporate office	Number of employees/sq. ft.	All	Assets	Number of employees/sq. ft.
Treasurers					
Treasurer	Manage staff for Treasurer's dept.	Assets	All	Assets	
Cash Management and Banking	Manage cash & banking relationships	Number of bank accounts	All	Assets	Number of bank accounts
Investments	Manage investments	Invested assets	All	Assets	Invested assets
Executive & Corporate					
Office of the CEO	CEO and support staff		All	Assets	
Corporate	Expenses not chargeable to any business area		All	Assets	

2.4 Review on the improved expense allocation system

The allocation bases of marketing department, customer service department (both life and annuity) have been improved: the original allocation bases are inconsistent with the cost drivers, and the allocation bases in the revised method are consistent with the cost drivers.

IT department, HR department, sales department, facilities department and treasurer's department still do not use cost driver as cost allocation base, thus requiring further improvement.

2.5 Review on the allocation basis for Life Insurance Projects

After analyzing the tables, we concluded that the proposed cost allocation basis for the life insurance program was inaccurate.

The project cost is the cost of system upgrading and modification. There is no direct and linear relationship between the cost and the number of life insurance policies. Using as the basis of allocation.

The allocation method, where the allocated expense is based on the number of life insurance policies, distorts the product cost. The upgrading or modification costs for different types of insurance can be traced directly to the particular insurance products that the relevant projects support.

2.6 Suggested Steps to Improve AX Life's Cost Allocation System

Based on the data and information provided, the following steps can be taken to drive IT, HR, Sales, Facilities, and Finance to use cost drivers as the basis for cost allocation:

A. Develop a survey plan to investigate specific cost drivers;

B. Hold communication meetings with appropriate cost center personnel to disseminate the program;

C. Develop a survey form;

D. Invite cost center personnel to determine the appropriate cost drivers and collect the number of cost drivers; E. Collect the forms, update the cost drivers, and determine the basis for allocating costs based on the cost drivers.

Several additional steps can be taken. First, change the allocation basis level from a functional center level to a cost center level. Second, review the allocation basis more frequently. Third, calculate a per-policy cost rate for the activity and examine the timing of the activity in the cost allocation process. Fourth, train the team to improve their understanding of how the information is used and what it means. Finally, improve communication with the actuarial department to understand their needs and understand actuarial theory.

3. Proposed solution for developing an activity-based costing system

3.1 Activity classification

Activities can be classified as units, batches, products, and facilities. Unit-level activities are activities that are performed specifically for a single product or service and that benefit a single product (or service).

Batch-level activities are activities performed for a group (or batch) of products (or services) that benefit that group (or batch) of products (or services).

Product-level activities are those performed for the production and distribution of a product (or service) and benefiting each unit of that product (or service).

The facility-level activity refers to the activities carried out to provide the basic ability to produce products (or services).

Category	Activity
Unit level activities	Review application(life and annuity), underwriting application, issuing new policy, Tech support for e-applications(life and annuity), manage customer service, receive incoming call, servicing life policy, service all annuity product, issue claim check, issue surrenders,
Batch level activities	In the industry of insurance, if a kind of product is developed by the actuarial department, the number of this product which could be sold is subject to management decision rather than producing capacity. This is to say, there is no concept of batch level in the industry of insurance.
Product level activities	Marketing campaigns, costs for media campaigns, media campaign for secure life product, manage new business(life and annuity), project for new annuity product, project for new life product,
Facility level activities	Media campaign for total company, Mange marketing dept., staff issuing new policy, manage staff for IT, manage financial/HR systems, managing life claim systems, manage staff for claims, managing life systems, project for upgrading financial systems, accounting dept., actuarial staff, financial analysts and budget analysts, cost accounting staff, manage staff for HR, executive and employee compensation, recruit for all company positions, manage sales function for company, east coast sales staff and management, Midwest sales staff and management, west coast sales staff and management, manage staff for facilities, maintenance and other facility staff, rent for entire corporate office, manage staff for treasurer's dept., manage cash&banking relationships, manage investments, CEO and support staff, expenses not chargeable to any area,

3.2 The cost rates

According to the information in Table 5, we can calculate the allocation rates by the expense number divided by the volume number, as detailed in the table below.

Table 2: Cost and Volume Data

Department/Function	Driver	Volume	Expense	Rate
New Business Life	New life policies	9,345	$ 191,525	20.49
New Applications	Number of life applications	11,489	815,251	70.96
Policy Underwriting	Number of life applications	11,489	1,610,825	140.21
Policy Issuance – Life	Number of life policies issued	9,385	1,155,424	123.11
e-Policy Issuance – Life	Number of electronic life policies	2,185	172,515	78.95
New Business Annuity	New annuity policies	9,490	397,125	41.85
New Applications	Number of annuity applications	9,925	1,215,241	122.44
Policy Issued	New annuity policies	9,490	1,192,500	125.66
e-Policy Issuance – Annuity	Number of electronic annuities	1,145	173,525	151.55
Customer Service Management	Number of policies (all)	2,275,694	1,156,250	0.51
Call Center	Number of calls	34,884	910,257	26.09
Life Inforce Management	Number of life policies	1,735,251	1,115,497	0.64
Annuity Inforce Management	Number of annuities	540,443	1,485,273	2.75
Annuity Surrenders/Payments	Number of annuities	101,426	415,125	4.09
Claims Management	Number of life claims	11,327	1,101,010	97.20
Life Claims Adjusters	Number of life claims	11,327	1,415,000	124.92
Life Claims Support	Number of life claims	11,327	1,227,904	108.41
Life Claims System	Number of life claims	11,327	1,215,250	107.29
Life Insurance System	Number of life policies	1,735,251	1,229,850	0.71
Annuity System	Number of annuities	540,443	$1,201,525	2.22

Given the inadequacy of the above information. The following data are needed for decision making: product unit costs and product variable costs for product decisions; costs and profits for responsibility centers (including cost centers) for performance measurement and evaluation of responsibility centers; activity costs for product portfolio decisions, ongoing tracking and analysis of activities, etc.

3.3 Cost of issuance for life insurance business

The cost of issuing life insurance policies is calculated by dividing the cost by the allocation base given in the table below, including the acceptance and processing of insurance applications for each product, as detailed in the table below.

The cost of issuing a policy is $386.12, of which $20.41 is for new business administration, $70.96 is for new applications, $171.64 is for policy underwriting, and $123.11 is for issuing a policy. If we adjust the cost of the policy by using the policy number as the basis of assignment instead of the application number to reflect that nearly one-fifth of applications do not result in a policy, the cost of a new application is $86.87 and the cost of a policy written is $402.03.

3.4 Deep dive on policy costs

According to the information in Table 7, the cost of servicing and maintaining a policy for each product has been calculated by the cost number divided by the number of allocation bases identified in the right part of the table, as detailed below.

It is noted that fixed cost comprise the majority of the cost, approximately 63%. Furthermore, almost 90% of the variable costs are salaries while about 39% of fixed cost is salaries. Therefore, the allocation of variable costs would be more reasonable if there were labor hours data. In addition, it will be more appropriate to allocate

fixed cost based on premium whose data will be extremely valuable. If the number of policies is large and the premium is small, the company will not be sustainable, so the premium data is more relevant.

3.5 How activity-based costing helps improve cost efficiency?

An improved Activity Based Costing (ABC) system provides AX Life with insight into the costs of developing, selling and servicing its products. The system will identify all activities at the cost center level, the cost drivers for each identified activity, and the cost object (typically a product, sales channel, or branch of the insurance company). In the ABC framework, it is assumed that cost objects consume activities and activities consume resources. Resources are assigned to activities based on resource drivers (which measure the frequency and intensity of demand for resources by activities), and activities are assigned to cost objects based on activity drivers (which measure the frequency and intensity of demand) by cost object placed on activities). As a result, the ABC system assigns indirect costs to cost objects more arbitrarily than traditional cost allocation methods. Since most of the costs in AX Life are indirect costs, ABC provides more accurate information about product costs. This is critical for product pricing and profitability testing, and supports AX executive management in making business decisions. In addition, the ABC system enables AX Life to identify non-value-added activities and unused capacity at the departmental cost center or functional level, helping management streamline operational processes and assess the organization's performance and cost effectiveness. In short, ABC helps AX Life to better control overall operating costs and improve the company's profitability over time.

3.6 Implementation of activity-based costing and time-driven activity-based costing

Based on industry experience, time-driven activity-based costing can greatly reduce the time and complexity of adopting ABC. In general, TDABC is an effective method for implementing activity-based costing.

The implementing steps of ABC are as follows. Firstly, identify the different resources, recognize and measure resource costs to lay a foundation for allocating resources to activities. Secondly, analyze business processes, identify, differentiate and define various activities and activity cost centers. Thirdly, based on benefit principle, distribute resources to activities in accordance with the relationship between cause and effect. Fourthly, understand and determine cost drivers for different activities. Fifthly, trace and record activity costs and cost driver's data. Finally, calculating the rate per activity on which based to allocate cost to objects.

There are two steps to implementing TDABC. The first step is to calculate the cost per time unit of capacity. This is determined by dividing the cost of all resources invested in the cost center by the actual productivity of the cost center after deducting the time spent on normal leave and training employees. The second step is to create a time equation to estimate the man-hours consumed by each cost object (customer, product, process). The resource cost of each department is assigned to the cost object based on the capacity cost per unit of time calculated in the first step. With these two steps, TDABC is much more concise and straightforward than traditional ABC.

II. ANALYSIS OF THE DIFFERENCES IN EARNINGS MANAGEMENT BETWEEN IFRS AND US GAAP

Earnings Quality in Qatar Exchange and US Stock Exchange: Empirical Evidence" by Dr. J.K. Yun, John J. Kim and Helmi Hammami (published by International Research Journal of Applied Finance, Vol-III, Issue-1, 2012) (January 2012) analyze the important differences between IFRS and US GAAP in terms of different inventory value measures of earnings Manipulation of accrual models and clarify that there is more scope for operating surplus management under IFRS.

This paper will present our own views based on a summary of the main points of the research paper. At the request of the professor, our views will be presented in the following order.

1. Introduction

IFRS (International Financial Reporting Standards) is a standardized accounting standard issued by the International Accounting Standards Board (IASB) to facilitate implementation by countries in the international marketplace. US GAAP (Generally Accepted Accounting Principles) consists of accounting standards, methods and procedures prescribed by the Financial Accounting Standards Board (FASB), the Association of Public Accountants (APB) and the Securities and Exchange Commission (SEC) in opinions and pronouncements.

After discussing the importance and methodology of this study, this paper will use large amounts of data, by using three different models, to empirically analyse and study the differences in inventory values between IFRS and US GAAP. The main research results will be listed,

on this basis of which the research conclusions will be formed.

2. Why is this research important?

Surplus management is the act of a company's management to control or adjust the disclosure of accounting income information to maximize the company's own interests on the basis of following accounting standards. Surplus management is a widely studied topic in economics and accounting abroad.

Whenever a company's management uses personal judgment to select accounting procedures and change financial reports in order to maximize personal utility or maximize corporate value, the purpose is to intentionally or unintentionally steer corporate stakeholders or to influence reliance on contractual results accounting reporting figures. These actions are considered surplus management. The empirical study of surplus management has not only deepened the understanding of accrual accounting and accelerated the improvement and development of GAAP, but has also greatly promoted the development of modern accounting theory and its research methods, playing a very important role in empirical accounting research, especially the empirical study of the application of modeling methods.

Model method is an important method in scientific research. Under the development of modern science and technology, model methods are more and more widely applied and produce great economic and social benefits. Model method is increasingly applied on modern accounting analysis and research.

Although modeling itself is limited and there are many assumptions, the model itself is a very rigorous discipline that can carry out a quantitative abstract analysis on the main aspects of objective matters. The scattered factors have been systematised in order to form an effective conclusion.

This paper analyses the important differences and impacts on the profit between IFRS and US GAAP by comparing the measurement of inventory value under different manipulative profit accrual models.

3. Methodology

This paper will use large amounts of data by three different models to empirically analyse and study the differences under IFRS and US GAAP. It focuses on the situation of more room for earnings management operations under IFRS and analyses the possible impacts.

4. Findings

The results of the study indicate that Qatari listed companies in the services, manufacturing and insurance sectors manage revenues more actively than their US counterparts. Furthermore, since the financial statements of listed Qatari companies are required to be prepared in accordance with IFRS, companies can reduce their tax burden by adopting different accounting options under IFRS, thereby increasing their profits. The study finds that in an inflationary environment, Qatari listed companies have a better ability to increase the residual value of their inventories on their balance sheets than the U.S. if they measure their inventories according to the first-in, first-out (FIFO) method of International Financial Reporting Standards (IFRS). -listed companies. Also, in an inflationary environment, the FIFO inventory method has a higher net profit than its U.S. counterpart listed companies.

5. Conclusion

The direction of surplus management is directed to the information content and signaling function of accounting data, which has different characteristics in different countries. Under the developed securities market, people consider more about the information content and signaling function of accounting data for surplus management, and the importance of information content is more obvious. Under less developed securities markets, people pay more attention to the deviation between accounting reported income, economic income or income under other regulations. Its position in economic income is accordingly more prominent.

IFRS and US GAAP are currently the two most important sets of accounting standards in the world. The paper points out that under IFRS there is more room for surplus management under the manipulative accrual profit model. However, over a long period of time (up to the entire life cycle of the company), surplus management does not increase or decrease the actual profitability of the company, but rather changes the reflection and distribution of the company's actual profits over different accounting periods. . In other words, surplus management affects accounting data, especially reported earnings, rather than the company's actual profits.

Since IFRS now provide management with more room for judgment to provide useful information and improve the quality of accounting information. Accounting standard-setting bodies can improve the conditions of application by setting up different accounting treatments and estimation methods more clearly, thus reducing corporate surplus management to some extent and

enhancing the comparability of operating results under different standards.

III. ANALYSIS ANALYSIS OF THE DIFFERENCES BETWEEN IFRS AND US GAAP AND THEIR EFFECTS

"Comparisons on selected ratios between IFRS and US GAAP companies" written by Professor Da-Hsien Bao, Jooh Lee and George Romeo (College of Business, Rowan University, Glassboro, New Jersey, USA) analyses the effect of differences related to inventory, property plant and equipment, intangible assets, and development costs between IFRS （International Financial Reporting Standards） and US GAAP (Generally Accepted Accounting Principles). This analysis is not the full difference between the two standards.

This paper will present our own views based on the summary of the main points of the research paper. At the request of the professor, our views will be presented in the following order.

1. Introduction

IFRS (International Financial Reporting Standards) are standardized accounting standards issued by the International Accounting Standards Board (IASB) that facilitate implementation by countries in the international marketplace. IFRS is a set of globally harmonized financial standards, which are financial management standards that operate in accordance with international practice and are used to regulate the accounting operations of companies or other economic organizations around the world. Thus, the economic interests of countries can be protected under the same standard in order to avoid unnecessary economic losses caused by different calculations under incompatible standards.

US GAAP consists of accounting standards, methods and procedures prescribed by the Financial Accounting Standards Board (FASB), the Association of Public Accountants (APB) and the Securities and Exchange Commission (SEC) in opinions and pronouncements. US GAAP is an official and authoritative combination of standards that company accountants must follow to record and summarize accounting data and prepare financial statements. It also serves as the basis for auditors to review a company's financial statements. US GAAP has been adopted primarily by U.S. companies or Wall Street public companies.

After discussing the importance and the methodology of this study, this paper will analyse and study by enumeration method. The main research results will be listed, on the basis of which the research conclusions will be formed.

2. Why is this research important?

In today's globalized economy, accounting has become a universal language. It has assumed an increasingly important responsibility in international economic and cultural exchanges. Understanding the differences between the two accounting standards is important for the business development of multinational companies, investors, governments, regulators, etc. This paper examines the similarities and the differences between IFRS and US GAAP in the areas of inventory, property and equipment, intangible assets, and development costs, resulting in current ratios, inventory turnover, asset turnover, gearing, and profitability Assets.

3. Methodology

This paper will list the impact on current significant differences between IFRS and US GAAP resulting in ratios and other relevant ratios through an enumeration approach. Significant differences between the two most important current standards and their impact will also be described.

4. Findings

The basic feature of IFRS is principle-based, while US GAAP is rule-based with many details. US GAAP is more conservative than IFRS in terms of quality of analysis. Assets under US GAAP are mostly measured at cost. In the absence of significant inflation, there are no significant differences in a company's financial statements that would have an impact on the quality of analysis. Assets under IFRS are measured at fair value, which better reflects the actual value of the company and improves the quality of financial statement analysis in the face of increasing inflation.

IFRS and U.S. GAAP are consistent in terms of the calculation of earnings per share, reporting disclosures, changes in accounting estimates and misstatement rules. The study identifies the differences between the two standards. (1) There is a difference between inventory cost and inventory write-downs. US GAAP allows LIFO, FIFO or weighted average method, but IFRS does not allow LIFO. reversal of inventory write-downs is not allowed under US GAAP, while it is allowed under IFRS. According to the results of this paper, the value of inventory under IFRS will be equal to or greater than US GAAP, resulting in higher total assets under IFRS than US GAAP at the reporting date. (2) In terms of fair value, IFRS allows for the measurement of property and

equipment and intangible assets at fair value, but US GAAP does not allow for fair value measurements. (3) In terms of capitalization of development costs, IFRS allows capitalization of development costs incurred during the development phase, but expensed under US GAAP. Based on the above findings, it was found that the current ratio under IFRS is higher than US GAAP, while the asset turnover ratio and gearing ratio are lower than US GAAP.

This paper illustrates the differences in the above aspects only. In fact, more differences between IFRS and US GAAP are as follows.

Items	IFRS	US GAAP
Classification, measurement and impairment of debt instruments	Classified according to business model and cash flow characteristics; Debt instruments that have not passed the contractual cash flow characteristics test (i.e. SPPI test) are measured at fair value; impairment applied based on expected credit risk.	Classified according to the intention of holding; debt instruments that have not passed the contractual cash flow characteristics test can be measured at amortized cost; impairment is accrued based on occurrence of credit risk.
Measurement of equity instruments	For the equity instruments measured at FVOCI (fair value through other comprehensive income), the realised gain or loss cannot be recycled to the income statements.	For the available-for-sale equity instruments, the realised gain or loss can be recycled to the income statements.
Issuer's classification of convertible bond instruments	Divided into the liability component and the equity component.	The entire instrument is presented as a liability.
Maturity on fixed asset borrowing costs	Interpreted as borrowing costs over one year can be capitalised as fixed asset costs or expensed in the income statements.	Must be capitalised as fixed asset costs.
Measurement of agricultural products, livestock, fruits and forest products	Measured at fair value, and its changes are recognised in profit or loss.	Historical costs usually adopted.
Measurement of investment in associates	Except for the investment entities which can be measured based on fair value through profit or loss, it must be measured by the equity method.	Measured by the equity method, the fair value option can be exercised.
Reversal of asset impairment losses	If certain criteria are met, impairment losses should be reversed (such as bonds). However, impairment losses on goodwill cannot be reversed.	Impairment losses cannot be reversed.

In summary, IFRS generally uses fair value to measure assets, which is better on reflecting the value of assets of the company and can improve the quality of financial analysis under the inflation is increasing intensively. Further, IFRS can also improve the correlation between accounting information and asset value.

5. Conclusion

The two sets of accounting standards, IFRS and U.S. GAAP, differ significantly in many important ways. These differences cause confusion and disagreement in understanding between people and increase the cost of communication. The harmonization of accounting standards enhances the comparability of accounting information. It is an important way to eliminate the communication barriers caused by differences in accounting standards. Therefore, we believe that these differences should be gradually eliminated through effective measures.

The necessity of harmonising the accounting standards should be apparent. It is not only the common goal of all countries in the world, but also the necessary way for China to participate in global economic activities. Hope that with the rise of China, the voices of emerging market countries can be expressed more in the formulation of international accounting standards and accelerate the process of global harmonisation of accounting standards.

REFERENCES

[1] MingyiHung.Accounting standards and value relevance of financial statements: An international analysis.Journal of Accounting and Economics Volume 30, Issue 3, December 2000,pp.401-420.

[2] Stefano Ponte,Peter Gibbon.Quality standards, conventions and the governance of global value chains.Economy and Society.34(1), 2005,pp.1-31.

[3] Ball, R., Kothari, S. P., Robin, A,"The Effect of International Institutional Factors on Properties of Accounting Earnings". Journal of Accounting and Economics, 29 (1),2000,pp.1–51.

[4] Clinical and Laboratory Standards Institute. 2018. Performance standards for antimicrobial susceptibility testing; approved standard—28th ed. M100. Clinical and Laboratory Standards Institute, Wayne, PA.

[5] Humphries RM, Hindler JA, Epson E, Horwich-Scholefield S, Miller LG, Mendez J, Martinez JB, Sinkowitz J, Sinkowtiz D, Hershey C, Marquez P, Bhaurla S, Moran M, Pandes L, Terashita D, McKinnell JA,Carbapenem-resistant Enterobacteriaceae (CRE) detection practices in California: what are we missing? Clin Infect Dis 66,2018,pp.1061–1067.

[6] Humphries RM, Hindler JA,Emerging resistance, new antimicrobial agents. but no tests! The challenge of antimicrobial susceptibility testing in the current US regulatory landscape. Clin Infect Dis 63,2016,pp.83–88.

[7] Argitis, Giorgos. "Veblenian and Minskian Financial Markets." European Journal of Economics and Economic Policies: Intervention 10, 1,2013,pp.28-43.

[8] Hombach M, Ochoa C, Maurer FP, Pfiffner T, Bottger EC, Furrer R, Relative contribution of biological variation and technical variables to zone diameter variations of disc diffusion susceptibility testing. J Antimicrob Chemother 71,2016,pp.141–151.

[9] Charlton CL, Hindler JA, Turnidge J, Humphries RM,Precision of vancomycin and daptomycin MICs for methicillin-resistant Staphylococcus aureus and effect of subculture and storage. J Clin Microbiol 52,2014,pp.3898–3905.

[10] Martirosov DM, Bidell MR, Pai MP, Scheetz MH, Rosenkranz SL, Lodise TP, Relationship between vancomycin exposure and outcomes among patients with MRSA bloodstream infections with vancomycin Etest MIC values of 1.5mg/L: a pilot study. Diagn Microbiol Infect Dis 88,2017,pp.259–263.

[11] Moise PA, Culshaw DL, Wong-Beringer A, Bensman J, Lamp KC, Smith WJ, Bauer K, Goff

DA, Adamson R, Leuthner K, Virata MD, McKinnell JA, Chaudhry SB, Eskandarian R, Lodise T, Reyes K, Zervos MJ,Comparative effectiveness of vancomycin versus daptomycin for MRSA bacteremia with vancomycin MIC >1 mg/L: a multicenter evaluation. Clin Ther 38,2016,pp.16–30.

[12] Eum S, Bergsbaken RL, Harvey CL, Warren JB, Rotschafer JC,Discrepancy in vancomycin AUC/MIC ratio targeted attainment based upon the susceptibility testing in Staphylococcus aureus. Antibiotics (Basel) 5,2016,pp.34.

[13] Huttner A, Verhaegh EM, Harbarth S, Muller AE, Theuretzbacher U, Mouton JW,Nitrofurantoin revisited: a systematic review and meta-analysis of controlled trials. J Antimicrob Chemother 70,2015,pp.2456–2464.

[14] Froding I, Vondracek M, Giske CG, Rapid EUCAST disc diffusion testing of MDR Escherichia coli and Klebsiella pneumoniae: inhibition zones for extended-spectrum cephalosporins can be reliably read after 6 h of incubation. J Antimicrob Chemother ,2017,pp.1094–1102.