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## Comparability of IFRS and GAAP

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COMPARABILITY OF IFRS AND GAAP

by

Stephanie Herzog

A thesis submitted in partial fulfillment of the requirements  
for graduation with Honors in the Accounting

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Cristi Gleason  
Thesis Mentor

Spring 2021

All requirements for graduation with Honors in the  
Accounting have been completed.

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Comparability between IFRS and GAAP

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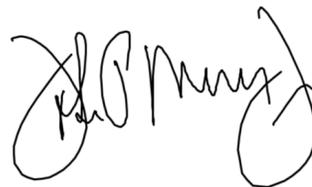
A thesis submitted in partial fulfillment of the requirements for  
graduation with Honors in the Tippie College of Business



Cristi Gleason  
Thesis Advisor

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Thesis received in partial satisfaction of the requirements to graduate  
with Honors in the Major



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Prof. John Murry  
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## **GAAP vs. IFRS**

### **Introduction**

My thesis explores the question of whether the comparability of disclosures is higher for firms reporting under Generally Accepted Accounting Principles (GAAP) versus firms reporting under International Financial Reporting Standards (IFRS). Comparability is important because it helps investors, creditors, and management make better decisions as they have access to financial information that can be easily compared and contrasted against companies in the same industry and of the same size. I used lease disclosures and related information reported in the 10-Ks and 20-Fs of publicly traded airlines provide evidence on the question.

I collected operating lease information from the financial statements of five domestic airlines and international airlines. Through my research, I discovered that my time to find information to compare international airlines was far more extensive as the international airlines did not disclose the same items as the domestic firms did. Additionally, the domestic firms reported their financial information in the same place on each 10-K, which made it much easier to compare. However, the international airlines did not report in the same format, so I had to dig deeper to find comparable information, and even then there were a lot of missing numbers for many international airlines.

I conclude that domestic firms reporting under GAAP have financial statements that are much more comparable than international firms reporting under IFRS. Because GAAP financial statements give investors, creditors, and managers the comparability advantage is one reason the US should be cautious about adopting IFRS.

### **History of Standards: GAAP Versus IFRS**

Accounting standards for reporting, including both the International Financial Reporting Standards (IFRS) and Generally Accepted Accounting Principles (GAAP), have been around a long time (CFI) and have evolved over time. GAAP has been around since before World War II, during the Great Depression and IFRS was established nearly thirty years ago (Principles). Publicly-traded corporations are required to follow these rules and creditors also require some privately-owned borrowers to prepare their financial statements in conformance with GAAP or IFRS. Auditors confirm for financial statement users whether a firm followed one of these standards in presenting their financial information. The Securities and Exchange Commission requires U.S. domestic firms to follow GAAP in their reporting, but permits international firms traded in the U.S. to follow IFRS. Currently, 166 countries have adopted IFRS, a notable exception being the U.S., which continues to set its own standards. (IFRS)

Accounting reporting standards allow firms to be compared against each other, which helps investors to make informed decisions about their investments. Reporting standardizes the way that companies report their assets and revenue and everything else, which creates comparability for readers of financial statements. Investors can inspect the comparable statements and make better firm investment decisions. Management can also use these comparable statements to inspect their standards versus their competitors to compare to industry standards (Bratton).

IFRS and GAAP are separate frameworks because they have been created by two different boards. The Securities and Exchange Commission (SEC) delegated standard setting authority to the Financial Accounting Standards Board (FASB), an independent organization that creates GAAP (Bratton). The SEC was established during the Great Depression following the stock market crashed. Governing authorities realized that to prevent companies falling into the

same traps that led to the Great Depression, an independent board needed to be created to oversee business reporting affairs. The SEC was independently created by Congress, and has the authority to determine GAAP. The FASB was established as an independent standard setting body to reduce or prevent political influence in the standard-setting process. The American Institute of Certified Public Accountants (AICPA) was influential in the development of GAAP. The AICPA provided insight as to what would be needed in the new standards (Bratton). The AICPA is an independent organization filled with knowledgeable accountants who knew the accounting issues and knew what would help standardize reporting in the beginning stages

The International Accounting Standards Board (IASB) was modelled after the FASB. The IASB is independent of official governments and maintains IFRS. The IASB evolved from the International Accounting Standards Committee (IASC), which initially represented countries in what we now call the European Union and Japan. At the time, the United Kingdom was a part of the European Union, which meant they heavily influenced the IASB. The IASB continues to work to create standardized reporting, as more and more countries adopt their accounting standards to increase comparability in the global market.

The IASB and FASB follow similar processes in setting standards. Additionally, the IASB adopted many elements of GAAP in its initial standards. The two boards also work together to harmonize new standards although differences remain, even in the latest standards. Articles and courses about financial reporting typically only highlight the differences because the similarities are so numerous. Accountants recognize the differences between the two standards and must learn those differences. For the most part, the learning curve between both sets of standards is small as most of their rules are similar or the same.

Despite the many similarities, IFRS and GAAP do differ in several areas. The differences between financial treatment typically comes from the basis of each set of rules. “Generally, IFRS is considered to be more ‘principles-based’, while U.S. GAAP is the more ‘rules-based’ set of standards” (Cussat). GAAP’s standards have more mandatory elements and reporting requirements, whereas IFRS tends to require more choices in measurement and discretion in reporting (Hail). GAAP’s rules focus on the income statement and revenue, in contrast to the balance sheet emphasis of IFRS (Bratton). The way some items are treated, such as operating leases and revenue recognition, differ because of this fundamental difference (Bratton). Proponents of the rules-based approach believe that GAAP provides more comparability because of its more rigid rules. I provide direct evidence on this assertion.

### **The U.S. in the Global Market Today**

The United States market still is one of the clear leaders in the global market. Based on GDP, the United States ranked number one in the world in 2020, which is a strong indicator of economy health (Silver). The U.S. has been a long-standing dominator in the global market, which gives it the “privilege of imposing its own terms on foreign entities”, including GAAP (Bratton). International firms are willing to conform to GAAP standards in order to do business in the U.S. because of its strong economy and potential for business growth.

IFRS are not specific to one country, whereas GAAP is only used in the United States. IFRS has many countries to accommodate, which is one reason for its more principles-based approach to standards. However, because GAAP only governs one country, its standards favor rules “unique to U.S. capital markets” (Bratton), which might allow greater comparability between firms and clarity for financial statement users.

## **Introduction to Airline Sample**

To directly compare IFRS and GAAP disclosures, I did selected a sample of domestic and international airlines traded in the U.S. domestic firms file Form 10-K reports annually, while the international firms file Form 20-F. I focused on the differences in operating lease disclosures, but I also examined the overall readability of IFRS and GAAP financial statements.

My airline sample includes five domestic, publicly traded airlines: American Airlines, Delta, United Airways, Spirit Airlines, and Jetway and five international airlines: Ryanair, Lufthansa, International Airlines, Air France, and Easyjet. My goal was to find at least five airlines in each category in order to have a detailed comparison across domestic and international airlines. For each airline, I collected financial and non-financial data for comparison between domestic and international airlines.

## **Sample Origination**

For each domestic firms I collected all financial information from the respective airline's SEC filings. The 2019 10K filings were the primary source of data for lease numbers. I used multiple sources outside of the 10-K for fleet size and other airline data. Sources of the non-financial domestic airline data include airline specific websites and other reporting sources, such as Statistica.

I collected financial information for the five international airlines from more sources than their domestic counterparts. Most of the international financial data came from each airline's respective annual filings under IFRS. The 2019 20F was the main source of lease numbers. However, I consulted airline websites and other reporting sources to fill in the gaps for some of the financial data. Similar to domestic firms, I collected non-financial data for international firms

from several sources. Some of the airlines had information about fleet size and other information in their footnotes, whereas others had them listed in company websites.

### **Sample Extraction**

To retrieve my sample, I started with deep research on the SEC filing website so gain an understanding of the domestic firm data. I found each domestic airline's 10K for 2019 and browsed through the lease information. Most data was extracted from the income statement and balance sheet. I collected my data in a spreadsheet.

I consulted the internet for the non-financial data for the domestic firms. I went through their company websites and other sources. I read several articles without the information that I needed until I found fleet size. Most domestic firms had their fleet size listed on their company website, so domestic research was fairly simple.

I started my sample extraction for the international airlines by first consulting their 2019 20F filings. I searched their financial statements and found most of the lease information in their income statement and balance sheet, much like the domestic firms. Unfortunately, not all their important financial information was reported within their financial statements, which led me to search the footnotes and company websites for more detailed information. After much digging, I was able to find most of the relevant information for the international firms.

The non-financial data extraction process started with reading the additional disclosures and footnotes within the 20F filings for the international firms. A few of the firms had their fleet size within their financial statement, but the majority had no data on fleet size. Therefore, I utilized each company's website to find the fleet size. I was able to find the majority of the

remaining fleet sizes this way, although a few numbers were found on other statistic reporting services, such as Statistica or comparison articles on international airlines.

## Data Collection

Table 1 describes the data items I collected and where information was located. A key take-away from the data collection process is that data is not consistently located in 20-F filings. Also international firms were more likely to lack some data items.

<b>Description of Data Collection Process</b>				
	<b>Operating Lease Liability</b>	<b>Revenue</b>	<b>Number of Planes</b>	<b>Right-of-use Lease Asset</b>
<b>Domestic Airlines</b>				
American	Financial Statements	Financial Statements	Statistica	Financial Statements
Delta	Financial Statements	Financial Statements	Statistica	Financial Statements
United	Financial Statements	Financial Statements	Statistica	Financial Statements
Spirit	Financial Statements	Financial Statements	Statistica	Financial Statements
Jetway	Financial Statements	Financial Statements	Statistica	Financial Statements
<b>International Airlines</b>				
Ryanair	Footnotes	Financial Statements	Company Website	Fintel
Luftansa	Financial Statements	Financial Statements	Financial Statements	Footnotes
International Airlines	Company Website	Financial Statements	Company Website	Company Website
Air France	Financial Statements	Financial Statements	Company Website	Financial Statements
Easyjet	Statistica	Financial Statements	Statistica	Financial Statements
% Missing Domestic Financial Statements	0%	0%	100%	0%

% Missing International Financial Statements	60%	0%	80%	60%
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Table 1

### The Difference in Samples

Although domestic and international firms are relatively similar in terms of average revenue, domestic airlines have fleets that are nearly twice as large. Domestic firms had similar average operating lease expenses in 2018 compared to international firms. However, after adopting the new standard, international airlines report a higher average operating lease expenses in 2019. Table 2 (in millions USD) reports descriptive data for the domestic firms whereas Table 3 (in millions USD) reports the same data for international firms. For comparison, I converted financial amounts reported in Euros into US dollars using the current Euro and USD rate. At the time of the data extraction, the exchange rate was 1.21 USD to one Euro.

<b>Domestic Overview of Data</b>					
<b>Airline</b>	<b>2019 Revenue</b>	<b>Fleet Size</b>	<b>2019 Right-of-use Asset</b>	<b>2019 Lease Expense</b>	<b>2018 Lease Expense</b>
American	\$45,768	1,569	\$8,737	\$1,326	\$1,264
United	\$43,259	1,380	\$4,758	\$288	\$433
Delta	\$47,007	1,349	\$5,627	\$423	\$394
Spirit	\$3,830	157	\$1,369	\$182	\$177
Jetway	\$8,094	267	\$912	\$99	\$104
Average	\$29,592	944	\$4,281	\$464	\$474

Table 2

<b>International Overview of Data</b>					
<b>Airline</b>	<b>2019 Revenue</b>	<b>Fleet Size</b>	<b>2019 Right-of-use Asset</b>	<b>2019 Lease Expense</b>	<b>2018 Lease Expense</b>
Ryanair	\$9,343	474	\$444	\$102	\$100
Lufthansa	\$44,210	763	\$5,077	\$2,890	\$0
International Airlines	\$30,958	646	\$11,727	\$1,070	\$1,068
Air France	\$33,001	552	\$6,278	\$900	\$885

Easyjet	\$7,750	331	\$604	\$219	\$6
Average	\$25,052	553	\$4,826	\$1,036	\$412

Table 3

### Relative Differences in Lease Use

Table 4 compares lease expense scaled by the number of aircraft, the amount of revenue or dollar-value of right-of-use assets (revenues and assets in millions USD) for 2019. This calculation equalizes the effect of firm size. In Table 5 (in millions USD), reports the same scaled leases expense amounts for international firms for 2019.

<b>Domestic Lease Amount Data</b>			
<b>Airline</b>	<b>Per Aircraft</b>	<b>Leases Per Revenue Dollar</b>	<b>Per Dollar of Right-of-Use</b>
American	\$0.85	\$0.03	\$0.15
United	\$0.21	\$0.01	\$0.06
Delta	\$0.31	\$0.01	\$0.08
Spirit	\$1.16	\$0.05	\$0.13
Jetblue	\$0.37	\$0.01	\$0.11
Average	\$0.58	\$0.02	\$0.11
Range	\$0.95	\$0.06	\$0.09

Table 4

<b>International Lease Amount Data</b>			
<b>Airline</b>	<b>Per Aircraft</b>	<b>Leases Per Revenue Dollar</b>	<b>Per Right-of-Use Dollar</b>
Ryanair	\$4.65	\$0.01	\$0.23
Lufthansa	\$0.26	\$0.07	\$0.57
International Airlines	\$0.60	\$0.03	\$0.09
Air France	\$0.61	\$0.03	\$0.14
Easyjet	\$1.51	\$0.03	\$0.28
Average	\$1.53	\$0.03	\$0.28
Range	\$4.39	\$0.06	\$0.48

Table 5

The aircraft lease expense per revenue dollar is similar for domestic and international firms. However, the average lease expense per aircraft is nearly three times as high for

international firms compared to domestic firms in 2019. Furthermore, the lease expense per right-of-use asset dollar is over double for international firms compared to the domestic firms.

Another thing to note is the drastic difference in ranges for the relative lease expense amounts in international and domestic firms. Although the ranges for Leases Per Revenue Dollar are the same for both domestic and international firms, the range Per Aircraft is over four times larger for international firms than domestic firms, and Per Right-of-Use Dollar is over five times larger for international firms than domestic firms. The amount of lease expense recognized per activity varies much more within international firms, highlighting an outcome of differences in the two reporting standards. The measurement of lease expense and obligations under IFRS appears to be less consistent and comparable than for domestic firms.

### **Differences in Footnotes and Disclosures**

Based upon my investigation of 10Ks and 20Fs, I found several differences in footnotes and disclosures between international and domestic firms. Overall, it appeared that the domestic firms disclosed far more data than any of the international firms, as their general word counts were higher. See Table 6 and 7 for the length of footnote disclosures for domestic and international firms.

<b>Number of Words in Domestic Financial Statements</b>	
<b>Airline</b>	<b>Number of Words</b>
American Airlines	103,666
United	60,871
Delta	53,019
Spirit	68,805
Jetblue	59,340
Average	69,140
Median	60,871

Table 6

<b>Number of Words in International Financial Statements</b>	
<b>Airline</b>	<b>Number of Words</b>
Ryanair	49,341
Luftansa	55,531
International Airlines	62,741
Air France	52,279
Easyjet	45,789
Average	53,136
Median	52,279

Table 7

The domestic disclosure filings were all consistent. Each income statement and balance sheet looked nearly identical. After observing one or two, I consistently knew where to find the information that I sought. Each company reported its 2017, 2018, and 2019 aircraft lease expense. They reported their 2018 and 2019 right-of-use assets, finance lease debt, and operating lease debt. Each 10K was in the exact same order, which made it effortless to extract the data.

The domestic footnotes had far more details than any of the international firms. Each firm reported a footnote about their operating and finance lease. Many of them disclosed extra information about the impact of the lease standards changes, and provided the dollar amount of the effect.

The international disclosures were inconsistent. Some of the firms reported right-of-use assets, aircraft lease expense, finance lease debt, and operating lease debt, but none of them disclosed all four or even all the same one.

Several firms would report one or two of the relevant lease numbers and other firms would report the other lease numbers. None of them reported the same data, unlike the domestic disclosures.

The footnotes were mostly unhelpful. I was hopeful that the international footnotes would help to dissect the reported numbers into further categories, including more detailed lease information. However, lease information was usually summed up in a sentence or two, without any numbers included. A few of the firms provided fleet numbers, but the majority did not.

My analysis indicates, that the financial statement information reported by the domestic firms is far more detailed and consistent. GAAP appears to have more structure and requirements when it comes to reporting on leases, which makes it much easier for the reader to understand the company standings.

### **Sample Results**

Based upon my analysis of research, GAAP reporting is more comparable than IFRS. One implication of my analysis is that adopting IFRS standards is likely to reduce financial statement comparability for U.S. firms. GAAP financial statements report the same items and have a much smaller range of operating lease amounts, which implies more consistent measurement of lease obligations and expenses. My analysis suggests the U.S. should resist pressure to conform to IFRS standards, and that keeping GAAP standards will maintain comparability, which benefits financial statement users.

### **Pros for adopting IFRS in the United States**

Accountants and firms mostly agree that there would be some positive benefits if GAAP were to converge with IFRS. Supporters of convergence argue that comparability will increase if U.S. companies report using the same set of standards that the rest of the world does. Supporters argue that adopting IFRS will result in “enhanced comparability across the financials of different financial statement users” (Bratton). The new comparability could potentially increase

international investment in the U.S. firms and provide “competitive advantages to U.S. issuers with extensive operations abroad” (Hail). International investors are more likely to invest in companies that do not require much inconvenience. Unfortunately, GAAP is one of the regulatory costs that make investment in U.S. firms unattractive for foreign investors (Bratton). If IFRS were utilized in the United States, those firms could experience an increase in foreign investment, which would in turn help their businesses to become better.

U.S. companies are required to follow GAAP, but some already take it a step further and voluntarily report financial information prepared following IFRS either because it is required in some countries where they have subsidiaries or to get the comparability benefits highlighted above. However, complying with two standards creates unnecessary expense for those firms who are trying to stay globally competitive. Typically, any amount of standardization in any industry results in lower costs, and a global reporting standard would be no exception (Bratton). Management in domestic companies that do comply with IFRS complain about the complexity and expense of using two sets of standards. If the U.S. adopted IFRS, there would be “recurring future cost savings that will largely accrue to multinational companies” because they will save the cost of complying with two sets of standards (Hail). These cost savings could eventually outweigh the original costs of changing systems in the long-term as it will reduce accounting expenses.

### **Cons for adopting IFRS in the United States**

In addition to the benefits of adopting IFRS outlined above, there are also costs that must be examined. A change in accounting standards in any form always has complications, and those complexities would increase exponentially if there was a change in accounting standards entirely.

A drawback of the U.S. adopting IFRS would be start-up costs. When any new rule is implemented, there are transition costs due to changing systems and training employees in the new standards (Hail). According to the Sarbanes-Oxley Act (SOX), a change to IFRS would also require companies to “update the documentation of internal control procedures” (Hail). Companies would have to go to prior financial periods and update those records to IFRS at least one year prior to the change. Firms may even have to update records up to three years prior because of current SEC rules. These transitional requirements would cost firms greatly as they may be required to hire additional employees to assist with the update or need their current employees to work more hours to complete the transition items. Larger firms may not have an issue with these additional costs and may already see the benefit of changing to IFRS. However, smaller companies could see the change as daunting because of the complexity and expense. The change could potentially be a large burden on smaller firms that would be required to report under IFRS if the change were to happen. These smaller firms are also unlikely to benefit from increased comparability to global competitors or increased access to foreign investment.

The U.S. has always valued its independence from other countries, and having its own set of standards is no exception. U.S. companies value GAAP because it favors the U.S. economy and environment. If the U.S. switched over to IFRS, FASB would essentially be giving a monopoly to the IASB in creating accounting standards (Hail). Monopolies usually halt innovation and slow down progress. If IASB were to have the monopoly on accounting standards, they would be more prone to political influence as there would no longer be choice between standards (Hail). The United States would have to give up some of its power of independence in its domestic firms if it were to switch to IFRS from GAAP.

Because IFRS is more principles-based and requires more discretion, management of firms would potentially have more opportunities to manipulate earnings on their financial statements. There is more optionality in the IFRS which means that companies could hide fraud more easily and inflate their earnings reports (Vichitsarawong). Suspicious activity and reports would be harder to investigate because of the increased choices in reporting standards. FASB and the SEC would have to consider the potential for corruption if they were to adopt IFRS standards.

IFRS is more “principles” based, which means that its disclosures tend to be more vague and less specific than the GAAP “rules”. Because domestic firms have higher standards to adhere to, their disclosures tend to be more readable for financial statement users because all disclosures are nearly the exact same. International firms have less stringent standards, which means that many firms disclose some items that other firms do not, and vice versa, making it complicated for users to compare international financial statements to each other.

## **Conclusion**

Empirical evidence on the cost and benefit of adopting IFRS in the United States is limited. My evidence suggests that the cost of adopting IFRS is a loss of comparability between financial statements. For the operating lease disclosures of airlines, financial statements prepared following GAAP have more standardized disclosures that make it easier to find information. GAAP also results in more consistent measurement of lease expenses and obligations, which makes comparisons between firms more reliable. I find that GAAP financial statements have more words, which is consistent with them being more informative. My evidence strongly suggests that a switch to IFRS in the U.S. would sacrifice comparability.

A limitation of my analysis is that I examine operating lease disclosures in a single industry. However, the airlines industry relies on leases for aircraft and terminal space. Thus, financial statement users need comparable information on leases to evaluate firm performance and risk. Additionally, the new lease standard significantly changes disclosures for U.S. firms and is a good setting for examining comparability because firms haven't had time to become entrenched in their disclosures. Future research could look at a broader sample of industries or consider other disclosures.

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