The Impact of IFRS on Financial Ratios, FDI, and GDP

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The Impact of IFRS on Financial Ratios, FDI, and GDP

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Abstract

This article aims to demonstrate the effects of IFRS on financial concepts such as Financial Ratios, Foreign Direct Investment (FDI) and Gross Domestic Product (GDP). As the article unfolds the relationship between these factors and IFRS will become clear and demonstrate that a significant relationship exists between IFRS and GDP. Demonstrating this relationship and its connections to the presentation of economic health will greatly assist in making conjectures about the impact IFRS can or will have on current users and future adopters under full IFRS implementation.

1. Introduction

The primary purpose of International Financial Reporting Standards (IFRS) is as a means of reducing information asymmetry, reducing home country bias and thereby enhancing the appeal for foreign investors. With that in mind, simply attaching the label of IFRS is insufficient to procure foreign investors. The research of Hansen et al., shows a strong correlation between company transparency and foreign investment and further demonstrates that IFRS adoption can mitigate the extent of home bias when applied rigorously (Hansen et al., 2013, p.27).

The objective of financial statements is to provide information, about the financial position, performance, and changes in financial position of an entity, that is useful to a wide range of users in making economic and investment decisions (KMPG, 2010, p.1). The use of IFRS has the potential to reduce earnings manipulation and improve stock market efficiency. According to recent research, there is no question that IFRS adoption provides various benefits by enhancing comparability of financial statements, lowering transaction costs, providing access to international capital, and increasing international investment (KMPG, 2010, p.1). Higher quality accounting and transparency enable investors to make informed decisions, as they attempt to predict the firm’s future performance.

The information provided by annual reports is used for analysis and decision-making purposes. Due to variations among accounting methods, legal systems and cultures, the data is often presented in contrasting ways that can be misleading when comparing financial data

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between companies. Despite this challenge, a wealth of information is provided in these reports which enable useful comparisons to be made. In comparing these reports it is essential to insure that the accounting practices do not differ to an extent that the comparisons are meaningless. Though the trend toward globalization continues to hold sway and the move towards a single set of standards looks ever closer, regional accounting will continue to play a notable role.

2. Literature Review

The relation between FDI and economic growth is frequently studied both theoretically and empirically. There are ongoing studies especially on the economic effects of FDI in developing countries. A consensus has not been developed yet regarding the results of analyses. Summary of some selected studies will be provided below.

Lynch (2007) examined the effect of IFRS adoption, relating to post-employment benefits and its effects on debt/equity ratios. The findings showed a significant increase in debt/equity ratios with three out of five Australian companies having an increase while nine out of ten UK companies had an increase in debt/equity ratios. Generally the increase in UK debt/equity ratios was of a greater magnitude than the Australian companies, which could be due to some of the older UK companies having significant pension funds.

Lantto and Sahlström (2009) undertook the job of proving that IFRS adoption affects key financial ratios. Their findings demonstrated a conclusive shift in key financial ratios as a direct result of the application of IFRS. The overall results indicate that the adoption of rules concerning fair value accounting, lease accounting and income tax accounting, as well as rules concerning the accounting of financial instruments, explain the changes in the key accounting ratios.

Blanchette et al. (2011) analyzed the impact of IFRS on financial ratios in Canada. They identified a fundamental difference between Canadian GAAP and IFRS, fair value accounting and consolidation. IFRS reliance on fair value accounting represents a substantial difference when compared with Canadian GAAP and as a result can lead to three possible effects on financial statements; balance sheet figures may be adjusted, some unrealized gains and losses will be directly allocated to the income statement, and other unrealized gains and losses may not be represented on the income statement until realized through a transaction with a third party. As a result liquidity and leverage ratios are affected, due to balance sheet variations, and profitability and coverage ratios, shift as a result of balance sheet variations and the recognition of unrealized gains and losses.

Chen et al. (2012) hypothesized that the convergence of domestic and IFRS promoted FDI. Using bilateral FDI data from 30 OECD countries between 2000 and 2005 they applied a gravity model to their regression model. The results suggest that there is a strong
correlation between the adoption of IFRS and FDI cash flows, largely associated with the degree of convergence. While acknowledging that controlling other determinants of FDI, in particular the rule of law, there are shortcomings to the study; it is still arguable that accounting standards represent a specific component of institutional infrastructure that is important for FDI.

Rakesh and Shilpa (2013) used the top 100 companies listed in the Bombay Stock Exchange between 2012 and 2013, the researchers queried business leaders and analyzed their findings using statistical analysis to determine whether or not a correlation existed between IFRS and adoption and implementation and FDI inflows into India. Their findings suggest definitively that IFRS adoption has indeed been a beneficial step for India and has led to increased FDI inflows.

Duo Qin et al. (2005) aimed to validate the long standing belief that China’s key development strategy, investment-driven growth, is indeed responsible for the explosive growth within the Chinese economy. The analysis of the long-run GDP trend shows that the Chinese economy has experienced positive effect on economic growth as a direct result of cash inflows and accumulated capital.

Contessi and Weinberger (2009) looked for the evidence of a positive relationship between foreign direct investment and national growth by looking at foreign direct investment, productivity, and growth using aggregate data. Their findings suggest that though the effect on GDP has been studied extensively and most literature suggests a positive correlation exists, in reality the evidence is too mixed and there is insufficient empirical evidence to lay claim one way or the other (Contessi and Weinberger, 2009, p.75).

Agrawal and Khan (2011) investigated the effect of FDI on GDP (economic growth) in China and India. Both countries have experienced economic growth in recent years. Through use of their modified growth model, they confirm that FDI promotes economic growth, and further provides an estimate that shows China is more significantly affected by FDI with a 1% increase in FDI yielding a 0.07% increase in China’s GDP while India’s experiences only a 0.02% increase in GDP (Agrawal and Khan, 2011, p.76).

Dunne et al. (2008) closely examined the implementation of IFRS in three countries: the UK, Italy and Ireland. The study focuses on these three countries because it was expected that companies in countries with a similar national accounting environment, such as the UK and Ireland, would experience similar reporting changes following the adoption of IFRS, and that companies in countries with a very different reporting environment, legal system and culture, such as Italy, would be affected differently by the adoption of IFRS. It provides a very thorough evaluation (Dunne et al., 2008, p.V).
3. The effect of IFRS on Financial Ratios

IFRS, to the best of my knowledge, are not applied with the express intent of altering financial ratios. That does not however allow professionals the luxury of being ignorant to the impact these new IAS will have when implemented. The changes, often varied in nature, are of paramount importance not only for the managers who use them to help determine their strategy and course of action but for the investors and creditors as well who will in turn inject money into these enterprises. The fact that IFRS are far less rule based than traditional GAAPs allows a great deal of leeway in reporting and to some extent it provides a great deal of flexibility in the manner that data is displayed.

Various researchers have pondered these very ideas and spent extensive hours identifying significant factors and statistically checking their connections. Results from researchers such as Blanchette et al. (2011), Lynch (2007), and Lantto and Sahlström (2009) have indeed shown that the adjustments made when reporting under a local GAAP, versus IFRS, tends to produce notable differences but given that each local accounting practice tends to have its own unique intricacies even these discrepancies are not uniform internationally.

For example, more than one financial ratio is affected when converting U.S. GAAP to IFRS. A few of the more notable variations that may occur include the current and quick ratios, due to the method of inventory utilized. Another example is the interest coverage ratio, since earnings before interest and taxes directly correlate with differences in the cost of goods sold.

Prior to IFRS changeover, regression analysis of Canadian GAAP and IFRS showed high volatility between the two regimes due largely to differences in the application of fair value accounting. There were significant differences in the values of ratios such as current and quick ratios, debt, alternative-debt and equity ratios, interest coverage, fixed-charge and cash-flow coverage, return on assets (ROA), comprehensive-ROA and price-earnings related ratios (Blanchette et al., 2011, p. 7).

The thorough research of Lynch (2007) identified a strong list of some of the most potentially impacting IFRS for the UK, several of which will greatly impact other developed nations similarly. Some of the most notable examples are presented below.

**Significant IFRS**

IFRS 2 – *Share-based payments*
IAS 12 – *Income Taxes*
IAS 39 – *Financial Instruments: recognition and measurement,*
IAS 16 – *Property, plant and equipment*
IFRS 3 – *Business combinations*
IAS 38 – *Intangible assets*
These International Accounting Standards are likely to have a significant impact on financial ratios following a conversion to IFRS. A simple example might be an instance of goodwill which is capitalized as an Intangible asset and as such is annually amortized. However, under IFRS capitalization annual impairment review is required. This example and other issues related to IFRS are described in more detail within the paper by Blanchette et al. (2007).

Within the UK, the following examples were of significant note in viewing the impact of IFRS. Important varying examples that will affect financial statements and ratios include:

IAS 12 which contrasts with FRS 19 in the UK it requires provisions be made for deferred tax on property revaluations31. This in general, may negatively affect balance sheets by increasing liabilities following the switch to IFRS. A company’s total tax charge would increase, which ultimately would decrease the income calculated under IAS 12. Additionally, IAS 12 does not allow for the discontinuing of deferred tax. FRS 19 permits, but does not require, discontinuing of deferred tax. Finally, IAS 12 requires a reconciliation of the total (current and deferred) taxes. FRS 19 requires the reconciliation be carried out for the current tax charge only. IAS 12 is likely to negatively impact the financial statements of UK-listed companies by increasing total tax charges, thus reducing total profit (PwC, 2015, p.15).

IFRS may produce some changes due mainly to differences in valuation policy. In this case, balance sheet figures (equity) and eventually the income statement (due to the balance between revaluation surplus and loss) might be affected. Under IFRS 3 goodwill amortization is prohibited, whereas FRS 10 permits goodwill amortization if the useful economic life of the purchased goodwill is less than 20 years. IFRS 3 requires annual impairment tests, whereas FRS 10 requires annual impairment tests on goodwill if the useful economic life of the goodwill is more than 20 years. That is why, it is expected that in most cases, intangible assets will increase after transitioning to IFRS (increase in balance sheet figures) and that income statement figures (generally profit) will decrease due to impairment. This kind of data is of paramount importance to the managers, investors and creditors especially as it provides the base form of information which allows these parties to engage in FDI.

4. The effect of IFRS on FDI

This topic is not necessarily difficult to understand however it is a many facetted issue clouded by various factors such as tax jurisdiction etc. The impact of IFRS on ratios, as mentioned in the preceding section, affects the basic information available to would be foreign investors, therefore having a true and accurate set of data that can be relied upon is crucial for FDI to proceed. But the impact of IFRS and ratios extends beyond the secondary affect caused by ratio adjustment. Researchers such as Chen et al.(2010), Rakesh and Shilpa
(2013) and various others have performed statistical testing and regression modeling to provide their own bits of proof that IFRS has or does indeed affect FDI inflows.

Given that IFRS are specifically investor focused it stands to reason that if investors are more readily able to understand a company’s reporting and financial position then they will be far more inclined to risk their private funds in promoting a business in the hope of good returns. It is not all that remarkable that statistical results should confirm this though it is important to note that such modeling is imperfect and cannot adequately cover all of the eventualities or possibilities which influence FDI. Therefore, these results are par at best and unremarkable beyond their ability to confirm the general consensus of accounting professionals, that being that IFRS increase investor knowledge and help encourage FDI cash flows.

Perhaps the most remarkable and notable way to observe the benefits of IFRS in regards to FDI would be to look at truly developing nations such as Nigeria. The research of Okpala (2012) which demonstrates that the primary loss involved in adopting an international standard set is the lost gains that might have accrued from future innovations in localized accounting standards (Okpala, 2012, p.77). Sacrificing the domestic accounting rules, rules which often varied from city to city, in favor of a standardized international set, has resulted in massive, uncharacteristic FDI inflows strongly demonstrating the benefits of a single standardized rule set, especially in developing nations.

5. The Effect of IFRS on GDP

It is at this point that the fore mentioned components, financial ratios and foreign direct investment, really come together and the broader and much more significant impact of IFRS comes into view. IFRS, as a standardized tool, allow investors to reach across borders and enhance their understanding of a company’s financial position. Furthermore they gain immense freedom from comparability which provides inestimable benefits on all sides of the equation; however, it has only ever been a means to an end. The end of course being to enable consumers to have some fair understanding of the company they decide to put their money in and for the companies to take advantage of the large untapped segment of global financing available.

Once we arrive at this point, there is far more to consider than the simple matter of investing or not investing. As stated from the start, for IFRS to succeed it must prove beneficial to all parties involved. While it has been seen that it provides great benefits to the managers, investors and creditors, the largest and perhaps most vital member in the multi-agency relationship, government, would seem to be in a much less fortuitous position. There have been cases such as those researched by Agrawal and Khan (2011) and Contessi and Weinberger (2009) which clearly demonstrated GDP growth as a direct result of FDI which
in turn can be attributed to the implementation of IFRS, however, a reverse scenario with far less positive results often occurs as well.

As we delve into this idea it becomes pertinent to first give a brief breakdown of how GDP is roughly calculated so that the following concepts may follow a logical course for you the reader. GDP at its simplest definition is a measure of all the goods and services produced domestically. Therefore, it can be roughly calculated by adding together the various components of the economy that are a measure of all the goods and services produced.

**Basic GDP calculation formula:** \( Y = C + I + E + G \)

\( Y = \text{GDP} \)
The sum of all the goods and services produced domestically.

**C = Consumer Spending**
Many of the goods and services produced are purchased by consumers. So, what consumers spend on them \( (C) \) is a measure of that component.

**I = Investment made by industry**
When calculating the GDP, *investment* is NOT defined the same as it is for individuals. It does not mean buying stocks and bonds or putting money in a savings account. When calculating GDP, *investment* refers to purchases made by industry for new productive facilities, equipment, or the process of essentially “reproducing itself” by buying new goods and services that will produce still more new goods and services.

**E = Excess of Exports over Imports**
The difference between the value of all exports and the value of all imports. If Exports exceeds imports, it contributes to the GDP. If not, it shrinks the GDP. Thus, even if a nation’s people work very hard to produce products for exports, but still import more than they export, the nation’s GDP will be negatively impacted. This is one of the reasons trade deficits are frequently a political target

**G = Government Spending**
The government buys (with your tax money) goods and services \( (G) \). These purchases are a measure of those goods and services produced. Be aware that many people make the mistake of thinking that the money paid in taxes and spent by the government is “lost” and therefore subtracts from the GDP. Tax money may indeed be spent inefficiently but this fact
This formula is relatively straightforward since GDP is a measure of all the goods and services produced domestically. In recent years, the value of GDP as a statistical figure has been challenged. It has been stated that it is a 1950’s term that was designed for a period of time in which most goods were produced and consumed domestically and high barriers to trade existed. Under those circumstances the more narrow view GDP offers was ideal for measuring input and output. Modern economists challenge this number stating one simple output does not measure the health of an economy. In their view it excludes various social data and is not an ideal measure to use in our global environment. Whereas these assumptions may be valid to some degree, for the purpose in which I utilize GDP, it still retains a position as the perfect statistical figure for the task at hand. The GDP flow diagram shown in figure one depicts a visual representation of the various components that comprise this formula and their contribution to GDP.

As we take look at the accounting ramifications of IFRS we are not interested in the social concerns, but the cold hard math involved in company reporting. We are looking at figures compiled by way of a formula, generally a localized GAAP. The application of IFRS then proposes to change the formula, or more specifically we might say make adjustments to the order of operations and the necessary steps to complete them. With this
type of hard data analysis in mind, GDP remains the ideal statistical figure to measure some of the affects IFRS implementation may have on an economy in a macro-economic environment.

It is important to remember that most governments are funded by way of taxes. Anything that has the power to upset tax revenues has the power to interfere with an entire nation. If the global society were to adopt IFRS as the global standard, including as a tax base, it would no doubt be such a force. However, IFRS have managed to exert influence even without full global acceptance.

IFRS have managed to do this in two substantial ways. First by simplifying accounting and making it easier for laymen to understand, the flood gates have been cast open allowing money and investment revenues to stream out of countries and into a global tertiary system. Those funds now make their way throughout the world. In most cases, the government is still able to reap revenue from these funds as many investors use accounts which are based within their home countries to receive their own earnings. In some cases where less straight forward investors have seen fit to deprive governments of their “fair share”, laws such as the U.S. FACTA law, which requires all foreign banking institutions to report American account holders, their balances and their transaction history, have come into play making it possible for governments to repatriate some of these funds.

The second is actually a bit more obscure. Some of the most popular tax havens for OECD countries are IFRS compliant countries such as Switzerland, the Netherlands and Ireland. Bermuda also is categorized as one of the favored tax havens; however, it does not conform to any specific accounting regime, including IFRS. To take advantage of these tax havens companies often use “transfer cost” also known as transfer pricing. Transfer pricing occurs anytime two companies that are part of the same multinational group trade with each other in the form of say a parent company trading with a subsidiary. In itself, transfer pricing is neither illegal nor abusive. This only becomes the case when transfer mispricing occurs. One example of trade mispricing can be seen in the form of re-invoicing. It is estimated, by various sources that somewhere between 60-70% of international trade actually occur internally within multinational companies. Though governments cannot adequately calculate the tax revenue losses, it is estimated that hundreds of billions of dollars are lost annually to this practice. Some estimates have reached as high as a trillion dollars in the estimated losses.

There are currently a number of high profile multi-billion dollar tax evasion cases circulating in the news. Take for example the case of Caterpillar Inc.’s transfer pricing arrangement in Switzerland, where the US government is currently pursuing 4.6 billion dollars in tax revenue. Three major cases with Google, Amazon and Starbucks are currently being pursued in the UK. All three of these companies earn an outrageous profit in the UK
and yet in 2011, Google’s UK unit paid just £6 million in taxes. Amazon, which had sales in the UK of £3.35 billion, paid only £1.8 million. Finally, Starbucks had £400m in sales and paid no corporate taxes (Barford and Holt, 2013). Instead Starbucks transferred some money to a Dutch sister company in royalty payments, bought coffee beans from Switzerland and paid high interest rates to borrow from other parts of the business. Now, in technicality, all of their actions could be upheld as legal, but the opinion of the government and the public is fast swinging away from that possibility.

In pulling all of these concepts together, we can identify where IFRS has been used in tax haven countries to help create an ideal environment for practices such as transfer pricing thereby allowing companies to reap hundreds of billions of dollars in profit while paying little in tax through the practice of transfer pricing. In connecting this to GDP, remember our basic formula, \( Y = C + I + E + G \). Government (G) is funded through tax revenue. If hundreds of billions of tax revenue dollars are lost, then government spending power will shrink. Therefore the government will not be able to reinvest tax funds into the economy, will be unable to employ extra workers, will have insufficient funds to enhance infrastructure and will ultimately see a decline in GDP. When and if all countries were to adopt IFRS as their national GAAP and tax base, then this problem could quickly be remedied, however, that is a very unlikely scenario as it would require quick actions and anonymous agreement on an unprecedented international scale.

6. Conclusion

This article set forth with the intention of demonstrating significant relationships between IFRS and key investment indicators such as financial ratios, FDI and ultimately GDP. In reviewing the research of Blanchette et al. (2011), Lynch (2007), and Lantto and Sahlström (2009), there is a clear, albeit varied, correlation between financial ratios when shifting from GAAP to IFRS. Additionally the area devoted to FDI and the research performed by Contessi and Weinberger (2009) and Agrawal and Khan (2011) made sound statistical analysis which solidified the relationship between IFRS adoption and FDI investment. It is important to remember that their research is limited in that it doesn’t analyze other potential factors that might have caused increases to FDI. As the final section relating to IFRS and GDP unfolded, it presented a layered relationship between these factors and IFRS. A clear and valid relationship between, IFRS, FDI, and financial ratios as well as their ability to impact national GDP could be reasonably identified. Understanding this relationship and the connections of the various economic indicators will undoubtedly assist in developing and analyzing future conjectures related to the impact IFRS can or will have on current users and future adopters, as well as their economies, under full IFRS implementation.
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References


