

The Effect of Adopting International Accounting Standards on Corruption under Financial Reporting Basis

Cheng-Wen Lee

Department of International Business, Chung Yuan Christian University, Taiwan

— *Review of* —
**Integrative
Business &
Economics**
— *Research* —

Muh. Irfandy Azis*

Ph.D. Program in Business, Chung Yuan Christian University, Taiwan; Department of Economics, Universitas Borneo Tarakan, Indonesia

ABSTRACT

Accounting has a strong relationship with corruption problems. This study aims to determine the role of adopting international accounting standards and Financial Reporting Basis (FRB) to increase the Corruption Perception Index (CPI) – an inverse measure of corruption. The CPI uses a scale of 0-100, where 0 indicates that it is highly corrupt, while 100 indicates that it is very clean. Further, this study also aims to provide an overview of how critical the Financial Reporting Basis is in increasing the CPI. This study uses three levels of regression analysis: levels A, B, and C. Level A adopts the international accounting standards as the independent variables and uses the CPI as the dependent variable. At level B, the omitted variable test is used to understand the significance of the financial reporting basis as an independent variable and add it to the regression model. At level C, ten most influential observations are deleted to understand the effect on the regression results. The best regression analysis results in level C show that the adoption of International Financial Reporting Standards (IFRS), Investigation and Discipline (ID), and FRB can significantly increase the CPI. Furthermore, based on the omitted variable test results and noticing a significant increase in R^2 , the FRB is an essential factor in increasing the CPI.

Keywords: International Accounting Standards; Financial Reporting Basis; Corruption Perception Index.

Received 16 February 2022 | Revised 22 April 2022 | Accepted 28 May 2022.

1. INTRODUCTION

One problem that a country has been facing for a long time and still cannot be solved and eliminated is corruption. For certain countries, corruption can be a major problem (Ariyanto & Bone, 2020). Perceptions of corruption can be influenced by the characteristics of each individual and social conditions (Melgar et al., 2010). Further, the corruption or fraud may be caused by several factors, such as opportunity, pressure, rationalization, environment, capability, and risk (Djajadikerta et al., 2019). It can affect many things in a country, for example reducing educational outcomes which simultaneously result to encouraging migration for skilled workers (Dimant et al., 2013). On the other hand, the corruption also harms the state costs and revenues. It can also increase costs, reduce revenues, make them ineffective and inefficient, and harm

economic growth (Ajaz & Ahmad, 2010; Capasso et al., 2021; Cerqueti & Coppier, 2011; d'Agostino et al., 2016; De Vaal & Ebben, 2011). In addition, the corruption can reduce the entrepreneurship in developing and developed countries (Avnimelech et al., 2014) and even weaken the tourism (Poprawe, 2015). Therefore, efforts from the government are highly needed to optimize all things owned by a country in order to suppress or lower the corruption so as to avoid various problems caused by the corruption. One example that can have an important role in overcoming the corruption problems is accounting.

Accounting has a strong relationship with the corruption problems (Malagueño et al., 2010; Neu et al., 2013). Accountability is believed to be able to reduce the corruption (Suhardjanto et al., 2018). Skilled and strict accounting techniques can be a solid force to overcome the corruption problems (Johnston, 2015). This study uses the international accounting standards and Financial Reporting Basis (FRB) as research objects associated with the corruption. The International Standards of Accountants used in this study are International Financial Reporting Standards (IFRS), Investigation and Discipline (ID), International Standards on Auditing (ISA), and International Public Sector Accounting Standards (IPSAS) (Boolaky & Omoteso, 2016; Boolaky & Soobaroyen, 2017; Brown, 2011; Brusca & Martínez, 2016; Chen et al., 2010; Iatridis, 2010; Paisey & Paisey, 2012; Parlakkaya et al., 2014).

The FRB, both in the private sector / companies and public sector / the government, currently apply the accrual basis. Almost all companies have been applying the accrual basis of financial statements. On the other hand, the government has just applied the accrual basis and there are still several state governments that are still applying the cash basis, or the cash basis to accruals, and have not fully applied the accrual basis.

The adoption of international accounting standards and FRB can increase accounting quality, transparency, accountability and realize a good governance (Bellanca & Vandernoot, 2014; Boolaky et al., 2019; Brusca & Martínez, 2016; Humphrey et al., 2009; Ofoegbu & Grace, 2014; Opanyi, 2016). The improvement in the quality of the accounting system in question is the improvement in the quality of financial reports, transparency, and accountability so that in the end, it is also expected to reduce the corruption problems both in the private and public sector. This study aims to determine the effect of adopting the international accounting standards on the corruption with FRB as the omitted variable. The researchers use Corruption Perception Index (CPI) to measure the corruption. It is an inverse measure of corruption. It uses a scale of 0-100, where 0 is highly corrupt while 100 is very clean. By using multiple regression analyses, this study provides an overview of the effect of adopting the international accounting standards on CPI. It is then followed by adding the financial reporting basis to the regression model as the omitted variable, and a description of the analysis results will be elaborated further in this study. In addition, this study also provides an overview of the results of the analysis of ten most influential observations omitted in the regression model with a financial reporting basis.

2. LITERATURE REVIEW AND HYPOTHESIS

2.1 IFRS and CPI

Adopting IFRS can benefit the country, for example strengthening the accounting quality and disclosure of accounting information that is more informative and of higher quality (Brown, 2011; Chen et al., 2010; Iatridis, 2010). The IFRS adoption can also improve the quality of audits and financial reports (Boolaky et al., 2019). In addition, the IFRS

adoption in developing countries is carried out for different reasons in developed countries. In developed countries, the IFRS adoption is done due to the demands from users for more reliable and transparent information. In contrast, the IFRS adoption in developing countries can be one of the factors for the economic growth (Albu & Albu, 2012).

H1: The IFRS adoption has a positive and significant effect on CPI.

2.2 ID and CPI

The adoption of international investigative and disciplinary standards is expected to have an indirect positive influence on the audit quality. The procedural discipline lies in the profession and professionalism (Paisey & Paisey, 2012). Audit committee and audit risk factors can improve the audit quality (Beattie et al., 2010). Independent regulators, and laws and regulations are considered capable of bringing impacts to the investigation and discipline of the auditor (Eltweri et al., 2018).

H2: The ID adoption has a positive and significant effect on CPI.

2.3 ISA and CPI

The collective adoption of ISAs is done through preparation and planning based on a commitment, and given a full support from the government, and in addition, there are also cultural factors that also influence it (Eltweri et al., 2021). Further, the accountant's level of knowledge of ISAs can be a factor in the choice of adoption (Parlakkaya et al., 2014). Efficiency and growth of Gross Domestic Product (GDP) as economic factors in encouraging ISA adoption, and institutional factors (such as minority rights protection, regulatory enforcement, foreign aid, foreign ownership prevalence, educational attainment, and political system) are all essential determinants in the ISA adoption (Boolaky & Omoteso, 2016; Boolaky & Soobaroyen, 2017). Besides, the ISA adoption can provide many benefits. In the private sector, companies that have prepared financial statements based on the IFRS and are audited under the ISAs can integrate with the international finance and increase the stock market capitalization. (Elmghaamez et al., 2020). Meanwhile in the public sector, applying the ISAs to matters not regulated by the local audit standards can also increase the international financial integration between countries and attract the foreign direct investment (Elmghaamez et al., 2020). Furthermore, the ISA adoption can also increase transparency which can be helpful for global investors (Humphrey et al., 2009). Compared to the IFRS adoption, the ISA adoption has a more negligible effect in improving the audit quality and financial reporting quality (Boolaky et al., 2019).

H3: The ISA adoption has a positive and significant effect on CPI.

2.4 IPSAS and CPI

Polzer et al. (2021) argued that adopting the IPSAS in emerging economics and lower-income countries would require more investment in the education and training of public sector employees. For the benefit of decision-making, the adoption of IPSAS can improve the quality characteristics of comparability, relevance, and timeliness to moderately improve the quality of financial reports of the government (Opanyi, 2016). The implementation of IPSAS can directly benefit the comparability and modernization of accounting in the public sector and is expected to increase the transparency and accountability (Brusca & Martínez, 2016). In addition, all countries, either they are

implementing and not implementing the IPSAS, positively responded to the benefits of implementing the IPSAS (Brusca & Martínez, 2016).

H4: The IPSAS adoption has a positive and significant effect on CPI.

2.5 FRB and CPI

The application of the cash basis, cash basis to the accrual basis, or the full accrual basis will affect the internal and external entities of the entity. In the private sector / companies, using the accrual basis is considered better in making earnings management decisions. Besides, the information available from the accrual basis can be used as a signal on the stock market (Goel, 2016). Meanwhile, the use of the accrual basis in the government sector should improve the transparency, governance, and management of public funds (Bellanca & Vandernoot, 2014). The application of the accrual basis can also be used for financial decision-making, especially for loan control, debt reduction, and capital maintenance (Bergmann, 2012).

H5: The FRB has a positive and significant effect on CPI.

3. METHOD

3.1 Population and Sample

The population in this study included all countries with jurisdictions. The data was collected through a purposive sampling technique which was also used to determine the number of samples that would be the objects of this study. The sample was selected based on several criteria, such as the availability of information about the type of financial reporting basis applied, the adoption of international accounting standards on the IFAC website and is the availability of information about the CPI on the transparency website.

3.2 Data

The data used in this study was secondary data with the cross-sectional data from the countries. There was a total of 117 data / countries with the data being studied was the ones in 2020. Table 1 displays the sources of data obtained from several sources.

3.3 Normality Test

A normality test was used to examine whether or not the data distribution met the normalcy assumption. With the additional assumption of normality, the OLS estimators could be considered as the best-unbiased estimators (BUE) in the entire class of unbiased estimators, either it was linear or not. Considering that the examination was based on the assumption of normality, classical linear regression model (CLRM) had been well-known as the normal classical linear regression model (Gujarati, 2014). The probability value on the Jarque-Bera was used to examine the hypothesis. If the probability value is higher than or equal to $\alpha = 0.05$, the data in this study would be considered normally distributed and vice versa where if the probability value was less than or equal to $\alpha = 0.05$, then the data would be considered not normally distributed.

Table 1. Data Measurement and Source

Variable	Abbreviation	Measurement	Source
Corruption Perception Index	CPI	Ratio scale: 0-100. 0 is highly corrupt & 100 is very clean.	https://www.transparency.org
International Financial Reporting Standards	IFRS	0 = Not adopted 1 = Partially adopted 2 = Adopted	https://www.ifac.org
Investigation and Discipline	ID	0 = Not adopted 1 = Partially adopted 2 = Adopted	https://www.ifac.org
International Standards on Auditing	ISA	0 = Not adopted 1 = Partially adopted 2 = Adopted	https://www.ifac.org
International Public Sector Accounting Standards	IPSAS	0 = Not adopted 1 = Partially adopted 2 = Adopted	https://www.ifac.org
Financial Reporting Basis	FRB	1 = Cash 2 = Partial Accrual 3 = Accrual	https://www.ifac.org

Source: Processed Data (2022)

3.4 Autocorrelation Test

The autocorrelation test was used to see the relationship between variables if there was a change in time. It was quite typical to expect each pair of observations to be uncorrelated when working with the cross-sectional data, which a random sampling would ensure (Hill et al., 2018). As a result, the autocorrelation must be examined. The probability value of the F-statistic on the Breusch-Godfrey Serial Correlation LM Test was used to perform the test. If the probability value is higher than or equal to $\alpha = 0.05$, no autocorrelation exists in this research variable, and vice versa where if the probability value is less than or equal to $\alpha = 0.05$, the autocorrelation does exist in this research variable.

3.5 Heteroskedasticity Test

A heteroscedasticity test was performed to investigate whether the data has met the heteroscedasticity assumption. For the error term in the regression model, the CLRM assumes that homoscedasticity (equal variance) across observations (Gujarati, 2014). The test was performed by looking at the probability value of the F-statistic on the Breusch-Pagan-Godfrey Heteroskedasticity Test. If the probability value is higher than or equal to $\alpha = 0.05$, it may be considered that the heteroscedasticity assumption in this study can be met. However, if the probability value is less than or equal to $\alpha = 0.05$, it can be concluded that the heteroscedasticity assumption in this study cannot be met.

3.6 Multicollinearity Test

A multicollinearity test was used to assess the multicollinearity between the independent variables in this study. The value of centered Variance Inflation Factors (VIF) was used to test the hypothesis. The VIF is a metric measuring how much collinearity has inflated the variance of the OLS estimator (Gujarati, 2014). If the VIF value falls within the range of 1 to 10, there is no evidence of multicollinearity. However, if the VIF value is beyond

the range of $1 > VIF > 10$, it can be assumed that the independent variables are multicollinear.

3.7 Multiple Regression Analysis

The analytical technique used in this study was the multiple regression analysis. This study uses three levels of multiple regression analysis. Level A consists of a dependent variable (CPI) and independent variables (IFRS, ID, ISA, and IPSAS). At level B, the FRB as the omitted variable would be added to the regression model. Level C has the same regression model as level B, but there are modifications to the data by omitting ten most influential observations. In short, the multiple regression analysis models used are as follow:

Table 2. Multiple Regression Model

Model Specification		
Level A	Level B (With FRB as an omitted variable)	Level C (Level B with ten most influent observations omitted)
$Y = \beta_1 + \beta_2 * X_2 + \beta_3 * X_3 + \beta_4 * X_4 + \beta_5 * X_5 + e$	$Y = \beta_1 + \beta_2 * X_2 + \beta_3 * X_3 + \beta_4 * X_4 + \beta_5 * X_5 + \beta_6 * X_6 + e$	$Y = \beta_1 + \beta_2 * X_2 + \beta_3 * X_3 + \beta_4 * X_4 + \beta_5 * X_5 + \beta_6 * X_6 + e$
Y = CPI β_1 = Intercept $\beta_2, \beta_3, \beta_4, \beta_5$ = Slope X2 = IFRS X3 = ID X4 = ISA X5 = IPSAS	Y = CPI β_1 = Intercept $\beta_2, \beta_3, \beta_4, \beta_5, \beta_6$ = Slope X2 = IFRS X3 = ID X4 = ISA X5 = IPSAS X6 = FRB	Y = CPI β_1 = Intercept $\beta_2, \beta_3, \beta_4, \beta_5, \beta_6$ = Slope X2 = IFRS X3 = ID X4 = ISA X5 = IPSAS X6 = FRB

Source: Processed Data (2022)

4. RESULTS AND DISCUSSION

4.1 Normality Test

Table 3. Normality Test

	Level A	Level B	Level C
Std. Dev.	16.22052	15.28810	13.29761
Skewness	0.371806	0.375945	0.342222
Kurtosis	2.553829	2.712523	2.376513
Jarque-Bera	3.666140	3.158906	3.821687
Probability	0.159922	0.206088	0.147956

Source: Processed Data in E-views (2022)

According to Table. 3, it can be concluded that the probability of Jarque-Bera value of Level A, Level B, and Level C is more than $\alpha = 0.05$. Therefore, the three-level data are normally distributed.

4.2 Autocorrelation Test

Table 4. Autocorrelation Test

	Level A		Level B		Level C
F-statistic	1.174391	F-statistic	1.988150	F-statistic	2.335865
Probability	0.3129	Probability	0.1419	Probability	0.1020

Source: Processed Data in E-views (2022)

According to Table 4., it can be concluded that all the probability of F-statistic value is higher than $\alpha = 0.05$. Therefore, it can be concluded that there is no autocorrelation in this research variable.

4.3 Heteroskedasticity Test

Table 5. Heteroskedasticity Test

	Level A		Level B		Level C
F-statistic	1.438643	F-statistic	1.299368	F-statistic	1.254588
Probability	0.2259	Probability	0.2694	Probability	0.2895

Source: Processed Data in E-views (2022)

According to Table 5., it can be seen that all the probability of F-statistic value is higher than $\alpha = 0.05$. Therefore, it can be concluded that the assumption of heteroscedasticity in this study has been met. In other words, there is homoscedasticity in the research data.

4.4 Multicollinearity Test

Table 6. Multicollinearity Test

	Level A		Level B		Level C	
Variable	Centered VIF	Variable	Centered VIF	Variable	Centered VIF	
IFRS	1.941290	IFRS	1.943891	IFRS	2.145406	
ID	1.128946	ID	1.129266	ID	1.161518	
ISA	1.807030	ISA	1.812885	ISA	2.050674	
IPSAS	1.150817	IPSAS	1.200883	IPSAS	1.222042	
		FRB	1.059842	FRB	1.069548	

Source: Processed Data in E-views (2022)

According to Table 6., the IFRS, ID, ISA, IPSAS and FRB in all three levels have a higher than 1 and less than 10 of Centered VIF value. Therefore, it can be concluded that there is no multicollinearity in each independent variable in this study.

4.5 Regression Analysis

Level A consists of the dependent variable (CPI) and independent variables (IFRS, ID, ISA, and IPSAS). Level B consists of the dependent variables (CPI) and independent variables (IFRS, ID, ISA, and IPSAS). In addition, the FRB variable was added to the

regression model at level B as an independent variable and the omitted variable. The following are the results of the omitted variable test:

Table 7. Omitted Variables Test

	Value	Probability
t-statistic	3.735328	0.0003
F-statistic	13.95268	0.0003
Likelihood ratio	13.85337	0.0002

Source: Processed Data in E-views (2022)

According to Table 7., the t-statistic and F-statistic values have a probability of less than $\alpha = 0.05$. It means that the FRB variable was such an important variable that must be added to the regression model.

Further, level C consists of CPI as the dependent variable; IFRS, ID, ISA, IPSAS as the independent variables; and FRB as the omitted variable. At this level, a statistical test to examine the influence was done to find out which observations have the most significant influence on the analysis results. Then, the number of observations with the most significant effect on the analysis results would be deleted, and the regression analysis would be done again to understand the effect of deleting the most significant observations. The following are the results of the statistical test:

Table 8. Statistical Test to Examine The Influence

Observations	Residual	RStudent	DFFITS	COVRATIO
Luxembourg	42.09872	2.848023	-0.640426	0.723792
Sweden	-34.22545	-2.264604	0.398877	0.828154
Uganda	33.42537	2.217374	-0.433734	0.843228
Singapore	32.68302	2.215010	-0.641007	0.880651
Malawi	-31.22545	-2.058076	0.362500	0.867753
Denmark	25.80818	1.735984	-0.507465	0.974458
Germany	25.19072	1.689078	-0.478088	0.977979
Hungary	-24.35726	-1.639648	0.492603	0.995844
Greece	-3.941566	-0.264120	0.085999	1.163302
Israel	2.944847	0.199531	-0.072253	1.191652

Source: Processed Data in E-views (2022)

According to Table 8., determining ten observations with the most significant influence on the results of the analysis is based on the criteria of RStudent, DFFITS, and COVRATIO. Ten observations with the most significant influence include Luxembourg, Sweden, Uganda, Singapore, Malawi, Denmark, Germany, Hungary, Greece, and Israel. After that, they were deleted, and the regression analysis was performed again.

The results of the regression analysis at level A, level B, and level C can be seen in Table 9.

Table 9. Regression Result

Variable	Level A		Level B		Level C	
	Coefficient	Prob.	Coefficient	Prob.	Coefficient	Prob.
C	27.86418	0.0000	12.08482	0.0898	5.349562	0.4212
IFRS	8.319282	0.0221	8.783106	0.0110	10.53322	0.0014
ID	16.70977	0.0000	16.90799	0.0000	17.10783	0.0000
ISA	-7.922540	0.0461	-7.131813	0.0581	-6.445456	0.0903
IPSAS	-0.718381	0.7657	-2.492296	0.2862	-1.550587	0.4618
FRB			7.257177	0.0003	7.930558	0.0000
R ²		0.240725		0.325509		0.428035
Adjusted R ²		0.213608		0.295126		0.399720
F-statistic		8.877302		10.71370		15.11684
Probability		0.000003		0.000000		0.000000

Source: Processed Data in E-views (2022)

4.5.1 Level A

Based on Table 9., three independent variables have a significant probability value at the 5% level, namely IFRS, ID, and ISA. Meanwhile, the IPSAS has a probability value at the 5% level. It means that the independent variables of IFRS, ID, and ISA significantly affected the CPI as the dependent variable. Any changes to the IFRS, ID, and ISA would significantly affect the CPI. Meanwhile, the changes in the IPSAS would not significantly affect the CPI. The following are the results of the estimation of level A regression model:

$$\text{CPI} = 27.8641754621 + 8.31928190291 \cdot \text{IFRS} + 16.7097734343 \cdot \text{ID} - 7.92254048883 \cdot \text{ISA} - 0.718381335409 \cdot \text{IPSAS}$$

The IFRS and ID variable have positive coefficient values. It means that any changes in the IFRS and ID would be responded positively by the CPI. If the IFRS and ID increased, the CPI would also increase and vice versa. Meanwhile, the ISA and IPSAS variable have negative coefficient values. It means that any changes in the ISA and IPSAS would be responded negatively by the CPI. If the ISA and IPSAS increased, the CPI would decrease. On the other hand, if the ISA and IPSAS decreased, the CPI would increase. The partial effect of the independent variable on the dependent variable can be seen in Figure 1.

There are four hypothesis testing conducted at level A. Based on the results of regression analysis at level A and the probability of the coefficient value of the independent variable, it can be interpreted that the regression analysis results at level A support H1, H2, and H3, while H4 is not supported empirically. The F-statistic value at level A is 8.877302 with a probability value of 0.000003 which is less than $\alpha = 0.05$. It means that together, all independent variables had a positive and significant effect on CPI. Any changes in the independent variables together would affect the CPI. The value of R² at level A is 0.240725. It means that the independent variable at this level could explain the CPI by 24.07%. The rest 75.93% could be explained by other variables not included in this level and research.

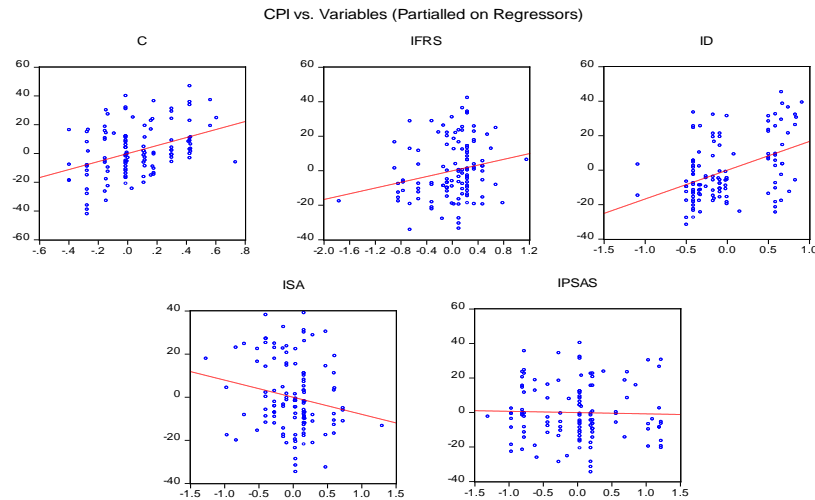


Figure 1. Partial Effect of Level A
Source: Processed Data in E-views (2022)

4.5.2 Level B

Based on Table 9., three independent variables have a significant probability value at the 5% level, namely IFRS, ID, and FRB. Meanwhile, the ISA and IPSAS have a probability value at the 5% level. It means that the independent variables of IFRS, ID, and FRB significantly affected the CPI as the dependent variable. Any changes to IFRS, ID and FRB would significantly affect the CPI. Meanwhile, any changes in the ISA and IPSAS would not significantly affect the CPI. The following are the results of the estimation of level B regression model:

$$\text{CPI} = 12.0848195434 + 8.78310610262 * \text{IFRS} + 16.9079937893 * \text{ID} - 7.13181344898 * \text{ISA} - 2.49229636829 * \text{IPSAS} + 7.2571767104 * \text{FRB}$$

The IFRS, ID, and FRB variable have positive coefficient values. It means that any changes in the IFRS, ID, and FRB would be responded positively by the CPI. If the IFRS, ID, and FRB increased, the CPI would also increase and vice versa. Meanwhile, the ISA and IPSAS variable have negative coefficient values. It means that any changes to the ISA and IPSAS would be responded negatively by the CPI. If the ISA and IPSAS increased, the CPI would also decrease. On the other hand, if the ISA and IPSAS decreased, the CPI would increase. The partial effect of the independent variable on the dependent variable can be seen in Figure 2.

There are five hypothesis testing conducted at level B. Based on the results of regression analysis at level B and the probability of the coefficient value of the independent variable, it can be interpreted that the regression analysis results at level B support H1, H2, and H5. However, at the same time, H3 and H4 are not supported empirically. The F-statistic value at level B is 10.71370 with a probability value of 0.000000 which is less than $\alpha = 0.05$. It means that together, all independent variables had a positive and significant effect on the CPI. Any changes in the independent variables together would affect the CPI. The value of R² at level A is 0.325509. It means that the independent variable could explain the CPI by 32.55%. The rest 67.45% could be explained by other variables not included in this level and research.

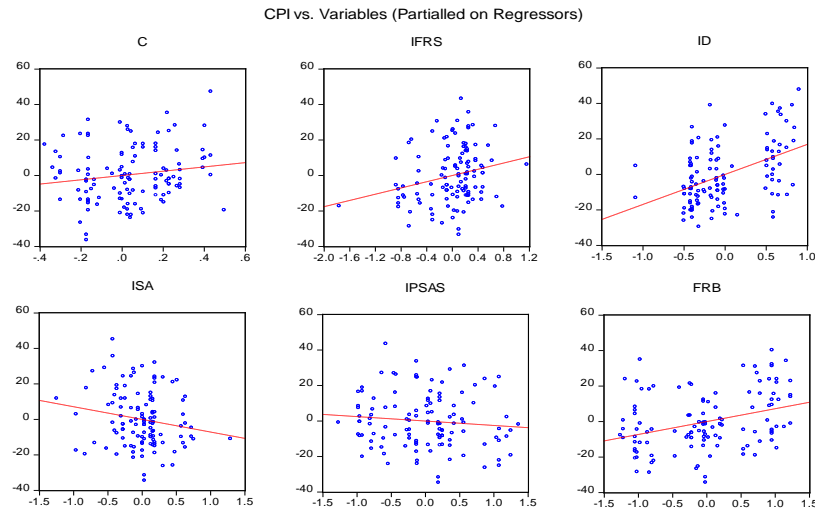


Figure 2. Partial Effect of Level B
Source: Processed Data in E-views (2022)

4.5.3 Level C

Based on Table 9., three independent variables have a significant probability value at the 5% level, namely IFRS, ID, and FRB. Meanwhile, the ISA and IPSAS have a probability value at the 5% level. It means that the independent variables of IFRS, ID, and FRB significantly affected the CPI as the dependent variable. Any changes in the IFRS, ID and FRB would significantly affect the CPI. Meanwhile, any changes in the ISA and IPSAS would not significantly affect the CPI. The following are the results of the estimation of level A regression model:

$$\text{CPI} = 5.34956247634 + 10.5332205351 \cdot \text{IFRS} + 17.1078309122 \cdot \text{ID} - 6.44545585565 \cdot \text{ISA} - 1.55058714136 \cdot \text{IPSAS} + 7.93055796384 \cdot \text{FRB}$$

The IFRS, ID, and FRB variable have positive coefficient values. It means that any changes in the IFRS, ID, and FRB would be responded positively by the CPI. If the IFRS, ID, and FRB increased, the CPI would also increase and vice versa. However, the ISA and IPSAS variable have negative coefficient values. It means that any changes in the ISA and IPSAS would be responded negatively by the CPI. If the ISA and IPSAS increased, the CPI would decrease. On the other hand, if the ISA and IPSAS decreased, the CPI would increase. The partial effect of the independent variable on the dependent variable can be seen in Figure 3.

There are five hypothesis testing conducted at level C. Based on the results of regression analysis at level C and the probability of the coefficient value of the independent variable, it can be interpreted that the regression analysis results at level C support H1, H2, and H5. However, at the same time, H3 and H4 are not supported empirically. The F-statistic value at level C is 15.11684 with a probability value of 0.000000 which is less than $\alpha = 0.05$. It means that together, all independent variables had a positive and significant effect on the CPI. Any changes in the independent variables together would affect the CPI. The value of R² at level A is 0.428035, which means that the independent variable could explain the CPI by 42.80%. The rest 57.20% could be explained by other variables not included in this level and research.

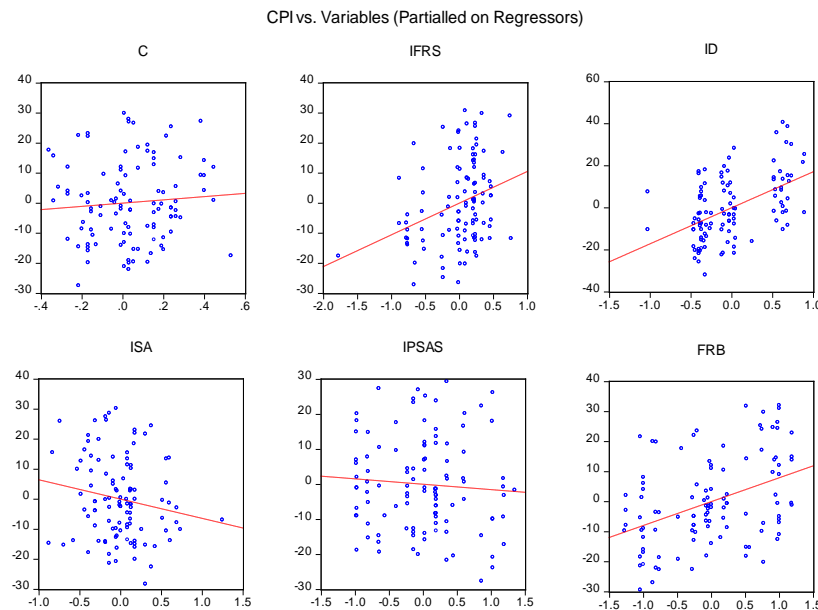


Figure 3. Partial Effect of Level C
Source: Processed Data in E-views (2022)

4.6 Discussion

Based on the results of the three-level regression analysis and considering the F-statistic and R² value, it can be concluded that the best regression analysis results are level C. The IFRS, ID, and FRB have a positive and significant influence on the CPI. Meanwhile, the ISA and IPSAS have a negative and insignificant effect on the CPI.

Further, this study finds that the adoption of ISA and IPSAS would negatively affect the CPI. Adopting the ISA and IPSAS would not significantly lower the CPI. It was due to the negative effect of the rapid adoption of the ISA (Elmghaamez et al., 2020) and the adoption of IPSAS (Caruana, 2021; Christiaens et al., 2015).

However, this study finds that adopting the IFRS and partial or full influence of ID would significantly increase the CPI. This finding was in line with researches conducted by Brown (2011), Chen et al. (2010), Iatridis (2010), Boolaky et al. (2019), Beattie et al. (2010). Differences to the FRB with either the cash basis, cash to accruals, or accrual basis would affect the CPI. Applying the cash basis to accrual or accrual basis would significantly increase the CPI. This finding was also supported by Bellanca & Vandernoot (2014), Bergmann (2012), Goel (2016).

Based on the results, this study finds that the F-statistic value is 15.11684, with a probability of $0.0000 < \alpha = 0.05$. It indicates that the IFRS, ID, ISA, IPSAS and FRB would all positively and significantly impact the CPI when they were used together or simultaneously. The full implementation of IFRS, ID, ISA, IPSAS, and the accrual based on the financial reporting basis would greatly enhance the CPI.

Furthermore, this study finds that the R² value is 0.428035. It indicates that the IFRS, ID, ISA, IPSAS, and FRB could explain the CPI by 42.80%. This emphasizes that the rest 57.20% could be explained by other variables not included in this study.

Therefore, the results of this study may have implications for the government policy in choosing the type of adoption of international accounting standards and the application of the basis of financial statements. Countries with low CPI scores can implement the results of this study as a reference for policy making. The government is suggested to formulate a policy of full adoption or partially international financial reporting standards

and investigation and discipline by considering the economic and business conditions in each country. In addition, as an important factor, the government can apply the accrual basis of financial statements so that it will have an impact on increasing the monitoring and disclosure of important financial information which in turn can increase the CPI.

5. CONCLUSION

The adoption of IFRS and ID would affect the CPI. Adopting the IFRS and partial or full ID would also significantly increase the CPI. However, the adoption of ISA and IPSAS would negatively affect the CPI. Further, adopting the ISA and IPSAS would not significantly lower the CPI.

Besides, the differences in the FRB either applying the cash, cash to accruals, or accrual basis would affect the CPI. Applying the cash basis to accrual or accrual basis would significantly increase the CPI. In addition, by implementing them together or simultaneously, the FRB, IFRS, ID, ISA and IPSAS would positively and significantly affect the CPI.

This study has several limitations, especially in terms of the data where the data used was only based on the qualitative data from the International Public Sector Financial Accountability Index obtained from the International Federation of Accountants, which was then converted into the quantitative data. Future researches are suggested to use more diverse data by adding other primary and secondary data that can support the research results on accounting and its relationship to corruption.

REFERENCES

- [1] Ajaz, T., & Ahmad, E. (2010). The effect of corruption and governance on tax revenues. *The Pakistan Development Review*, 49(4), 405–417. <https://www.jstor.org/stable/41428665>
- [2] Albu, N., & Albu, C. N. (2012). International Financial Reporting Standards in an emerging economy: lessons from Romania. *Australian Accounting Review*, 22(4), 341–352. <https://doi.org/10.1111/j.1835-2561.2012.00196.x>
- [3] Ariyanto, R., & Bone, H. (2020). Fraud awareness in Indonesian governmental sector: Multi-agency responses. *Review of Integrative Business and Economics Research*, 9, 209–222.
- [4] Avnimelech, G., Zelekha, Y., & Sharabi, E. (2014). The effect of corruption on entrepreneurship in developed vs non-developed countries. *International Journal of Entrepreneurial Behavior & Research*, 20(3), 237–262. <https://doi.org/10.1108/IJEER-10-2012-0121>
- [5] Beattie, V., Fearnley, S., & Hines, T. (2010). *Factors affecting audit quality in the 2007 UK regulatory environment: perceptions of chief financial officers, audit committee chairs and audit engagement partners*.
- [6] Bellanca, S., & Vandernoot, J. (2014). International public sector accounting standards (IPSAS) implementation in the European Union (EU) member states. *Journal of Modern Accounting and Auditing*, 10(3). <https://doi.org/10.17265/1548-6583/2014.03.001>
- [7] Bergmann, A. (2012). The influence of the nature of government accounting and reporting in decision-making: Evidence from Switzerland. *Public Money & Management*, 32(1), 15–20. <https://doi.org/10.1080/09540962.2012.643050>

- [8] Boolaky, P. K., & Omoteso, K. (2016). International standards on auditing in the international financial services centres: What matters? *Managerial Auditing Journal*, 31(6/7), 727–747. <https://doi.org/10.1108/MAJ-09-2015-1243>
- [9] Boolaky, P. K., & Soobaroyen, T. (2017). Adoption of International Standards on Auditing (ISA): Do institutional factors matter? *International Journal of Auditing*, 21(1), 59–81. <https://doi.org/10.1111/ijau.12081>
- [10] Boolaky, P. K., Soobaroyen, T., & Quick, R. (2019). The Perceptions and Determinants of Auditing and Reporting Quality in the Asia-Pacific Region. *Australian Accounting Review*, 29(3), 468–484. <https://doi.org/10.1111/auar.12225>
- [11] Brown, P. (2011). International Financial Reporting Standards: what are the benefits? *Accounting and Business Research*, 41(3), 269–285. <https://doi.org/10.1080/00014788.2011.569054>
- [12] Brusca, I., & Martínez, J. C. (2016). Adopting International Public Sector Accounting Standards: a challenge for modernizing and harmonizing public sector accounting. *International Review of Administrative Sciences*, 82(4), 724–744. <https://doi.org/10.1177/2F0020852315600232>
- [13] Capasso, S., Cicatiello, L., De Simone, E., & Santoro, L. (2021). Corruption and tax revenues: evidence from Italian regions. *Annals of Public and Cooperative Economics*, 1–24. <https://doi.org/10.1111/apce.12356>
- [14] Caruana, J. (2021). The proposed IPSAS on measurement for public sector financial reporting—recycling or reiteration? *Public Money & Management*, 41(3), 184–191. <https://doi.org/10.1080/09540962.2021.1873594>
- [15] Cerqueti, R., & Coppier, R. (2011). Economic growth, corruption and tax evasion. *Economic Modelling*, 28(1), 489–500. <https://doi.org/10.1016/j.econmod.2010.07.006>
- [16] Chen, H., Tang, Q., Jiang, Y., & Lin, Z. (2010). The role of international financial reporting standards in accounting quality: Evidence from the European Union. *Journal of International Financial Management & Accounting*, 21(3), 220–278. <https://doi.org/10.1111/j.1467-646X.2010.01041.x>
- [17] Christiaens, J., Vanhee, C., Manes-Rossi, F., Aversano, N., & Van Cauwenberge, P. (2015). The effect of IPSAS on reforming governmental financial reporting: An international comparison. *International Review of Administrative Sciences*, 81(1), 158–177. <https://doi.org/10.1177/2F0020852314546580>
- [18] d’Agostino, G., Dunne, J. P., & Pieroni, L. (2016). Corruption and growth in Africa. *European Journal of Political Economy*, 43, 71–88. <https://doi.org/10.1016/j.ejpoleco.2016.03.002>
- [19] De Vaal, A., & Ebben, W. (2011). Institutions and the relation between corruption and economic growth. *Review of Development Economics*, 15(1), 108–123. <https://doi.org/10.1111/j.1467-9361.2010.00596.x>
- [20] Dimant, E., Krieger, T., & Meierrieks, D. (2013). The effect of corruption on migration, 1985–2000. *Applied Economics Letters*, 20(13), 1270–1274. <https://doi.org/10.1080/13504851.2013.806776>
- [21] Djajadikerta, H., Fettry, S., & Tanumihardja, D. (2019). Fraud and Corruption Trigger Model Based on Perception of High School Students: A Preliminary Study. *Review of Integrative Business and Economics Research*, 8, 82–92.
- [22] Elmghamez, I. K., Gerged, A. M., & Ntim, C. G. (2020). Financial market consequences of early adoption of international standards on auditing:

- international evidence. *Managerial Auditing Journal*, 35(6), 819–858.
<https://doi.org/10.1108/MAJ-04-2019-2233>
- [23] Eltweri, A., Altarawnah, M., Al-Hajaya, K., & Al-Karaki, W. (2018). Auditing profession regulation: Lesson learned from code and common law countries regulatory approaches. *Risk Governance and Control: Financial Markets & Institutions*, 8(3), 80–101. <https://doi.org/10.22495/rgcv8i3p6>
- [24] Eltweri, A., Faccia, A., & Cavaliere, L. P. L. (2021). The role of culture on the adoption of International Standards on Auditing in the developing countries: An institutional perspective. *Journal of Governance and Regulation*, 9(4), 162–171. <https://doi.org/10.22495/jgrv9i4art14>
- [25] Goel, D. (2016). The earnings management motivation: Accrual accounting vs. cash accounting. *Australasian Accounting, Business and Finance Journal*, 10(3), 48–66. <https://doi.org/10.14453/aabfj.v10i3.4>
- [26] Gujarati, D. N. (2014). *Econometrics by Example* (Second Ed.). Palgrave.
- [27] Hill, R. C., Griffiths, W. E., & Lim, G. C. (2018). *Principles of econometrics* (Fifth Ed.). John Wiley & Sons.
- [28] Humphrey, C., Loft, A., & Woods, M. (2009). The global audit profession and the international financial architecture: Understanding regulatory relationships at a time of financial crisis. *Accounting, Organizations and Society*, 34(6), 810–825. <https://doi.org/10.1016/j.aos.2009.06.003>
- [29] Iatridis, G. (2010). International Financial Reporting Standards and the quality of financial statement information. *International Review of Financial Analysis*, 19(3), 193–204. <https://doi.org/10.1016/j.irfa.2010.02.004>
- [30] Johnston, M. (2015). Making transparency real? Accounting and popular participation in corruption control. *Critical Perspectives on Accounting*, 28, 97–101. <https://doi.org/10.1016/j.cpa.2015.01.009>
- [31] Malagueño, R., Albrecht, C., Ainge, C., & Stephens, N. (2010). Accounting and corruption: a cross-country analysis. *Journal of Money Laundering Control*, 13(4), 372–393. <https://doi.org/10.1108/13685201011083885>
- [32] Melgar, N., Rossi, M., & Smith, T. W. (2010). The Perception of Corruption. *International Journal of Public Opinion Research*, 22(1), 120–131. <https://doi.org/10.1093/ijpor/edp058>
- [33] Neu, D., Everett, J., Rahaman, A. S., & Martinez, D. (2013). Accounting and networks of corruption. *Accounting, Organizations and Society*, 38(6), 505–524. <https://doi.org/10.1016/j.aos.2012.01.003>
- [34] Ofoegbu, & Grace, N. (2014). New public management and accrual accounting basis for transparency and accountability in the Nigerian public sector. *IOSR Journal of Business and Management*, 16(7), 104–113. <https://doi.org/10.9790/487X-1673104113>
- [35] Opanyi, R. O. (2016). The effect of adoption of international public sector accounting standards on quality of financial reports in public sector in Kenya. *European Scientific Journal*, 12(28), 161–187. <https://doi.org/10.19044/esj.2016.v12n28p161>
- [36] Paisey, C., & Paisey, N. J. (2012). Whose rights? Professional discipline and the incorporation of a (human) rights framework: The case of ICAS. *Critical Perspectives on Accounting*, 23(1), 17–35. <https://doi.org/10.1016/j.cpa.2011.11.008>
- [37] Parlakkaya, R., Akmese, H., & Akmese, K. A. (2014). Status Quo of international

- financial reporting standards and international standards on auditing: A research on the accounting professionals in Konya. *Procedia Economics and Finance*, 15, 1663–1670. [https://doi.org/10.1016/S2212-5671\(14\)00638-8](https://doi.org/10.1016/S2212-5671(14)00638-8)
- [38] Polzer, T., Adhikari, P., Nguyen, C. P., & Gårseth-Nesbakk, L. (2021). Adoption of the International Public Sector Accounting Standards in emerging economies and low-income countries: a structured literature review. *Journal of Public Budgeting, Accounting & Financial Management*. <https://doi.org/10.1108/JPBAFM-01-2021-0016>
- [39] Poprawe, M. (2015). A panel data analysis of the effect of corruption on tourism. *Applied Economics*, 47(23), 2399–2412. <https://doi.org/10.1080/00036846.2015.1005874>
- [40] Suhardjanto, D., Syafruddin, M., Andini, R. P., & Rahmatika, M. W. (2018). Accountability and Corruption Level of Provincial Government in Indonesia. *Review of Integrative Business and Economics Research*, 7, 281–296.