

## The Fair Value of Animal Zoo

Muhammad Fahmi<sup>1</sup>, Muhammad Irsan<sup>2</sup>

Economic and Business Faculty of Muhammadiyah University of North Sumatera<sup>1,2</sup>

Kapt. Mukhtar Basri Street No. 3 Medan. 20238. North Sumatera. Indonesia

Correspondence Email: [muhammadfahmise@umsu.ac.id](mailto:muhammadfahmise@umsu.ac.id)

ORCID ID: <https://orcid.org/0000-0002-8587-1782>

### ARTICLE INFORMATION

#### Publication Information

#### Research Article

#### HOW TO CITE

Amran, Y., & Nisa. (2021). CSR in the Covid-19 situation in Indonesia. *Journal of International Conference Proceedings*, 9(1), 23-31.

#### DOI:

<https://doi.org/10.32535/jicp.v4i2.1282>

Copyright@ year owned by Author(s).  
Published by JICP



This is an open-access article.

License: Attribution-Noncommercial-Share Alike (CC BY-NC-SA)

Received: 18 September 2021

Accepted: 22 October 2021

Published: 26 November 2021

### ABSTRACT

However, the published financial statement of The Development District Company of Medan Sub Unit Zoo year 2015 and 2016 does not reflect the characteristic of appropriate qualitative financial statement yet with SAK. The animal in the zoo can be identified as company asset, but cannot be categorized yet as an asset, whether current asset, fixed asset or non-fixed asset. Another phenomenon is some animals cannot be detected their own fair value, because those animals are not for trade and have no market price. The animal has similar characteristic with fixed asset, but the estimation assessment of depreciation percentage and amortization, useful life and residue value cannot be measured yet trustfully. By the phenomenon, the problem comes up that is measurement (identification, categorization, and the assessment of economy transaction) so that it is enable for animal cannot be presented in the financial statement. Based on the observation result, it is acquired that animal collections as many as 38 animals, each consists of 20 species for aves class, 11 species for mammals and 7 species for reptile. According to UU No. 5 year 1990, PP No. 07 year 1999 and PP No. 08 year 1999 there are 21 protected animals, so that the fair value cannot be determined, but the unprotected animals and the category of cite appendix II as many as 10 animals can be determined due to enable to be traded.

**Keywords:** Animal Zoo, Fair Value, Medan

**JEL Classification:** M14, Q14, M10

## INTRODUCTION

Zoo is the entity of service company which its whole income required from selling tickets, from the selling tickets the visitors can see and use the diversity of flora, fauna and recreation playground in that zoo. Development District Company of Medan Sub Unit Zoo is a zoo company managed by *Pemerintah Daerah (Pemda)* of Medan. *Peraturan Pemerintah (PP)* No. 08 year 2006 obligate every District Company arrange the annual financial statement by applying the *Standar Akuntansi Pemerintahan (SAP)* and *PSAK 45* is required if the company is public service committee or zoo or called non-profit oriented. And *Undang-Undang No 17-year 2003* emphasize the district government responsibility is to arrange the district government financial statement enclosing with district government financial statement, and it also should be audited by the *Badan Pemeriksa Keuangan Republik Indonesia (BPK-RI)*.

Based on the financial statement published by The *Perusahaan Daerah (PD) Pembangunan Kota Medan Sub Unit Kebun Binatang* year 2015 and 2016, all animals owned by company which do not list and admit in the company's financial statement, the existence of the animals in the company merely listed as the expense in the activity statement and nett asset exchange for example conservation expense, maintenance expense, research expense and development and other expense.

The animal characteristics have the equality of asset, if the company acquire an animal to be owned and controlled in order to get the economic benefit in the future, so the animals are classified as the asset, but the explanation in Internastional Accounting Standard (IAS) 41 about Agriculture which adopted by *Standar Akuntansi Keuangan di Indonesia (PSAK) 69* about Biology Asset which is valid to plantation and husbandry company, however it cannot be applied to zoo company, because of the difficulty to determine the fair value of every kind of animal owned by the company, the effect of this moment causes the accounting distortion due to a standard failure capture economic reality (Subramanyam and Wild, 2009).

Concerning the interpretation of *PSAK No.16* about fixed asset and another asset describe that an animal owned by zoo cannot be classified as the fixed asset and another asset, due to there is no certain value concerning the useful life, the percentage of amortization expense and residue value for every kind of animals. If an animal acquired by donation, so it is noted in accordance with its fair value, but it is difficult to determine the fair value based on the market price if any kind of animal classified as the protected and not for sale animal.

Particularly in Indonesia, financial accounting and tax is different, basically taxable income is financial accounting income which is justified to the difference with tax law, so the financial accounting and tax is discrete (Choi and Meek, 2011). *Direktorat Jendral Pajak (DJP) Republik Indonesia* release the *Peraturan UU No. 36* year 2008 about Income Tax explain that taxable income acquired from adjusting in accordance with the valid tax regulation. Thus, if all animals owned by company did not list and admit in the financial statement, so it can omit the potency of tax.

In several zoo, the ownership of animal collection does not list and present yet in financial statement in the end year. The following presents the description from the independent auditor report about the inspection toward some zoo companies in several countries.

- Based on the independent auditor report Chon Reznick toward the inspection of consolidation financial statement of Zoological Society of San Diego dba San Diego Zoo Global in the period 7 December 2015 and 1 January 2017, state that:

Animal and Horticultural Collections

In accordance with customary practice among Zoological organizations, animal and horticultural collections are recorded at the nominal amount of one dollar, as there is no objective basis for establishing value. Additionally, animal and horticultural collections have numerous attributes, including species, age, sex, relationship and value to other animals, endangered status, and breeding potential, whereby it impracticable to assign value. Expenditures related to animal and horticultural acquisitions are expensed in the period of acquisition.

- Based on the independent financial statement Hendry and Horne, LLP the inspection of consolidation financial statement of Arizona Center for Nature Conservation and Affiliate, end of year 30 June 2014 and 2015 state that:

Animals

In Accordance with industry practice, the animal collection is not recorded, as there is no objective basis for establishing value. Additionally, the animal collection has numerous attributes, including species, age, sex, relationship and value to other animals, endangered status, and breeding potential, whereby it impracticable to assign value. Acquisitions and Sales of animal are recorded as operating expense or revenue in the year of purchase or sale.

- Based on the independent financial statement Verdeja, De Armas, Trujillo toward the financial statement of Zoo Miami Foundation, Inc end year 30 September 2014 and 2015 in the company's financial statement did not reveal the information about animals.
- Independent auditor report Mazars LLP toward the inspection of financial statement of Marwell Wildlife end year 31 December 2015, state that:

Animals

Marwell wildlife participates in global cooperative efforts to maintain sustainable populations of animals which reliant on the sharing of individuals between zoological organizations. Veterinary screening, transport and other cost of receiving animals are expensed during the period of acquisition. However, with no objective or practical basis for establishing value, animal transactions are made without monetary consideration. Hence, as is customary among zoological organisations, the animal collection is recorded at a nominal value.

- Based on the independent auditor report of Will Baker from KPMG LLP toward the inspection of financial statement The North of England Zoological Society, end year 31 December 2015, did not reveal the information about animals in the financial statement.
- Based on the independent auditor report of Scott and Company toward the inspection of financial statement of Richland-Lexington Riverbanks Park District, for the fiscal end year 30 June 2014, did not reveal the information about animals in the financial statement.
- The independent auditor report of Clifton Larson Allen LLP toward the inspection of financial statement of Saint Louis Zoo end year 31 December 2016, state that:

#### Animals Transactions

Animal transactions that do not involve either the receiving or disbursing of cash are not recorded in the Zoo's financial statement, those transactions that involve cash are recorded on the accrual basis of accounting in the period the animal was shipped or received.

- The independent auditor report of Mari-Anne Williamson toward the inspection of financial statement of Wellington Zoo end year 30 June 2016, explain that:

#### Animals Collections

In accordance with customary practice among Zoological organizations, animal are not recorded as there is no objective basis for establishing value. Additionally, animal have numerous attributes, including species, age, sex, relationship and value to other animals, endangered status, and breeding potential, whereby it is impracticable to assign value. Expenditures related to animal acquisitions is expensed in the period of acquisition.

### **LITERATURE REVIEW**

Financial statement is a result of the accounting process, accounting involves the measurement process, revealing and auditing (Choi and Meek, 2011). The measurement encompasses a series of identification, grouping and calculating the economic entity. The calculating of economic value should fulfill the fair value. According to Pedoman Standar Akuntansi Keuangan (PSAK) 16 (IAI.16.2) the fair value is an amount of, for this an asset possibly exchanged or an obligation to be finished between the participant which apprehend and will to do the fair transaction (arm's length transaction). Then the International Financial Reporting Standards (IFRS) No.13 (2012.9) fair value as the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date, IFRS 13 state that the price used in the market (market based measurement) as the basic measurement of fair value, not based on the price depended on the company's internal factor (entity specific measurement), word "orderly transaction" is a transaction in the regular fair condition, that is the the price from internal factor that can be used if the used price in market does not exist.

International Accounting Standard (IAS) 41 explained that a biological asset is a living animal or plant. The animals and Plants called as the biologic asset because they have the growing process, degeneration, production and procreation which cause the quantity and quality exchange in the biologic asset itself. As for the fair value measurement in IAS 41 based on IFRS 13 that is the used price in market. Based on PSAK 68 (IAI. 2013 27.34) the assessment technique from fair value consists of three approaches, market approach in which use the price and another relevant information produced by market transaction which entail the asset, the equal liability. Cost approach reflects the needed amount now to substitute the useful capacity of asset (serve capacity). Income approach converse the future amount to a single amount now.

IAS 20 adopted fully by PSAK 61 (IAI. 2010) the definition of government donation is a help from entity requirement of government's help which should do purchase, build or sell long-term asset, the scope of IAS 20 excluded IAS 41 which is adopted by PSAK 69, the fair value assessment of IAS 20 refers to IFRS 13 that is the used price in market and the transaction in regular and fair condition. And PSAK 16 states the donation active is an active acquired from the listed donation as much as the appraisal price or market price with credit the donation capital.

From the fact of the zoo's financial statement that the incapacity to measure the fair value of whole material of animals will turn down the qualitative quality value of financial statement, according to SAK (IAI 2004,08) materiality is a carelessness to insert or the falsity in listing the information that can influence the user's economic decision taken from the financial statement.

(William Penner and Singh, 2015) state the fact that Zoo World bought five men and women giraffe with \$25.000 for each, additional cost for veterinarian \$10.000 and guarantee and transportation cost \$20.000, feeding cost \$3.000/year and breeding cost \$10.000/year, Zoo World change the giraffe with Egyptian donkey from another zoo with fair value for \$15.000 and \$20.000 in cash. In line with PSAK (IAI.2004.20) in the recognition post has the element there is an economic usefulness related to the post that connect into the company and the post that has the dependable measured value and cost, and PSAK (IAI.2004.21) the cost and value should be estimated. According to (Kaur, 2013) the animal and plant can be measured the fair value if they have market price and the cost while assessed and the animal is listed as the fixed asset and amortized (Warren, Reeve and Fess, 2005).

The revealing fact above in accordance with IFRS 13 that animal asset enables to be determined its fair value, and if the transaction is in the fair c and regular condition so the estimation can use the public assessment service as PMK No. 101/PMK.01/2014 *Pasal 05 Point (3) huruf e* that is property assessment service involves agriculture, husbandry, fishery and forestry. The revealing fact can be avoided to happen due to the usefulness is lesser than the cost (Stice, Stice and Skousen, 2013)

## **RESEARCH METHOD**

The paradigm in this study is Inductive qualitative research. It is a research which emphasizes to apprehend the problems in social life on the base of reality and the holistic natural setting, complex and detail by arranging the theory constructive or hypothesis through revealing the fact (Sekaran, 2003). The point of view in inductive research prioritizes data exploration for the first time as the early step, it means the theory is not a crucial matter to do the early research. The collecting data in this research through interview and observation to the research's subject and object (Sekaran, 2003).

The location of the research consists of two, they are Perusahaan Daerah (PD) Pembangunan Kota Medan in Jalan Sutomo Ujung No. 04 Kode Pos 20235, Kecamatan Medan Timur, Kotamadya Medan. Provinsi Sumatera Utara. And Medan Zoo Jalan. Bunga Rampai IV No. 100 Kode Pos 20135. Kelurahan Simalingkar, Kecamatan Medan Tuntungan, Provinsi Sumatera Utara. The subject of the research as the qualitative research data source is all animals in Perusahaan Daerah (PD) Pembangunan Kota Medan Sub Unit Kebun Binatang

## **RESULTS**

The results of observations from the Medan City Zoo Animal Collection are revealed in table 1 below:

**Table 1.** Medan City Zoo Animal Collection

Name	Class	Ordo	Familia	Status
Nuri KepalaHitam	Aves	Psittaciformes	Psittaculidae	Cites Appendix II

Bayan (Bird)	Aves	Psittaciformes	Cacatuidae	Protected UU No. 5 th 1990. PP No 7 & 8 th 1999
Kakatua Maluku	Aves	Psittaciformes	Cacatuidae	Cites Appendix II
Kakatua Raja	Aves	Psittaciformes	Cacatuidae	Cites Appendix I Protected UU No 5 th 1990 PP No 7 & 8 th 1999
Kakatua Jambul Kuning	Aves	Psittaciformes	Cacatuidae	Cites Appendix I Protected PP No 7 & 8 th 1999
MerakHijau	Aves	Galliformes	Phasianidae	Cites Appendix II Protected PP No 7 & 8 th 1999
Bangau Tong Tong	Aves	Ciconiiformes	Ciconiidae	Protected PP No 7 & 8 th 1999
Kera Jepang	Mamalia	Primata	Cercopithecidae	-
Ayam Mutiara	Aves	Galliformes	Numididae	-
BurungHantu	Aves	Stringiformes	Strigidae Nocturnal	Cites Appendix II
Kowak Malam Abu Abu	Aves	Ciconiformes	Ardeidea	UnProtected
BleokSawah	Aves	Ciconiformes	Ardeidea	-
BurungKuntul	Aves	Ciconiformes	Ardeidea	Cites Appendix III Protected PP No 7 & 8 th 1999
ElangUlar	Aves	Accipitriformes	Accipitridae	Cites Appendix II Protected PP No 7 & 8 th 1999
ElangUlarBido	Aves	Accipitriformes	Accipitridae	Cites Appendix II
ElangBondol	Aves	Falconiformes	Accipitridae	Cites Appendix II Protected PP No 7 & 8 th 1999
Kura – Kura	Reptile	Testudinae	Emydidae	-
Kura – Kura Brazil	Reptile	Psittaciformes	Cacatuidae	Protected PP No 7 & 8 th 1999
PenyuSisik	Reptile	Testudinata	Cheloniidae	Cites

				Appendix III
Dara Mahkota	Aves	Columbiformes	Columbidae	Cites Appendix II Protected PP No 7 & 8 th 1999
Landak	Mamalia	Rodenti	Hystriidae	Cites Appendix III
Merpati	Aves	Columbiformes	Columbidae	Cites Appendix III
Ayam Kalkun	Aves	Galliformes	Phasianidae	-
Elang Laut Perut Putih	Aves	Falconiformes	Accipitridae	Cites Appendix I PP No 7 & 8 th 1999
Harimau Sumatera	Mamalia	Carnivora	Felidae	Cites Appendix I Protected UU no 5 th 1990 PP No 7 & 8 th 1999, Cites Appendix I
Harimau Benggala	Mamalia	Carnivora	Felidae	-
Beruang Madu	Mamalia	Carnivora	Ursidae	Cites Appendix I Protected UU no 5 th 1990 PP No 7 & 8 th 1999
Rusa Tutul	Mamalia	Artiodactyla	Cervidae	-
Rusa Timor	Mamalia	Artiodactyla	Cervidae	PP No 7 & 8 th 1999
Biawak	Reptile	Squamata	Varanidae	Cites Appendix II
Kucing Emas	Mamalia	Carnivora	Felidae	Protected
Ular Sanca Jarring	Reptile	Squamata	Phrynosomidae	Cites Appendix II
Rusa Sambar	Mamalia	Artiodactyla	Cervidae	Protected PP No 7 & 8 th 1999
Buaya Muara	Reptile	Crocodylia	Crocodylidae	Protected PP No 7 & 8 th 1999. Cite Appendix I/II
Buaya Senyulong	Reptile	Crocodylia	Crocodylidae	Protected PP No 7 & 8 th 1999. Cite Appendix I/II
Kasuari	Aves	Casuariformes	Casuariidae	Protected PP No 7 & 8 th 1999.
Kuda	Mamalia	Perissodactyla	Equidae	Unprotected
Kelinci	Mamalia	Lagomorpha	Leporidae	Unprotected

## DISCUSSION

From the observation in the subject of the research in *Perusahaan Daerah (PD) Pembangunan Kota Medan Sub Unit Kebun Binatang* in (appendix 1) states that the collection is 38 kinds of animal, they are aves class 20 kinds, mamalia 11 kinds and reptile 7 kinds. The protected and not for sale animal according to *UU No. 5* year 1990, *PP No. 07* year 1999 and *PP No 08* year 1999 as follows:

In the table 2 all animals in accordance with *UU No 5* year 1990, *PP No. 07* year 1999 and *PP No 08* year 1999 is the protected and not for sale animal, if they protected and not for sale so they are difficult in order to determine their fair value. Table 3 state that there are 10 kinds of animals in the status of unprotected animal and Cites Appendix II, the unprotected status enables to determine a fair value of an animal, because the animal is traded, it is in line with the status Cites Appendix II, include in the appendix of animal list from the not extinct species, but there is a government regulation about its trading. This the animal with unprotected status and Cities Appendix II enables in determining its fair value

**Table 2.** The protected animal UU No. 5 year 1990, PP No. 07 year 1999 dan PP No 08 year 1999

No	Name	Latin Name	Class	Ordo	Familia
1	Bayan (Burung)	-	Aves	Psittaciformes	Cacatuidae
2	Kakatua Raja	ProboscigerAtterimus	Aves	Psittaciformes	Cacatuidae
3	Kakatua Jambul Kuning	LopturaNycthemera	Aves	Psittaciformes	Cacatuidae
4	MerakHijau	PavoMuticus	Aves	Galliformes	Phasianidae
5	Bangau Tong Tong	LeptoptilosJavanicus	Aves	Ciconiiformes	Ciconiidae
6	BurungKuntul	ErgrettaGazetta	Aves	Ciconiformes	Ardeidea
7	ElangUlar	Cacatuica	Aves	Accipitriformes	Accipitridae
8	ElangBondol	Haliastur Indus	Aves	Falconiformes	Accipitridae
9	Kura-Kura Brazil	Trachemys Scripta Elegans	Reptile	Psittaciformes	Cacatuidae
10	PenyuSisik	Eretmochelys Imbricata	Reptile	Testudinata	Cheloniidae
11	Dara Mahkota	Goura Victoria	Aves	Columbiformes	Columbidae
12	Landak	Hystrix Brachyura	Mamalia	Rodenti	Hystriidea
13	ElangLautPerutPutih	Haliaeetus Leucogaster	Aves	Falconiformes	Accipitridae
14	Harimau Sumatera	Panthera Tigris Sumatra	Mamalia	Carnivora	Felidae
15	BeruangMadu	HelarctosMalaynus	Mamalia	Carnivora	Ursidae
16	Rusa Timor	Cervus Timorensis	Mamalia	Artiodactyla	Cervidae



17	KucingEmas	FelisTemmincki	Mamalia s	Carnivora	Felidae
18	Rusa Sambar	Cervus Unicolor	Mamalia s	Artiodactyla	Cervidae
29	BuayaMuara	CrocodylusPorosu s	Reptile	Crocodilia	Crocodylida e
20	BuayaSenyulong	TomistomaSchlege lii	Reptile	Crocodilia	Crocodylida e
21	Kasuari	CasuariusCasuariu s	Aves	Casuariforme s	Casuariidae

**Table 3.** Unprotected Animals and Cites Appendix II

No	Name	Class	Ordo	Familia	Status
1	Nuri KepalaHitam	Aves	Psittaciforme s	Psittaculidae	Cites Appendix II
2	Kakatua Maluku	Aves	Psittaciforme s	Cacatuidae	Cites Appendix II
3	BurungHantu	Aves	Stringiformes	Strigdae octurnal	Cites Appendix II
4	Kowak Malam Abu Abu	Aves	Ciconiformes	Ardeidea	Unprotected
5	ElangUlarBido	Aves	Accipitriforme s	Accipitridae	Cites Appendix II
6	Biawak	Reptile	Squamata	Varanidae	Cites Appendix II
7	UlarSanca Jarring	Reptile	Squamata	Phiyhonidae	Cites Appendix II
8	Kuda	Mamali as	Parissodactyl a	Equidae	Unprotected
9	Kelinci	Mamali as	Lagormorpha	Leporidedae	Unprotected
10	Merpati	Aves	Columbiform es	Columbidae	Unprotected

## CONCLUSION

From the previous research, so the conclusion of this study as the following:

1. Form the observation if an animal in the protected status so it cannot be determined its fair value.
2. From the observation, if an animal in the status of unprotected and Appendix Cites II, is enable to be determined its fair value. Because the animal is traded.

For this time being, the financial statement published by *Perusahaan Daerah (PD) Pembangunan Kota Medan Sub Unit Kebun Binatang* year 2015 and 2016, do not insert all animal collection due to they have no fair value. The findings approve that 10 kinds of animal from whole animals 38 kinds, enable to be determined their fair value, thus if the animal can be determined its fair value so it can be presented in the financial statement in the next period.

The limits of this study are in the following:

1. The observation on the subject of this research in determining the fair value can be done in the first step of observation, the observation did by photo documentation in every animal and compare with the reality based on the research observation.
2. The researcher did not interview yet to the management and data examiner in every animal.
3. The researcher did not conduct the advance survey yet concerning the market price of every unprotected animal.

### **ACKNOWLEDGMENT**

We, as authors, would like to thank the *Perusahaan Daerah (PD) Pembangunan Kota Medan Sub Unit Kebun Binatang* in providing data and information regarding this research, and Muhammadiyah University of North Sumatera through the Institute for Research and Community Service (LP2M) Muhammadiyah University of North Sumatera, who has provided research funding until the results of this research were published.

### **DECLARATION OF CONFLICTING INTERESTS**

The object of this research is the *Perusahaan Daerah (PD) Pembangunan Kota Medan Sub Unit Kebun Binatang* and this research is funded by Muhammadiyah University of North Sumatera through the Institute for Research and Community Service (LP2M) Muhammadiyah University of North Sumatera. And the author declares that the author has no conflict of interest. In this regard, In accordance with that, I as an author have disclosed those interests fully to the Journal of International Conference Proceedings (JICP), and I have in place an approved plan for managing any potential conflicts arising from (that involvement).

### **REFERENCES**

- Choi, F. D. S. and Meek, G. K. (2011) *International Accounting*. 7th edn, *The International Executive*. 7th edn. United States of America: Prentice Hall.
- International Financial Reporting Standar (IFRS) 13 *Fair Value Measurement*. International Accounting Standards Board (IASB)
- International Accounting Standard (IAS) 41 *Agriculture*, International Accounting Standards Board (IASB)
- International Accounting Standar (IAS) 20 *Accounting for Goverment Grants and Disclouser of Goverment Assistance*. International Accounting Standards Board (IASB)
- Kaur, J. (2013) 'The Fairness of the Fair Value Concept', *International Journal of Business and Commerce*, 3(3), pp. 1–10.
- Sekaran, U. (2003) *Research Methods For Business*. 4th edn. United States of America: John Wiley & Sons.
- Stice, J. D., Stice, E. K. and Skousen, F. K. (2013) *Intermediate Accounting*. 16th edn. United States of America: Thomson South-Western.
- Subramanyam, K. R. and Wild, J. J. (2009) *Financial Statement Analysis*. 10th edn. United States: McGraw-Hill.
- Undang-undang No. 36 Tahun 2008 *tentang Pajak Penghasilan dan Peraturan Pelaksanaannya*, Kementerian Keuangan Direktorat Jendral Perpajakan RI.
- Undang-undang No. 17 Tahun 2003 *Tentang Keuangan Negara*.
- Undang-undang No. 5 Tahun 1990 *Tentang Konservasi Sumberdaya Alam Hayati Dan Ekosistemnya*.
- Pedoman Standar Akuntansi Keuangan (PSAK) No 14.2004 *tentang Aset Tetap, Ikatan Akuntansi Indonesia*. Dewan Standar Akuntansi Keuangan Ikatan Akuntan Indonesia (DSAK-IAI).

- Pedoman Standar Akuntansi Keuangan (PSAK) No 16. 2010. *Aktiva Tetap dan Aktiva Lain-lain*, Dewan Standar Akuntansi Keuangan Ikatan Akuntan Indonesia (DSAK-IAI).
- Pedoman Standar Akuntansi Keuangan (PSAK) No 68. 2013 *Pengukuran Nilai Wajar*, Dewan Standar Akuntansi Keuangan Ikatan Akuntan Indonesia (DSAK-IAI).
- Pedoman Standar Akuntansi Keuangan (PSAK) No 61. 2010. *Akuntansi Hibah Pemerintah dan Pengungkapan Bantuan*, Dewan Standar Akuntansi Keuangan Ikatan Akuntan Indonesia (DSAK-IAI)
- Pedoman Standar Akuntansi Keuangan (PSAK) No 69. 2015. *Aset Biologis*, Dewan Standar Akuntansi Keuangan Ikatan Akuntan Indonesia (DSAK-IAI).
- Peraturan Menteri Keuangan (PMK) Republik Indonesia No 101/PMK.01/2014 Tentang *Penilai Publik*. No reg. 719,2014
- Peraturan Menteri Keuangan Republik Indonesia No 247/PMK.06/2014 Tentang Perubahan Kedua Atas Peraturan Menteri Keuangan No. 01/PMK.06/2013 Tentang *Penyusutan Barang Milik Negara Berupa Aset Tetap Pada Entitas Pemerintah Pusat*.
- Peraturan Pemerintah No 08 Tahun 2006 Tentang *Pelaporan Keuangan dan Kinerja Instansi Pemerintah*.
- Peraturan Pemerintah Republik Indonesia No 07 Tahun 1999 *Tentang Pengawetan jenis Tumbuhan dan Satwa*.
- Peraturan Pemerintah Republik Indonesia No 08 Tahun 1999 *Pemanfaatan Jenis Tumbuhan dan Satwa Liar*.
- Warren, C. S., Reeve, J. M. and Fess, P. E. (2005) *Accounting*. 21st edn. USA: South-Western, Thomson.
- William P, J. and Singh, J. (2015) 'Accounting for Giraffes at a For-Profit Zoo - A Case Study', *International Journal of Accounting and Financial Reporting*, 5(1), pp. 99–108. doi: 10.5296/ijafr.v5i1.6961.