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# Article

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# **Sustainability Report Practices in Indonesia: Context, Policy, and Readability**

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#### ABSTRACT

Considering sustainability disclosure become one important issue, while still there no universal agreement for the guidance, this study aims to examine Indonesia's Sustainability Disclosure trend using GRI as quantity dimension, KLD for the quality, and readability and PROPER to measure how well they communicate. This study uses a sample of 224 firm-year observation from 2013 to 2017 based on GRI database. Descriptive analytic employed to figure disclosure trend in general, year to year, and industry base, and Pearson to explain correlation between measurements. There are three important issue discovered in this research. First, Indonesia's sustainability disclosure is generally low but mixed among different proxies by the year, and SIC 2 as the best quantity disclosure and SIC 4 provides readable report. Second, we found a significant positive correlation between quantity and quality sustainability disclosure. Third, the result reveals an indication that PROPER award rely on corporate's environmental risk disclosure. This study limited to public company that issue Sustainability Disclosure hence sample relatively small. This research provides insight for firms to improve quantity and quality of firm's Sustainability Disclosure as development of trends is not optimized.

**Keywords:** Sustainability Report, Corporate Social Responsibility, Indonesia **JEL Classifications:** Q51, Q56

# **1. INTRODUCTION**

Since 2015, United Nation revamps the Millennium Development Goals (MDGs) into Sustainable Development Goals (SDGs), a closer analogue to international human rights and environmental agreements than their predecessors. Sustainability is about rational use of natural resources, in line with the principles of eco-efficiency, equity and social justice, (Martins et al., 2019) rather than only "going green."

It's no surprise that many large multinational corporations are paying increased attention to sustainability-oriented innovation. Faced with mounting challenges and pressure from stakeholders, company are searching for ways to do things differently while also seeking opportunities for growth (Bocken et al., 2014). As sustainability become one important issue for corporate to consider, sustainability disclosure become tricky as no universal agreement on how sustainability should be disclosed. Extant sustainability reporting literature has researched who is reporting, what is reported, and how much is reported (Meng et al., 2014; Radu and Francoeur, 2017; Sriyani et al., 2016; Tian et al., 2016). Recognizing the fact that robust, reliable, and replicable sustainability quality assessment is problematic lot (Lo et al., 2017; Mattingly and Berman, 2006), this research aims to investigate on how sustainability disclosure trends in Indonesia using measures that used in prior corporate sustainability disclosure studies.

Based on our empirical results, Indonesia's quality disclosure increase year to year but still in minimum range. Using Pearson correlation, we found a significant positive correlation between

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quantity and quality sustainability disclosure, and PROPER award may rely on environmental risk disclosure.

Consequently, this paper makes several contributions to the sustainability disclosure quality literature. First it provides trend analysis on how Sustainability Disclosure on Indonesian listed firms, which it shows mixed trends among different proxies. Second for firms, it can be used as fundamental for Sustainability Disclosure firm's policy. It provides insight for firms to improve quantity and quality of firm's Sustainability Disclosure as development of trends is not optimized.

# **2. LITERATURE REVIEW**

In 2018 conceptual framework that devised by International Accounting Standards Board (IASB) states it contributes to IASB mission which is "develop standards that bring transparency, accountability and efficiency to financial markets around the world." Sustainability disclosure also part of corporate disclosure that shares same objective, to provide information to stakeholders. As sharing similar traits, sustainability disclosure shares same challenges which are its complex concept and has a multi-standard and subjective nature (Meng et al., 2014; Sriyani et al., 2016). Some literatures tend to focus on one dimension of disclosure quality (e.g., quantity, timeframe, readability) to provide rich understanding of reporting and disclosure quality.

#### 2.1. Global Reporting Initiatives (GRI)

The Global Reporting Initiatives (GRI) shows a trade off with respect to ecological issues(Marimon et al., 2012). This study used GRI standard because is the most widely used for standard sustainability reporting according to a number of researcher (Skouloudis et al., 2009) and provide a harmonized, standardized, understandable, and objective report for all firms worldwide. We use GRI 4 to measure disclosure context of the firm.

### 2.2. Readability Index

The more comprehensive annual report, as indicated by Loughran and McDonald (2016), the most its influence wrong decision making by users. It may change users' perceptions and predictions about future corporation performance because of textual risk disclosure. Numerous study about correlation between readability index and performance has been conducted (Lo et al., 2017; Loughran and McDonald, 2016), but limited to sustainability report, so we consider to measure sustainability disclosure by readability index.

# **2.3.** Kinder, Lydenberg, Domini Research and Analytics (KLD)

Kinder, Lyndenberg, Domini (KLD) provide a set of environmental rank for corporation which divided by environmental strength and concern indicator (Mattingly and Berman, 2006). Environmental strength indicate the goodness of corporate environmental action, while environmental concern focus on disclosure of environmental risk caused by the firm. Refers to prior studies KLD, we measurement by dummy (Fernando et al., 2017; Lo et al., 2017).

#### 2.4. PROPER Award

Since 2002, The Indonesia's Ministry of Environment has been conducted The Program for Pollution Control, Evaluation, and Rating (PROPER) to encourage firm implementation environment act, regulation compliance, and observe firm environmental performance. The Ministry of Environment regulation No 6/2013 rates corporate's environmental performance on the following colors from the best to the worst respectively; gold, green, blue, red, and black. This rate depends on corporate compliance on water, air, B3 waste, AMDAL, and ocean contamination control regulation which closely related to sustainability disclosure. This study used PROPER disclosure because mostly sustainability disclosure depends on their environmental performance (Kumar, 2017)

# **3. METHODOLOGY**

#### 3.1. Sample

We initially obtained from the Sustainability Disclosure Database a sample of 244 Indonesia's firm-year observations over period 2013-2017 from GRI database. In context of this research, we exclude (1) firms that not listed on the Indonesia Stock Exchange; (2) firms that do not issue a sustainability report; (3). The final sample consists of 110 firm-year observation with 33 firms.

#### **3.2. Data Collection**

We choose content analysis, a methodology widely adopted in Corporate Social Responsibility disclosure literature (Beck et al., 2010; Meng et al., 2014; Michelon et al., 2015), to assess the quality sustainability disclosure. Specifically, for PROPER, we are confirming each of our sample to list of award that published by official website of Ministry of Environment. Our Cronbach's Alpha test of our four measurement shows 71.06% percent, which is above the appropriate minimum acceptable level of 70% (Kalu et al., 2016), it provide that our internal consistency measurement of sustainability disclosure is reliable.

# **4. RESULTS AND DISCUSSION**

### 4.1. An Overview of the Sustainability Disclosure Measurement Methods

Table 1 figures that in overall Indonesia has low Corporate Social Responsibility Disclosure (CSRD) either from GRI, Readability, KLD, and PROPER. We acknowledged that in terms of quantity (GRI) has mean value closer toward minimum value rather than maximum value. For communication quality (Readability) shows also inadequate quality as the mean has closer toward maximum

#### Table 1: Descriptive statistic

|        | Mean   | Median | Minimum | Maximum | Standard  |
|--------|--------|--------|---------|---------|-----------|
|        |        |        |         |         | deviation |
| GRI    | 0.401  | 0.357  | 0.099   | 0.956   | 0.204     |
| FKGL   | 23.364 | 23.303 | 27.295  | 18.727  | 1.622     |
| FKRI   | 34.916 | 34.071 | 48.385  | 15.536  | 5.903     |
| GFRI   | 27.433 | 27.372 | 31.773  | 21.798  | 1.748     |
| SMOG   | 21.107 | 21.174 | 24.983  | 14.681  | 1.767     |
| CLRI   | 23.996 | 23.898 | 29.531  | 19.869  | 1.216     |
| KLD S  | 0.468  | 0.485  | 0.030   | 0.758   | 0.169     |
| KLD_C  | 0.487  | 0.400  | 0.800   | 0.200   | 0.164     |
| PROPER | 3.450  | 3.000  | 2.000   | 5.000   | 0.778     |

| Table 2: Descriptive statistic sustainability disclosure in Indonesia 2013-2 | <b>Sable 2: Descripti</b> | ve statistic susta | inability disclosu | ire in Indonesia | 2013-201 |
|--|---------------------------|--------------------|--------------------|------------------|----------|
|--|---------------------------|--------------------|--------------------|------------------|----------|

| Panel A: CSRD by SIC and year       |              |               |                               |         |                    |  |  |  |
|-------------------------------------|--------------|---------------|-------------------------------|---------|--------------------|--|--|--|
| <b>Observation year</b>             | Mean         | Median        | Minimum                       | Maximum | Standard deviation |  |  |  |
| Year 2013 (22)                      | 0.480        | 0.473         | 0.220                         | 0.857   | 0.206              |  |  |  |
| Year 2014 (29)                      | 0.402        | 0.385         | 0.110                         | 0.835   | 0.172              |  |  |  |
| Year 2015 (29)                      | 0.422        | 0.352         | 0.099                         | 0.956   | 0.229              |  |  |  |
| Year 2016 (25)                      | 0.329        | 0.275         | 0.099                         | 0.703   | 0.187              |  |  |  |
| Year 2017 (5)                       | 0.301        | 0.231         | 0.099                         | 0.670   | 0.218              |  |  |  |
|                                     |              | Panel B: FK   | GL by SIC and year            |         |                    |  |  |  |
| Observation year                    | Mean         | Median        | Minimum                       | Maximum | Standard deviation |  |  |  |
| Year 2013 (22)                      | 23.319       | 23.378        | 27.295                        | 20.937  | 1.551              |  |  |  |
| Year 2014 (29)                      | 23.098       | 23.066        | 26.974                        | 18.727  | 1.847              |  |  |  |
| Year 2015 (29)                      | 23.520       | 23.428        | 26.263                        | 21.301  | 1.402              |  |  |  |
| Year 2010 (25)<br>Vear $2017 (5)$   | 23.370       | 23.204        | 20.492                        | 20.049  | 1.602              |  |  |  |
| real 2017 (5)                       | 24.131       | 23.039        | 27.010                        | 21.233  | 2.132              |  |  |  |
|                                     |              | Panel C: FK   | RI by SIC and year            |         |                    |  |  |  |
| Observation year                    | Mean         | Median        | Minimum                       | Maximum | Standard deviation |  |  |  |
| Year $2013(22)$                     | 35.121       | 34.631        | 48.195                        | 25.297  | 5.337              |  |  |  |
| Year 2014 (29)<br>Vear 2015 (20)    | 34.178       | 34.105        | 48.1/3                        | 15.536  | 6./39<br>5.156     |  |  |  |
| Vear $2015(29)$                     | 34.009       | 34.124        | 44.000                        | 24.000  | 5.150              |  |  |  |
| Vear $2010(23)$                     | 37 192       | 33.065        | 46.585                        | 20.265  | 7.924              |  |  |  |
| 10ai 2017 (5)                       | 37.192       | Denal D. CE   | 40.904                        | 28.800  | 7.924              |  |  |  |
| Observation year                    | Maan         | Panel D: GF   | KI by SIC and year<br>Minimum | Marimum | Standard deviation |  |  |  |
| Voor 2012 (22)                      | <b>Niean</b> | viedian       | 20.941                        |         | Standard deviation |  |  |  |
| Vear $2015(22)$                     | 27.455       | 27.732        | 30.841                        | 24.142  | 1.014              |  |  |  |
| Vear 2015 (29)                      | 27.150       | 27.347        | 30.176                        | 25.042  | 1 499              |  |  |  |
| Year 2016 $(25)$                    | 27.481       | 27.372        | 31.565                        | 24.560  | 1.819              |  |  |  |
| Year $2017(5)$                      | 28.394       | 27.679        | 31.773                        | 25.503  | 2.473              |  |  |  |
| Panel F: SMOC by SIC and year       |              |               |                               |         |                    |  |  |  |
| Observation year                    | Mean         | Median        | Minimum                       | Maximum | Standard deviation |  |  |  |
| Year 2013 (22)                      | 21.060       | 21 273        | 24 528                        | 18 554  | 1 611              |  |  |  |
| Year 2014 (29)                      | 20.749       | 21.143        | 24.697                        | 14.681  | 2.210              |  |  |  |
| Year 2015 (29)                      | 21.326       | 21.363        | 24.058                        | 19.004  | 1.401              |  |  |  |
| Year 2016 (25)                      | 21.129       | 21.087        | 24.607                        | 18.196  | 1.651              |  |  |  |
| Year 2017 (5)                       | 22.006       | 21.654        | 24.983                        | 18.915  | 2.218              |  |  |  |
|                                     |              | Panel F: CL   | RI by SIC and year            |         |                    |  |  |  |
| <b>Observation vear</b>             | Mean         | Median        | Minimum                       | Maximum | Standard deviation |  |  |  |
| Year 2013 (22)                      | 23.943       | 23.961        | 27.092                        | 22.065  | 1.081              |  |  |  |
| Year 2014 (29)                      | 24.333       | 24.092        | 29.531                        | 21.691  | 1.615              |  |  |  |
| Year 2015 (29)                      | 23.613       | 23.769        | 26.373                        | 19.869  | 1.096              |  |  |  |
| Year 2016 (25)                      | 24.086       | 24.041        | 26.107                        | 22.506  | 0.883              |  |  |  |
| Year 2017 (5)                       | 24.035       | 23.693        | 25.213                        | 23.175  | 0.939              |  |  |  |
|                                     |              | Panel G: KLI  | <b>D_S by SIC and year</b>    |         |                    |  |  |  |
| <b>Observation year</b>             | Mean         | Median        | Minimum                       | Maximum | Standard deviation |  |  |  |
| Year 2013 (22)                      | 0.424        | 0.409         | 0.030                         | 0.758   | 0.185              |  |  |  |
| Year 2014 (29)                      | 0.459        | 0.424         | 0.121                         | 0.758   | 0.162              |  |  |  |
| Year 2015 (29)                      | 0.488        | 0.485         | 0.182                         | 0.758   | 0.157              |  |  |  |
| Year 2016 (25)                      | 0.487        | 0.515         | 0.152                         | 0.758   | 0.173              |  |  |  |
| Year 2017 (5)                       | 0.509        | 0.576         | 0.152                         | 0.636   | 0.201              |  |  |  |
|                                     |              | Panel H: KLI  | <b>D_C</b> by SIC and year    |         |                    |  |  |  |
| Observation year                    | Mean         | Median        | Minimum                       | Maximum | Standard deviation |  |  |  |
| Year 2013 (22)                      | 0.482        | 0.400         | 0.800                         | 0.400   | 0.118              |  |  |  |
| Year 2014 (29)                      | 0.469        | 0.400         | 0.800                         | 0.200   | 0.171              |  |  |  |
| rear 2015 (29)                      | 0.497        | 0.400         | 0.800                         | 0.200   | 0.166              |  |  |  |
| rear 2010 (25) $V_{200} = 2017 (5)$ | 0.496        | 0.400         | 0.800                         | 0.200   | 0.1/4              |  |  |  |
| 1cal 2017 (3)                       | 0.320        | 0.400         | 0.800                         | 0.200   | 0.208              |  |  |  |
|                                     |              | Panel I: PROI | PER by SIC and year           |         |                    |  |  |  |
| Observation year                    | Mean         | Median        | Minimum                       | Maximum | Standard deviation |  |  |  |
| Year 2013 (15)                      | 3.667        | 3.000         | 2.000                         | 5.000   | 1.047              |  |  |  |
| Year 2014 (22)                      | 3.318        | 3.000         | 2.000                         | 5.000   | 0.716              |  |  |  |

(*Contd...*)

Table 2: (Continued)

| Panel I: PROPER by SIC and year |       |        |         |         |                    |  |  |
|---------------------------------|-------|--------|---------|---------|--------------------|--|--|
| <b>Observation year</b>         | Mean  | Median | Minimum | Maximum | Standard deviation |  |  |
| Year 2015 (21)                  | 3.381 | 3.000  | 2.000   | 5.000   | 0.740              |  |  |
| Year 2016 (19)                  | 3.421 | 3.000  | 3.000   | 5.000   | 0.607              |  |  |
| Year 2017 (3)                   | 4.000 | 4.000  | 3.000   | 5.000   | 1.000              |  |  |

# Table 3: Descriptive statistic based on industry

| Panel A: CSRD by SIC and year |                  |                  |                      |         |                    |  |  |  |  |
|-------------------------------|------------------|------------------|----------------------|---------|--------------------|--|--|--|--|
|                               | Mean             | Median           | Minimum              | Maximum | Standard deviation |  |  |  |  |
| SIC 0 (10)                    | 0.471            | 0.412            | 0.264                | 0.703   | 0.173              |  |  |  |  |
| SIC 1 (35)                    | 0.435            | 0.396            | 0.099                | 0.956   | 0.217              |  |  |  |  |
| SIC 2 (15)                    | 0.516            | 0.418            | 0.110                | 0.835   | 0.278              |  |  |  |  |
| SIC 3 (17)                    | 0.363            | 0.363            | 0.099                | 0.560   | 0.151              |  |  |  |  |
| SIC 4 (20)                    | 0.326            | 0.291            | 0.099                | 0.659   | 0.149              |  |  |  |  |
| SIC 5 (9)                     | 0.359            | 0.352            | 0.209                | 0.571   | 0.113              |  |  |  |  |
| SIC 8 (4)                     | 0.401            | 0.357            | 0.099                | 0.956   | 0.204              |  |  |  |  |
|                               |                  | Panel B:         | FKGL by SIC and year |         |                    |  |  |  |  |
|                               | Mean             | Median           | Minimum              | Maximum | Standard deviation |  |  |  |  |
| SIC 0 (10)                    | 22.987           | 22.522           | 25.323               | 21.468  | 1.618              |  |  |  |  |
| SIC 1 (35)                    | 23.457           | 23.204           | 26.974               | 21.255  | 1.600              |  |  |  |  |
| SIC 2 (15)                    | 23.701           | 23.531           | 27.295               | 21.650  | 1.647              |  |  |  |  |
| SIC 3 (17)                    | 24.041           | 24.118           | 26.368               | 21.598  | 1.1/0              |  |  |  |  |
| SIC 4 (20)                    | 22.519           | 22.846           | 25.599               | 18./2/  | 1./13              |  |  |  |  |
| SIC 5 (9)                     | 23.503           | 23.596           | 27.016               | 21.301  | 1./20              |  |  |  |  |
| SIC 8 (4)                     | 23.364           | 23.303           | 27.295               | 18.727  | 1.622              |  |  |  |  |
|                               |                  | Panel C:         | FKRI by SIC and year |         |                    |  |  |  |  |
|                               | Mean             | Median           | Minimum              | Maximum | Standard deviation |  |  |  |  |
| SIC 0 (10)                    | 34.018           | 31.818           | 44.337               | 27.413  | 6.015              |  |  |  |  |
| SIC 1 (35)                    | 35.444           | 34.252           | 48.385               | 28.062  | 5.576              |  |  |  |  |
| SIC 2 (15)                    | 33.977           | 34.105           | 48.195               | 15.536  | 6.943              |  |  |  |  |
| SIC 3 (17)                    | 37.636           | 37.254           | 44.808               | 28.690  | 5.048              |  |  |  |  |
| SIC 4 (20)                    | 32.430           | 33.118<br>24.124 | 43.570               | 18.727  | 5.890              |  |  |  |  |
| SIC S (9)                     | 33.388           | 34.124           | 40.904               | 29.000  | 5.421              |  |  |  |  |
| SIC 8 (4)                     | 34.916           | 34.071           | 48.385               | 15.536  | 5.903              |  |  |  |  |
| Panel D: GFRI by SIC and year |                  |                  |                      |         |                    |  |  |  |  |
|                               | Mean             | Median           | Minimum              | Maximum | Standard deviation |  |  |  |  |
| SIC 0 (10)                    | 26.857           | 26.179           | 29.949               | 25.032  | 1.750              |  |  |  |  |
| SIC 1 (35)                    | 27.584           | 27.411           | 31.565               | 25.131  | 1.689              |  |  |  |  |
| SIC 2 (15)                    | 27.716           | 27.579           | 30.841               | 25.534  | 1.525              |  |  |  |  |
| SIC 3 (17)                    | 28.261           | 28.103           | 30.804               | 25.854  | 1.390              |  |  |  |  |
| SIC = 4(20)<br>SIC = 5(0)     | 20.434           | 20.313           | 29.707               | 21.798  | 1.802              |  |  |  |  |
| SIC $S(9)$                    | 27.043           | 27.372           | 21.772               | 23.364  | 1.045              |  |  |  |  |
| SIC 8 (4)                     | 27.433           | 21.372           | 51.775               | 21.798  | 1.748              |  |  |  |  |
|                               |                  | Panel E:         | SMOG by SIC and year |         |                    |  |  |  |  |
|                               | Mean             | Median           | Minimum              | Maximum | Standard deviation |  |  |  |  |
| SIC 0 (10)                    | 20.612           | 19.994           | 23.206               | 19.005  | 1.641              |  |  |  |  |
| SIC 1 (35)                    | 21.210           | 21.1/6           | 24.697               | 18./10  | 1.000              |  |  |  |  |
| SIC 2 (15)<br>SIC 2 (17)      | 21.074           | 21.005           | 24.528               | 19.118  | 1.559              |  |  |  |  |
| SIC 3 (17)<br>SIC 4 (20)      | 21.842           | 21.810           | 24.201               | 19.525  | 1.105              |  |  |  |  |
| SIC = 4(20)<br>SIC 5(0)       | 20.000           | 20.055           | 23.203               | 14.001  | 2.175              |  |  |  |  |
| SIC S (J)                     | 21.278           | 21.303           | 24.903               | 14.681  | 1.751              |  |  |  |  |
| 51C 8 (4)                     | 21.107           | 21.1/4           | CLDLL CLC and and    | 14.001  | 1.707              |  |  |  |  |
|                               | Meen             | Panel F:         | CLRI by SIC and year | M       | Standard deviation |  |  |  |  |
| SIC 0 (10)                    | <b>Niean</b>     |                  | 21 015               |         |                    |  |  |  |  |
| SIC U(10)<br>SIC 1(25)        | 23.839<br>23.975 | 24.120           | 24.843               | 22.333  | 0.850              |  |  |  |  |
| SIC 2 (15)                    | 23.675           | 23.007           | 27.092               | 22 461  | 1 1 2 1            |  |  |  |  |
| SIC 3 (17)                    | 24 361           | 23.311           | 26 373               | 21 691  | 1 226              |  |  |  |  |
| SIC = 5(17)<br>SIC 4 (20)     | 24.185           | 23 354           | 29 531               | 22.001  | 1 838              |  |  |  |  |
| SIC 5 (9)                     | 24.053           | 23.891           | 25.213               | 23.046  | 0.682              |  |  |  |  |
| SIC 8 (4)                     | 23.996           | 23.898           | 29.531               | 19.869  | 1.216              |  |  |  |  |

(*Contd...*)

Table 3: (Continued)

| Panel G: KLD_S by SIC and year |       |            |                              |         |                    |  |  |  |  |
|--------------------------------|-------|------------|------------------------------|---------|--------------------|--|--|--|--|
|                                | Mean  | Median     | Minimum                      | Maximum | Standard deviation |  |  |  |  |
| SIC 0 (10)                     | 0.548 | 0.515      | 0.424                        | 0.636   | 0.080              |  |  |  |  |
| SIC 1 (35)                     | 0.520 | 0.545      | 0.030                        | 0.758   | 0.155              |  |  |  |  |
| SIC 2 (15)                     | 0.588 | 0.606      | 0.424                        | 0.697   | 0.091              |  |  |  |  |
| SIC 3 (17)                     | 0.403 | 0.364      | 0.212                        | 0.758   | 0.210              |  |  |  |  |
| SIC 4 (20)                     | 0.388 | 0.409      | 0.152                        | 0.606   | 0.141              |  |  |  |  |
| SIC 5 (9)                      | 0.407 | 0.394      | 0.303                        | 0.576   | 0.095              |  |  |  |  |
| SIC 8 (4)                      | 0.468 | 0.485      | 0.030                        | 0.758   | 0.169              |  |  |  |  |
| Panel H: KLD_C by SIC and year |       |            |                              |         |                    |  |  |  |  |
|                                | Mean  | Median     | Minimum                      | Maximum | Standard deviation |  |  |  |  |
| SIC 0 (10)                     | 0.600 | 0.600      | 0.800                        | 0.400   | 0.189              |  |  |  |  |
| SIC 1 (35)                     | 0.531 | 0.400      | 0.800                        | 0.200   | 0.175              |  |  |  |  |
| SIC 2 (15)                     | 0.573 | 0.600      | 0.800                        | 0.200   | 0.128              |  |  |  |  |
| SIC 3 (17)                     | 0.388 | 0.400      | 0.600                        | 0.200   | 0.165              |  |  |  |  |
| SIC 4 (20)                     | 0.430 | 0.400      | 0.600                        | 0.200   | 0.117              |  |  |  |  |
| SIC 5 (9)                      | 0.400 | 0.400      | 0.400                        | 0.400   | 0.000              |  |  |  |  |
| SIC 8 (4)                      | 0.487 | 0.400      | 0.800                        | 0.200   | 0.164              |  |  |  |  |
|                                |       | Panel I: P | <b>ROPER by SIC and year</b> |         |                    |  |  |  |  |
|                                | Mean  | Median     | Minimum                      | Maximum | Standard deviation |  |  |  |  |
| SIC 0 (10)                     | 3.100 | 3.000      | 2.000                        | 4.000   | 0.568              |  |  |  |  |
| SIC 1 (27)                     | 3.704 | 3.000      | 2.000                        | 5.000   | 0.912              |  |  |  |  |
| SIC 2 (11)                     | 3.455 | 3.000      | 3.000                        | 5.000   | 0.688              |  |  |  |  |
| SIC 3 (17)                     | 3.529 | 3.000      | 2.000                        | 5.000   | 0.874              |  |  |  |  |
| SIC 4 (4)                      | 3.250 | 3.000      | 3.000                        | 4.000   | 0.500              |  |  |  |  |
| SIC 5 (9)                      | 3.000 | 3.000      | 3.000                        | 3.000   | 0.000              |  |  |  |  |
| SIC 8 (2)                      | 3.450 | 3.000      | 2.000                        | 5.000   | 0.778              |  |  |  |  |

#### **Table 4: Pearson correlation**

|        | CSRD           | FKGL          | FKRI          | GFRI        | SMOG    | CLRI    | KLD_S          | KLD_C    | PROPER |
|--------|----------------|---------------|---------------|-------------|---------|---------|----------------|----------|--------|
| CSRD   | 1.000          |               |               |             |         |         |                |          |        |
| FKGL   | -0.024         | 1.000         |               |             |         |         |                |          |        |
|        | (0.805)        |               |               |             |         |         |                |          |        |
| FKRI   | 0.025          | 0.876***      | 1.000         |             |         |         |                |          |        |
|        | (0.792)        | (0.000)       |               |             |         |         |                |          |        |
| GFRI   | -0.037         | 0.965***      | 0.905***      | 1.000       |         |         |                |          |        |
|        | (0.701)        | (0.000)       | (0.000)       |             |         |         |                |          |        |
| SMOG   | -0.056         | $0.970^{***}$ | $0.760^{***}$ | 0.938***    | 1.000   |         |                |          |        |
|        | (0.561)        | (0.000)       | (0.000)       | (0.000)     |         |         |                |          |        |
| CLRI   | -0.021         | 0.071         | 0.376***      | $0.185^{*}$ | -0.076  | 1.000   |                |          |        |
|        | (0.826)        | (0.463)       | (0.000)       | (0.054)     | (0.431) |         |                |          |        |
| KLD_S  | 0.225**        | 0.047         | 0.084         | 0.059       | 0.033   | 0.079   | 1.000          |          |        |
|        | (0.018)        | (0.624)       | (0.383)       | (0.542)     | (0.735) | (0.410) |                |          |        |
| KLD_C  | $-0.401^{***}$ | -0.047        | -0.052        | -0.027      | -0.025  | -0.020  | $-0.440^{***}$ | 1.000    |        |
|        | (0.000)        | (0.624)       | (0.590)       | (0.778)     | (0.793) | (0.833) | (0.000)        |          |        |
| PROPER | 0.065          | -0.020        | -0.141        | -0.092      | -0.006  | -0.097  | 0.165          | -0.228** | 1.000  |
|        | (0.569)        | (0.857)       | (0.213)       | (0.417)     | (0.959) | (0.390) | (0.145)        | (0.042)  |        |

P-values in parentheses, \*P<0.1, \*\*P<0.05, \*\*\*P<0.01

value which means in average Indonesia Sustainability Report not easily to be read for common people. As for qualitative measurement (KLD), even KLD Strengths mean shows closer toward its maximum value but it nets off by KLD Concerns mean that closer also toward its maximum value. Last but not least, effective communication indicator (PROPER) shows that different result with other CSRD measurement. It may be implies Indonesia applies lower standard for CSRD for listed firms.

Second, we divided our main sample according to the year to determined trend of sustainability disclosure. Based on Table 2,

we observe that the average quantity of CSRD according to GRI Index tends to decrease even though increase from 2014 to 2015. Our subsamples on readability index fluctuate from 2013 to 2017, and show sustainability report 2017 as least readable report. But, according to KLD Database Indicator, we found a progressive improvement on firms' environmental performance, either strength or concern, and PROPER Rank continuously raise from 2014 to 2017.

And for the last, we consider that sustainability disclosure may influenced by firm industry, so we divided the sample into seven subsamples based on IDX industry base to Table 3. We exclude SIC 6 because many of prior study didn't employee it and relative risky. In addition, we also exclude SIC 7 because they do not issue sustainability report. SIC 2 disclose much context based on GRI, while SIC 4 provides the least. SIC 4 provides the most readable reports. The best quality disclosure are SIC 2 and SIC 0. All of industry basically have a good average on PROPER, but the highest is owned by SIC 1.

## 4.2. Correlation between Sustainability Disclosure Measurement Methods

Based on Table 4 that provides Pearson correlation result, there are two important issue that we can address related to CSRD issue in Indonesia. First that CSRD measurement based on quantity (GRI) and quality (KLD) has significant relationship. It means that Indonesia's Sustainability Report has similar trends in terms of quantity and quality. Second the conclusion that we can conclude is based on correlation between KLD and PROPER. Uniquely, KLD Strengths has not significant correlation while KLD Concerns has negative significant correlation with PROPER. It indicates on how PROPER awards mostly based on how environmental risk disclosure (KLD Concerns) of firms rather than environmental friendly act disclosure (KLD Strengths).

# **5. CONCLUSION**

Empirical results in this research show that trend Indonesia's sustainability disclosure is generally low. However, if we divided our sample into the year, quality disclosure based on KLD and PROPER increase year to year. SIC 2 do the best disclosure on quantity and quality, but SIC 4 win the communication. Using Pearson correlation, we prove a significant positive correlation between quantity and quality sustainability disclosure, and PROPER award may rely on environmental risk disclosure. We acknowledge some limitation in this research, i.e. limited content analysis in KLD measurement, a relatively small sample, and limited to public companies issuing Sustainability Report.

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