

Sta. Romana, Leonardo L.

Preprint

Measuring the impact of business: Sustainability Reporting by Corporations in Emerging Asia

Suggested Citation: Sta. Romana, Leonardo L. (2018) : Measuring the impact of business: Sustainability Reporting by Corporations in Emerging Asia, ZBW – Leibniz Information Centre for Economics, Kiel, Hamburg

This Version is available at:

<https://hdl.handle.net/10419/179675>

Standard-Nutzungsbedingungen:

Die Dokumente auf EconStor dürfen zu eigenen wissenschaftlichen Zwecken und zum Privatgebrauch gespeichert und kopiert werden.

Sie dürfen die Dokumente nicht für öffentliche oder kommerzielle Zwecke vervielfältigen, öffentlich ausstellen, öffentlich zugänglich machen, vertreiben oder anderweitig nutzen.

Sofern die Verfasser die Dokumente unter Open-Content-Lizenzen (insbesondere CC-Lizenzen) zur Verfügung gestellt haben sollten, gelten abweichend von diesen Nutzungsbedingungen die in der dort genannten Lizenz gewährten Nutzungsrechte.

Terms of use:

Documents in EconStor may be saved and copied for your personal and scholarly purposes.

You are not to copy documents for public or commercial purposes, to exhibit the documents publicly, to make them publicly available on the internet, or to distribute or otherwise use the documents in public.

If the documents have been made available under an Open Content Licence (especially Creative Commons Licences), you may exercise further usage rights as specified in the indicated licence.

**Measuring the impact of business:
Sustainability Reporting by Corporations in Emerging Asia**

Author: STA. ROMANA, Leonardo L.

Associate Editor,
Encyclopedia of the UN Sustainable Development Goals
(Springer Reference, in progress); and
Senior Economic Consultant, Metro Manila

leonardo_staromana [at] post.harvard.edu
llstaromana [at] yahoo.com

Date: 16 April 2018

Note: This working paper is circulated for discussion and comment purposes.

This paper was written in response to a call for papers on “Measuring the Impact of Business on Well-being and Sustainability” by the OECD Better Life Initiative and HEC Paris Business School/SnO (Society and Organizations) Center. An abstract, on which this paper is based, went through the evaluation process of an OECD and HEC Paris/SnO Center selection committee.

**Measuring the impact of business:
Sustainability Reporting by Corporations in Emerging Asia**

Author:
STA. ROMANA, Leonardo L.

Full Paper Submitted
for the
Call for Papers on
“Measuring the Impact of Business on Well-being and Sustainability”
by the
OECD Better Life Initiative and
HEC Paris Business School/SnO (Society and Organizations) Center

Theme addressed by the paper:
“Mapping with the SDGs”

Date: 16 April 2018

ABSTRACT

This study addresses the issue of sustainability reporting by corporations, and the framework(s) and guidelines used in the preparation of those annual reports.

It takes as its starting point the UN Sustainable Development Goal 12: “Ensure sustainable consumption and production patterns”, with its Target 12.6: “Encourage companies, especially large and transnational companies, to adopt sustainable practices and to integrate sustainability information into their reporting cycle”. And it is the Indicator 12.6.1: “Number of companies publishing sustainability reports” that provides the inspiration for the idea for doing this study.

The study provides, firstly, a brief background on the group responsible for the sustainability reporting framework widely used by companies, the Global Reporting Initiative (GRI). This is followed with another short background on a second, though newer, group with another framework, the International Integrated Reporting Council (IIRC).

The study presents - to the best of the author's knowledge - the first comparative study of corporate sustainability reports (and the frameworks used) across ten Emerging Asian economies.

It proceeds to this core empirical contribution of the paper by explaining the process how the corporations in Emerging Asia were selected for inclusion in the study. It notes that the companies and the economies of origin were not picked directly for inclusion.

The first step was to find reputable corporate sustainability rankings and ratings. Seven information sources yielded a list of 150 companies from ten Emerging Asian economies. These economies are: China, Hong Kong, India, South Korea, Taiwan, Thailand, Indonesia, Malaysia, Philippines and Singapore.

It then presents the findings from a survey of the sustainability reports of the 150 corporations. Across the entire sample, almost 90 percent cite the use of the GRI guidelines. In three economies with more than just a handful of companies in the sample -- South Korea, Taiwan and Thailand -- all of their companies cite the GRI framework. However, the picture is not as one-sided in India, where less than half cite the GRI.

1, Introduction

What is the impact of the business sector on society's well-being and sustainability? The conventional wisdom is that the business community has a significant impact, for example, in terms of the jobs it provides and the goods and services it produces for the consuming public. On the other hand, some companies may cause pollution in the air and waters in nearby rivers as a result of their production activities, thereby affecting the community in an adverse way (the so-called negative spill-overs or externalities).

The question of policy interest then is: how can we measure the impact of business on well-being and sustainability, and thereby monitor its various impacts periodically? Or, from the viewpoint of a business enterprise, how does it measure, monitor and report on its impacts on the community and society, the economy, as well as the environment?

Among the 17 UN Sustainable Development Goals (SDGs) for 2030 is SDG 12 -- "Ensure sustainable consumption and production patterns". One of SDG 12's set of corresponding Targets is Target 12.6 -- "Encourage companies, especially large and transnational companies, to adopt sustainable practices and to integrate sustainability information into their reporting cycle".

Target 12.6 has a corresponding Indicator 12.6.1: "Number of companies publishing sustainability reports" (UN, 2015). This SDG Indicator 12.6.1 (of the Target 12.6 for the Goal 12) provides the inspiration for the idea of undertaking this study.

With a focus on developing economies from the outset, the author has looked for something other than the anecdotal evidence he has come across regarding corporate sustainability reporting in those economies. There are several that focus on a single country, but to the best of his knowledge, there has been no study that spans across a number of countries in Emerging Asia. It is toward filling this gap in the literature that this paper intends to contribute.

This paper is organized in the following manner. Section 2 gives a brief background on what is generally considered the group responsible for the sustainability reporting framework widely used by companies, the Global Reporting Initiative. This is followed in Section 3 with another short background on a second, though newer, group with another framework, the International Integrated Reporting Council. The next segment, Section 4, explains this study's methodology on how the corporations and their sustainability reports were selected, and presents the results. Then, Section 5 concludes with some remarks about the alphabet soup of acronyms gleaned from the perusal of the sustainability reports.

2. Global Reporting Initiative ¹

The Global Reporting Initiative (GRI) has its roots in Boston in 1997 as a project of the coalition of US non-profit groups, CERES (formerly known as the Coalition for Environmentally Responsible Economies), in collaboration with another non-profit group, the Tellus Institute.

The goal of CERES and the Tellus Institute was for GRI to develop and disseminate a standardised framework for environmental reporting. The framework would be an accountability mechanism to ensure companies were following the CERES Principles for responsible environmental conduct.

The United Nations Environment Programme (UNEP) joined GRI shortly after as a partner. In 1998, a steering committee was formed to guide the initiative. And a pivotal decision was reached to

“do more than the environment”, thus broadening its intended framework’s scope to include social, economic and governance issues.

In 2001, upon the advice of the steering committee, CERES turned GRI into a separate, non-profit organisation. And in 2002, GRI relocated from the US to Europe, i.e., to Amsterdam, the Dutch capital.

To GRI’s credit, its pioneering actions in the field of sustainability reporting have led to its framework’s widespread adoption by companies in need of reporting guidelines. The first version of its guidelines came out in 2000, followed by the second, or G2, in 2002, then G3 in 2006. Its current version, G4, was released in 2013.

3. International Integrated Reporting Council ²

The International Integrated Reporting Council (IIRC) is a worldwide coalition of regulators, investors, companies, standard-setters, accounting professionals and civil society organisations. HRH The Prince of Wales launched the initiative in 2010 through The Prince’s Accounting for Sustainability Project (A4S), which also acted initially as its secretariat.

Formed as a Committee to begin with, it then officially became a Council in 2011 and became an independent body. Their purpose is to evolve a framework for a process that results in communications within an organisation, as well by an organisation to stakeholders outside, about “value creation” over time. IIRC views value creation as the next step in corporate reporting.

After initiating an extensive consultation process, IIRC published the first version of its “International Integrated Reporting <IR> Framework” in December 2013.

A fundamental concept of the IR framework are the six types of capital that an organisation works with to create value. Aside from the traditional financial capital and manufactured capital, it also brings into the narrative human capital, intellectual capital, natural capital, and social/relationship capital.

4. The Selection Process for the Sample of Companies

The first major task for the author was to decide whose corporate sustainability reports in Emerging Asia would be looked into. In this section, we explain the process how the corporations were selected for inclusion in this study.

It needs to be emphasised that the countries and companies were not selected directly by the author for inclusion in the sample for this research. Rather, a two-step selection process was involved. Since time constraints, among others, ruled out an attempt to come up with a random sample of large companies, the next-best practicable option was to come up with a list of leading companies in the environmental, social and governance (ESG) practices, or corporate social responsibility (CSR).

For the first step, we searched for reputable rankings and ratings of corporations in Emerging Asia in terms of sustainability, ESG or CSR. From these rankings, we then derived our list of companies and the countries in which they were based. For the benefit of researchers who may wish to replicate our sample of companies, these are the procedures we used and the sources of the corporate information.

We extracted the names of the corporations from the following seven sources, going step-by-step from the first data source and then proceeding until the last source in that order, as follows:

- 1) Top 100 Companies – Channel NewsAsia Sustainability Ranking 2016 (with Sustainalytics);
- 2) Top 3 Companies in each country (that are not in Top 100) – Channel NewsAsia Sustainability Ranking 2016 (with Sustainalytics);
- 3) Constituent Firms - Dow Jones Sustainability Emerging Markets Index, with RobecoSAM, as of 18 September 2017;
- 4) Top 10 Constituents - MSCI Emerging Markets ESG Leaders Index, as of 28 February 2018;
- 5) Top 10 Constituents - MSCI Emerging Markets ESG Universal Index, as of 28 February 2018;
- 6) Constituent Firms - Dow Jones Sustainability Asia Pacific Index, with RobecoSAM, as of 18 September 2017; and
- 7) Constituent Firms - UN Global Compact 100 Index (with Sustainalytics), May 2016.

It should be noted that each of the above sources, though indicating different dates, are the latest data available.

We present in Table 1 the summary statistics of our sample of companies across the ten Emerging Asian economies, and the economies are arranged in alphabetical order, with the group of economies with more than ten companies placed ahead of the remaining group with less than ten companies. The complete list of 150 corporations, with their respective information compiled, are in Table 2 (placed at the end of the main text due to its length).³

TABLE 1
SUMMARY STATISTICS:
NUMBER OF COMPANIES AND THEIR SELECTED FRAMEWORKS

COUNTRIES	NUMBER OF COMPANIES	FRAMEWORK CITED:		
		GRI	IIRC	OTHER
CHINA	12	10	0	7
HONG KONG	12	8	4	4
INDIA	23	11	3	9
SOUTH KOREA	42	42	15	1
TAIWAN	28	28	6	0
THAILAND	18	18	5	0
INDONESIA	3	3	0	0
MALAYSIA	4	4	1	0
PHILIPPINES	3	3	2	0
SINGAPORE	5	5	2	0
Total	150	132	38	21

Source: Derived from Table 2 of this study.

The economy with the most number of companies in our sample is South Korea (42), followed by Taiwan (28), and India (23).

Before turning our attention to the sustainability reporting framework used by the corporations, it bears noting that this information comes from the “About This Report” section of their reports. The

author simply took at face value the framework(s) that the corporation claims to have referenced in the preparation of the sustainability report.

Firstly, across the entire sample, almost 90 percent (132 out of 150) of the companies cite the GRI guidelines. On the other hand, 25 percent of the companies (38 out of 150) cite the IR framework of the IIRC. Since it was not uncommon for a company to cite more than one framework, the total will add up to more than 100.

It is also of interest to look at the economies with more than just a handful of companies in the sample. One notes that in three economies - South Korea, Taiwan and Thailand - all of the companies in each of them cite the use of the GRI framework. However, the picture is not as one-sided in India, where less than half cite the GRI (48 percent, or 11 out of 23).

In general, our findings confirm the first-mover advantage that GRI has, by virtue of being the pioneer in corporate sustainability reporting.

5. Concluding Remarks: An Alphabet Soup of Acronyms – CSR, ESG, et. al.

In the course of perusing 150 corporate sustainability reports, variously titled as corporate social responsibility (CSR), environmental, social and governance (ESG), or sustainable development (SD) reports, with their economic, social and environmental (ESE) indicators, two questions came to the fore.

One, what issue or concern should the corporates be properly addressing with their sustainability reports? And two, a related question, what is the UN SDG Target 12.6 and Indicator 12.6.1 referring to with the phrases “adopt sustainability practices. . . integrate sustainability information. . . and publish sustainability reports”?

In short, is environmental sustainability the bull’s eye of the target, so to speak? In this final section of this paper, we lay out briefly the pros and cons of the debate.

There is no doubt that environmental sustainability has risen as a high-priority concern for society, as awareness grows regarding the degradation of the environment that accompanies the prevailing consumption and production practices. So, indeed, corporates will need to measure, monitor, and report on their impact on the environment, unlike in the business-as-usual modus operandi of the past and present.

On the other hand, the goal of sustainable development refers, to be sure, to environmental protection and environmental sustainability. However, it also encompasses two other aspects, namely, growth and progress in the economy, as well inclusion for everyone in society.

We conclude on that note -- knowing that the debate will continue -- and, to return to the topic of this study, the answer to the two questions above has “materiality” (to use a jargon in the sustainability reporting literature) and relevance, not only to those in need of Guidelines (the corporates), but also to the drafters of those Guidelines.

TABLE 2 – Page 1 of 4
COMPANIES AND THEIR SUSTAINABILITY REPORTS

COMPANIES	FRAMEWORK CITED: GRI IIRC OTHER		REPORT TYPE	YEAR	SAMPLE SOURCE
CHINA					
Lenovo Group Ltd	Y	Reg	Sustainability (SR)	FY 2017	1
Shui On Land Ltd		Reg	Annual (AR)	CY 2015	2
Trina Solar Ltd	Y		Corp Soc Resp(CSR)	CY 2016	2
China Oilfield Svcs Ltd	Y		SR chap in AR	CY 2016	2
China Everbright Intl	Y		SR	CY 2016	3
China Overseas Land	Y	Reg	CSR	CY 2016	3
China Mobile Ltd	Y		SR	CY 2017	3
Tencent Holdings Ltd		Reg	AR	CY 2015	4
Ping An Insuranc Hldg	Y		SR	CY 2016	4
ICBC Holdings	Y	Reg	CSR	CY 2016	5
Bank of China Hldg	Y	Reg	CSR	CY 2015	5
China Vanke Co Ltd	Y	Reg	CSR	CY 2016	7
HONG KONG					
Swire Properties Ltd	Y	Y	Sustainable Devt	CY 2016	1
CLP Holdings Ltd	Y	Y	SR, separate IR	CY 2017	1
Great Eagle Holdings		Reg	SR chap in AR	CY 2017	1
MTR Corp Ltd	Y		SR	CY 2016	1
Li & Fung Ltd		Reg	CSR issues in AR	CY 2016	1
VTech Holdings Ltd	Y		SR	FY 2017	1
Shangri-La Asia Ltd		Reg	CSR chap in AR	CY 2016	6
HK Exchanges & Clear	Y		CSR	CY 2017	6
Hang Lung Properties	Y		SR	CY 2016	6
Link REIT	Y	Y	Integrated (IR)	FY 2017	6
Swire Pacific Ltd	Y	Y	Sustainable Devt	CY 2016	6
Power Assets Holdings		Reg	ESG chap in AR	CY 2017	6
INDIA					
Wipro Ltd		Y	AR	FY 2017	1
Infosys Ltd	Y		SR	FY 2017	1
Tech Mahindra Ltd		Reg	AR	FY 2017	1
Tata Consultancy Svcs	Y		SR	FY 2017	1
ACC Limited		Reg	AR	FY 2016	1
Mahindra Lifespace Dv	Y		SR	FY 2016	1
Larsen & Toubro Ltd	Y		SR	FY 2017	1
HCL Technologies Ltd		Reg	AR	FY 2017	1
ABB India Ltd		Reg	AR	FY 2016	1
Tata Chemicals Ltd		Reg	AR	FY 2017	1
Hindustan Unilever Ltd		Reg	AR	FY 2017	1
Mahindra & Mahindra	Y		SR	FY 2017	1
Yes Bank Ltd	Y		SR	FY 2016	1
GlaxoSmithKline India		Reg	AR	FY 2017	1
Hindustan Zinc Ltd	Y		SR	FY 2017	1

TABLE 2 – Page 2 of 4
COMPANIES AND THEIR SUSTAINABILITY REPORTS

COMPANIES	FRAMEWORK CITED: GRI IIRC OTHER	REPORT TYPE	YEAR	SAMPLE SOURCE
Colgate-Palmolive Ind	Reg	AR	FY 2017	1
Tata Motors Ltd	Y	SR	FY 2016	3
Mahindra & Mahin Fin	Y	SR	FY 2017	3
ITC Ltd	Y	SR	FY 2017	3
Tata Steel Ltd	Y	AR	FY 2017	3
Dr Reddy's Laborator	Y	SR	FY 2016	3
HDFC Housing Dv Fin	Reg	Biz Resp (BRR)	FY 2017	4
Reliance Industries	Y	AR	FY 2017	4
SOUTH KOREA				
Hankook Tire Co Ltd	Y	CSR	CY 2016	1
Coway Co. Ltd	Y	SR	CY 2016	1
S-Oil Corp	Y	SR	CY 2016	1
SK Hynix Inc	Y	SR	CY 2016	1
Daewoo Eng Construct	Y	SR	CY 2016	1
Samsung Electronics	Y Y	IR	CY 2016	1
LG Electronics Inc	Y	SR	CY 2016	1
LG Innotek Co Ltd	Y	SR	CY 2016	1
Hyundai Mobis	Y	SR	CY 2016	1
LG Household Health	Y Y	CSR	CY 2016	1
Samsung Electro-Mech	Y	SR	CY 2015	1
Amorepacific Group	Y	SR	CY 2016	1
DGB Financial Group	Y	SR	CY 2016	1
BNK Financial Group	Y	SR	CY 2016	6
Hana Financial Group	Y	SR	CY 2016	6
KB Financial Group	Y	SR	CY 2016	6
Shinhan Financial Grp	Y	CSR	CY 2016	6
Doosan Corp	Y	CSR	CY 2016	6
GS Eng Construction	Y Y	IR	CY 2016	6
Hyundai Eng Construct	Y	SR	CY 2016	6
Samsung C&T Corp	Y Y	IR	CY 2016	6
Samsung Engineering	Y	SR	CY 2016	6
Samsung Heavy Indust	Y Y	IR	CY 2016	6
SK Holdings Co Ltd	Y	SR	CY 2016	6
Kangwon Land Co Ltd	Y Y	IR	CY 2016	6
Mirae Asset Daewoo	Y	SR	CY 2016	6
Samsung Securities Co	Y Y	IR	CY 2016	6
SK Innovation Co Ltd	Y	SR	CY 2016	6
CJ CheilJedang Corp	Y	SR	CY 2016	6
Dongbu Insurance Co	Y Y	IR	CY 2016	6
Samsung Fire&Marine	Y	SR	CY 2015	6
Hyundai Steel Co	Y Y	IR	CY 2016	6
LG Chem Ltd	Y Y	IR	CY 2015	6`
Lotte Chemical Corp	Y	SR	CY 2015	6

TABLE 2 – Page 3 of 4
 COMPANIES AND THEIR SUSTAINABILITY REPORTS

COMPANIES	FRAMEWORK CITED: GRI IIRC OTHER		REPORT TYPE	YEAR	SAMPLE SOURCE
POSCO	Y	Y	IR	CY 2016	6
LG Display Co Ltd	Y	Y	IR	CY 2016	6
Samsung SDI Co Ltd	Y	Y	IR	CY 2016	6
KT Corp KoreaTelcom	Y	Y	IR	CY 2016	6
SK Telecom Co Ltd	Y	Y	IR	CY 2016	6
Hyundai Glovis Co Ltd	Y	Y	IR	CY 2016	6
Korea Electric Power	Y		SR	CY 2016	6
Korea Gas Corp	Y		SR	CY 2016	6
TAIWAN					
Lite-On Technology	Y		CSR	CY 2016	1
Qisda Corp	Y		SR	CY 2016	1
United Microelectronic	Y		CSR	CY 2016	1
Taiwan Semiconductor	Y		CSR	CY 2016	1
Compal Electronics	Y		CSR	CY 2016	1
China Steel Corp	Y		SR	CY 2016	1
Innolux Corp	Y		CSR	CY 2016	1
ASUSTeK Computer	Y		CSR	CY 2016	1
AU Optronics Corp	Y		CSR	CY 2016	1
Acer Inc	Y		CSR	CY 2016	1
MediaTek Inc	Y		CSR	CY 2016	1
Wistron Corp	Y		CSR	CY 2016	1
Chunghwa Telecom	Y	Y	IR	CY 2016	1
Inventec Corp	Y		CSR	CY 2016	1
Pegatron Corp	Y		CSR	CY 2015	1
Compeq Mfg Co	Y		CSR	CY 2016	1
Advanced Semiconduct	Y		SR	CY 2016	1
Macronix Intl Co	Y		CSR	CY 2015	1
Siliconware Precision	Y		CSR	CY 2016	1
CTBC Financial Hldg	Y	Y	CSR	CY 2016	3
E.Sun Financial Hldg	Y	Y	CSR	CY 2016	3
First Financial Hldg	Y		CSR	CY 2016	3
CTCI Corp	Y		CSR	CY 2016	3
Fubon Financial Hldg	Y	Y	CSR	CY 2016	3
Delta Electronics	Y		CSR	CY 2016	3
Far EasTone Telecom	Y	Y	IR	CY 2016	3
Taiwan Mobile Co	Y	Y	IR	CY 2016	3
China Airlines	Y		SR	CY 2016	3
THAILAND					
PTT Global Chemical	Y	Y	IR	CY 2017	1
Siam Cement Public C	Y		SR	CY 2017	1
Thai Oil Public Co	Y	Y	SR	CY 2017	1
IRPC Public Co	Y	Y	IR	CY 2017	1

TABLE 2 – Page 4 of 4
COMPANIES AND THEIR SUSTAINABILITY REPORTS

COMPANIES	FRAMEWORK CITED: GRI IIRC OTHER	REPORT TYPE	YEAR	SAMPLE SOURCE
PTT Public Co	Y Y	SR	CY 2016	1
PTT Exploration Prod	Y Y	SR	CY 2016	1
Kasikorn Bank PCL	Y	SR	CY 2016	3
Minor International	Y	SR	CY 2017	3
Banpu PCL	Y	SR	CY 2016	3
CP ALL PCL	Y	SR	CY 2016	3
Charoen Pokphan Food	Y	SR	CY 2016	3
Thai Beverage PCL	Y	SR	FY 2017	3
Thai Union Group PCL	Y	SR	CY 2016	3
Indorama Ventures	Y	SR	CY 2016	3
Central Pattana PCL	Y	CSR issues in AR	CY 2017	3
Home Product Center	Y	CSR issues in AR	CY 2017	3
True Corp PCL	Y	SR	CY 2016	3
Airports of Thailand	Y	SR	FY 2017	3
INDONESIA				
Unilever Indonesia Tbk	Y	SR	CY '15, '16	1
Indocement Tunggai Pr	Y	SR	CY 2016	2
Vale Indonesia Tbk PT	Y	SR	CY 2016	2
MALAYSIA				
Digi.com Bhd	Y	SR	CY 2016	1
Malayan Banking Bhd	Y	SR	CY 2016	2
Bursa Malaysia Bhd	Y	SR	CY 2017	2
Sime Darby Bhd	Y Y	IR	FY 2017	3
PHILIPPINES				
Ayala Land Inc	Y Y	IR	CY 2016	1
Manila Water Co Inc	Y Y	IR	CY 2016	2
Energy Devt Corp	Y	SR	CY 2016	2
SINGAPORE				
City Developments Ltd	Y Y	IR	CY 2017	1
CapitaLand Ltd	Y Y	SR	CY 2016	1
Sembcorp Industries	Y	ESG chap in AR	CY 2016	2
Keppel Corp Ltd	Y	SR	CY 2016	6
Golden Agri-Resources	Y	SR	CY 2016	6

Sources of data: Corporate sustainability reports, as compiled by the author. “Reg” refers to regulator. For the methodology and information sources on how the companies were selected, please see the text.

ENDNOTES:

1. The background information on GRI draws from the following sources: GRI (2017), van der Molen (2015), and Fogelberg (2017).
2. The background information on IIRC draws from the following sources: IIRC (2014) and IASPlus (2017).
3. The method for selecting the companies used in this study actually yielded 154 corporations. However, despite an extensive search for sustainability reports in English in their respective websites, as well as in the Internet, four companies had to be removed from the sample, two each from Taiwan (Cathay Financial Holding Co Ltd and Inotera Memories Inc) and China (China Construction Bank Holding and Alibaba Group Holding).

REFERENCES

- Channel NewsAsia (2016), Asia's Top 100 Companies – Sustainability Ranking 2016, Singapore, with Sustainalytics, <http://sustainability-ranking.consap.sg/index.html>
- Dow Jones Sustainability Indexes (2017a), Dow Jones Sustainability Asia Pacific Index, with RobecoSam, <http://www.sustainability-indices.com/index-family-overview/djsi-family-overview/index.jsp>
- Dow Jones Sustainability Indexes (2017b), Dow Jones Sustainability Emerging Markets Index, with RobecoSam, <http://www.sustainability-indices.com/index-family-overview/djsi-family-overview/index.jsp>
- Fogelberg, T. (2017), “15 Years before the European Medicine Agency, Amsterdam won the global HQ of GRI and became Europe's corporate sustainability centre”, Sustainability-Reports.com, 30th Nov.
- Global Reporting Initiative [GRI] (2017), “GRI's History”, <https://www.globalreporting.org/information/about-gri/Pages/default.aspx> (accessed 10 April 2018).
- GRI (2016), Sustainability Disclosure Database, <http://database.globalreporting.org/SDG-12-6/>
- IASPlus (2017), “International Integrated Reporting Council”, <https://www.iasplus.com/en/resources/sustainability/iirc>
- International Integrated Reporting Council [IIRC] (2014), “Why? The need for change”, and “International Integrated Reporting <IR> Framework”, <http://integratedreporting.org>
- MSCI Environmental, Social and Governance (ESG) Indexes (2018a), MSCI Emerging Markets ESG Leaders Index (USD), <https://www.msci.com/esg-indexes>
- MSCI ESG Indexes (2018b), MSCI Emerging Markets ESG Universal Index (USD), <https://www.msci.com/esg-indexes>
- Sta. Romana, L. (2017), "Sustainable Consumption and Production in the Philippines", in Schroeder, P. et al. (eds.), *Sustainable Asia: Supporting the Transition to Sustainable Consumption and Production in Asian Developing Countries*, World Scientific Publishing, Singapore.
- United Nations [UN] (2015), “Sustainable Development Goals”, <http://www.un.org/sustainabledevelopment>
- UN Global Compact (2016), UN Global Compact 100 Index (with Sustainalytics) <https://www.sustainalytics.com/global-compact-100/>
- van der Molen, F. (2015), “Behind the 15 years of GRI sustainability reporting”, 2degrees blog, 1st Sep, <https://www.2degreesnetwork.com/groups/2degrees-community/resources/15-years-gri-sustainability-reporting/>