The Country by Country Ranking of Pension Systems in The World-A Multiple Discriminant Analysis Testing of the Data from the Mercer CFA Institute's* Global Pension Index 2021

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Abstract

This study examined the validity of the Mercer Global Pension Index using multiple discriminant analysis. The index data for 43 countries in the Index Report of 2021 was obtained and a ranking score developed. The three predictors; adequacy, sustainability and, integrity were analyzed to determine the extent to which they influence the ranking of the pension systems. The findings confirm that adequacy, sustainability and integrity of the pension system all have a significant influence on the ranking of pension systems in the world as provided in the Mercer Global Pension Index report of 2021.

Keywords: Adequacy, Sustainability, Integrity, Validity

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1. Introduction

The Mercer and CFA Institute developed a ranking criteria that uses a pension rating index calculated at country level using three composite variables of Adequacy; Sustainability and Integrity. According to the Institute, adequacy is determined using the amount of pension benefits, the design of the pension system, the amount of savings, government support for the pension plans, home ownership, the amount of savings as well as the amount of growth assets held by the pension plans. Sustainability of the pension plans depends on pension coverage, the total assets of the plan, demographic profile of members, public expenditure, the amount of government debt and the extent of economic growth. Integrity is operationalized using regulation, governance, protection, communication and operating costs. The overall index is a composite index that uses adequacy, sustainability and integrity predictors as sub-indices.

This study sought to determine if indeed these three predictors have a significant influence on the rating of the pension systems in the world. It addressed itself to the need to assure validity of the ranking criteria used by the Mercer Global Pension Index so that countries can adopt the various recommendations contained in the index reports with a view to improving their pension systems. A Multiple Discriminant Analysis (MDA) technique was used with it very mean specifications to provide a very compelling validity testing of the ranking criteria used by the Mercer Global Institute.

A pension plan is a retirement scheme formed either by the state or private entities for the purpose of pooling contributions from the members and/or sponsors over a period of time in order to secure a retirement benefit to the members. The pension structure differs from country to country but the most fundamental concern is how best it provides financial support to its members upon retirement. The need to evaluate how various countries' pension systems score is important as it highlights the general wellbeing of people in the post-employment phase of their lives. Demographic projections show that the pension costs will increase in the future, which puts pressure on governments' budgets (Roman, Toma & Tuchilus, 2018). Recent macroeconomic and demographic trends have resulted in new challenges for pension systems. One of these challenges is to create a sustainable pension system while simultaneously providing adequate pension benefits for current and future pensioners (Krpan, Pavković & Žmuk, 2019).

The quantum of pension benefits alone cannot be a sufficient indicator for rating pension systems as it's dented by the obvious limitations of absoluteness, given the disparities in per capita incomes as well as the cost of living differentials across countries, all of which have both direct and indirect influence on the

wellbeing of retirees. The need to evaluate pension systems is underscored by the reality of a shifting demographic profile in which aging populations are increasing across many countries (Rosset 2017). The share of individuals aged 65 years and above was projected to increase from 8% of the total world population in 2015 to almost 18% by 2050 and from 16% to 27% in the Organization for Economic Co-operation and Development (OECD) countries (OECD, 2015). The OECD (2015), Pensions at a Glance 2015: OECD and G20 indicators, report show that the future net replacement rates from mandatory schemes for a full-career average-wage worker is an average of 63% in OECD countries, ranging from 27% in Mexico to 105% in Turkey. The imminent challenge of caring for the elderly, is partly addressed if the pension systems perform optimally. There is however no universally agreed upon criteria for appraising the countries on how best they operate their pension systems. The 2021 edition of Pensions at a Glance highlights the pension reforms undertaken by OECD countries over the past two years. The highlights of this report point towards the need for automatic adjustment mechanisms in pension systems in OECD countries, the usefulness and limitations of the attendant policy instruments, and suggestion of ways to improve them in order to enhance the capacity of pension systems to fulfil their objectives (OECD, 2021).

2. Empirical Review

A study by Omotosho (2012) paints a grim picture of suffering among retirees in Nigeria who are unable to promptly access their pension benefits after retirement. The study adopted systematic sampling in which 200 retirees aged between 71 and 80 years were studied to determine their general wellbeing in the post-employment phase of their lives. This is a pointer to a troubled pension system given that the retirement age in Nigeria is 60 years or after 35 years of service whichever comes first. The unfortunate reality, that almost 10 years after retirement, some retirees still experience difficulties in accessing their pension benefits and sadly so from the government, paints a very sorry state of the pension system in Nigeria. In the design of this study, an attempt should have been made to develop a stratification criteria based on the period since retirement before the respondents get access to their benefits. This would help bring to the fore the extent of suffering among the pensioners rather than bundle them in one group yet some retirees would obviously have been in the waiting list for longer periods than others. This is in line with the intragenerational redistributive requirement of good pension systems as a way to guarantee minimum living standards to future low-income retirees (Frassi, Gnecco, Pammolli & Wen, 2019). This is confirmed by the (Klos, Krieger & Stöwhase, 2021) study that ageing societies expect pensions to be both inter-generationally and intra-generationally fair.

The reality of an increasing cost of living in the long-run cannot be overemphasized. This is a universal phenomenon that provides a strong case for the design of pension systems to be very deliberate in embedding cost of living and inflation adjustments through indexation in their benefit schemes. In Tanzania, for example, a study by Nyangarika and Bundala (2020) found that retirees face a lot of problems in their lives since the pension benefits they get do not match the rising cost of living over time. As such, retirees have to lean on their families for support, which confirms that the design of the pension system in Tanzania does not deliver the desired financial independence to the aged. The situation in Tanzania has however been ameliorated by the existence of a social welfare programme run by the government in which the elderly receive monthly allowances. This study did not address the gap in financial independence that retirees have to deal with after factoring in such government funded social welfare programmes. Additionally, the study was agnostic about the economic wellbeing of the retirees in the pre-retirement times which information would have helped in assessing the changes that are attributable to the cessation of earnings from employment.

Kettlewell and Lam (2021) conducted a study on the retirement, social support and mental wellbeing using couple-level data from retirees in Australia and found that those with high social support do experience a small but statistically significant improvement in mental wellbeing post retirement. Their study also found that spill-over benefits from spousal retirement are larger for individuals with low social support.

In most countries, retirement comes with inevitable loss of earnings. This may weigh on the general mental wellbeing of people who are at the cusp of retirement. Topa, Jiménez, Valero and Ovejero (2017) studied how the aged participants' perception of retirement losses and gains explain the mental wellbeing. The study findings suggest that losses better explain wellbeing than gains. This is consistent with the theories that explain human biases like the prospect theory in which value function was found to be concave for losses and convex for gains and is generally steeper for losses than gains (Kahneman & Tversky, 2013). The study recommended that both perceived losses and gains associated with retirement and social support during retirement should be taken into account in addressing post retirement wellbeing.

Aspegren, Durán and Masselink (2019) appraised the pension reforms that were introduced in Sweden in the last 20 years to determine their sustainability and adequacy and found that the reforms had rendered the system fiscally sustainable and politically stable. The study however found that there were concerns on adequacy since the cost of ageing was shifted to the pensioners as a result of reduced annuities arising from expanded life expectancy. They pointed out that substandard pensions may lead to ad hoc interventions that

may go against the aim of automatism embedded in a transparent system. Such interventions, according to this study, may be occasioned by changes of interest rate in the economy which may lead to a revision of the rate of return on the pension fund. The desire for transparency is consistent with the integrity sub-index used in the Mercer Global Pension Index.

Mennis, Banta, and Draine (2018) study on risk of fiscal distress for pensions run by the government in 10 states in the United States showed that poorly funded pension plans face the risk of unfunded liabilities, high costs and in some cases, insolvency. According to this study, the converse was true, that states with well-managed pension systems have achieved such through fiscal discipline and a proactive risk management framework aimed at adjusting the plan investments to accommodate market volatility from time to time. This addresses the sustainability sub-index of the Mercer CFA index that includes government debt as a constituent variable. Fiscal discipline means that a government operates within the resources that it generates with little borrowing. A state that engages in wanton borrowing depletes its capacity to assemble an optimal pension system which directly punctures the wellbeing of the retirees.

A lot of reforms that countries pursue to improve their pension plans are characterized by gradualism due to the relative inflexibility of most plans to structural adjustments. China for instance, has re-designed its pension model to link benefits and contributions. This has however been criticized on account of unnecessary inequalities. To remedy this situation, there has been a call for the promotion of equalization and the de-stratification of the plan (Zhu & Walker, 2018). In line with the integrity sub-index in the Mercer Global Index, Georgia has initiated a reform agenda for its pension system that provides for indexing of accumulated pensions as well as setting up mechanisms for its protection against abuse (Veshapidze & Karalashvili, 2018). Both indexation and protection against abuse address the adequacy and integrity pillars in the Mercer Global Pension Index.

The designers of the pension index are cognizant of the cultural differences of the countries used in the study. This is so because country-specific culture has a bearing on the variables making up the sub-indices used in constructing the main index. Variables such as public expenditure, government debt, regulation and communication all bear the hallmark of a country's culture. Rozo, Huitrón, Steenbeek, and Lecq, (2018) study on national culture and the configuration of public pensions provide empirical evidence about societies with a culture of uncertainty avoidance as being associated with low redistribution. Their finding also showed that individualism and intragenerational redistribution are positively related.

A study by Pak (2020) in Korea faults the use of an all-encompassing objective metrics of wellbeing in assessing the success or failure of the pension system, and in its stead propose that subjective self-reported wellbeing data be used. This provides a strong justification for the quest to validate the Mercer Global Pension Index since the predictors used therein are largely generated at macro-level which is in contrast to the findings in the Korean study.

The Chybalski and Gumola (2018) study brings out a critical convergence with the Mercer Global Index on two variables of adequacy and sustainability. This study analyses 27 European Union (EU) countries after the implementation of the Open Methods of Coordination (OMC) reforms that were aimed at improving the pension systems among the EU member states generally. Specifically, the above study sought to find out whether European pension systems have become more similar, convergent and better in terms of the three main objectives of OMC-adequacy, sustainability and modernization of pension systems. The results show a failure of the EU pension systems to converge and to be better than before the OMC initiatives. Any improvements in OMC performance in the pension systems was found not to be as significant as had been expected. Safe for the last variable on modernization, the criteria used in the above study creates even a stronger compulsion to test the Mercer Index.

Bollacke (2016) used vector similarity to compare pension systems and established that differences in pension systems can be significantly explained by the old-age dependency ratio, the fertility rate, the legal retirement age as well as the public gross debt in percent of the gross domestic product. Three of these variables (old-age dependency ratio, the fertility rate, and public debt) fall within the ambit of the sustainability sub-index used by the Mercer CFA Institute.

Roman, et al (2018) used three economic and social dimensions to compare the efficiency of pension systems in the EU. They used GDP-distribution efficiency, the adequacy efficiency and the labor market efficiency to conduct a cluster analysis of the efficiency of the pension system in 26 EU countries. According to their findings, Hungary, Luxembourg and Romania had the most efficient systems whereas Greece, Portugal and Italy had the worst score. None of these countries were included in the Mercer Global Pension Index except Italy and the ranking for Italy is consistent with the findings in the above study.

Jensen, Lassila, Määttänen, Valkonen, and Westerhout (2020) study on the top three pension systems used data from the 2018 Mercer Global Pension Index to study the differences and similarities in the three top

pension systems in Denmark, Finland and the Netherlands. The findings suggest that there is the collective and compulsory nature of the earnings-related pension schemes and the important role of social partners in decision making as the basis for common success. These systems are however wrought with challenges of legitimacy in decision making processes as well as embedded limitation on individual choices. The 2021 Mercer Global Pension Index has new entrants to the top spot that displaces Finland to the seventh (7th) position in the ranking. The top ten countries with the best pension systems are; Iceland, Netherlands, Denmark, Israel, Norway, Australia, Finland, Sweden, UK and Singapore in that order.

The rank shifting among the various pension systems in the Mercer Global Pension Index stimulates more than ever, the desire to test the index in a bid to empirically ratify the rankings as well as the various recommendations contained in the index reports.

3. Data

The data used in this study was obtained from the Mercer Global Pension Index report for the year 2021 country by country ranking of pension systems and was used without any modification safe for the transformation of the response variable (the index value) from scale variable to categorical variable for analytical compatibility. The need to use the data as-is was necessary to provide a scientific basis for the desired validation as this call would have been undermined if any adjustments were made to the index data.

The explanatory variables according to the index were adequacy, sustainability and integrity. These were captured without any transformation. The response variable was the value of the index itself which was transformed into a categorical variable (see Appendix 2) to facilitate the use of multiple discriminant analysis technique. The transformation of the index value was done by classifying the countries into three categories‡; WORST, FAIR and BEST by grouping the countries using the index value. The “WORST” category comprised countries in the lower quartile and the “BEST” category was made up of countries in the upper quartile of the index values. The rest of the countries belonged to the group designated “FAIR”. This transformation generated data for the 43 countries in three groups of unequal membership with “WORST” and “BEST” accounting for 11 countries each and “FAIR” accounting for the remaining 21 countries.

‡ The division of the grouping variable into three is informed by the huge variability in the value of the index across the 43 countries and the desire to reduce the risk of misclassification in the MDA methodology. In the Mercer CFA Global Pension Index, there is mention of only two categories of best and worst but this study sought to reduce the intra-group heterogeneity instead.

The data alongside the transformation details appear in appendix 1. In constructing the index for 2021, 43 countries were used which represent more than 65% of the world population according to the Mercer Pension Index Report (2021).

4. Methodology

Multiple discriminant analysis technique was used to determine the likelihood of a pension system belonging in each of the three groups of "WORST", "FAIR" and "BEST". The index data was transformed from scale data to categorical (nonmetric) data by assigning the values of the Mercer Global Pension Index to any of the three groups above using notations of "WORST=1", "FAIR=2" and " BEST=3" respectively. The "WORST" and "BEST" groups were generated as the "Lower Quartile" and "Upper Quartile" values respectively with a group membership of "WORST=11", "FAIR=21" and "BEST=11".

The data was tested for the assumptions of MDA which included the assumption of i) multivariate normality; ii) the absence of outliers; iii) the absence of multicollinearity among the predictor variables; iv) the relationship between all the pairs of predictors in each group being linear and v) the homogeneity of variances. Any outliers found in the data were removed as this would have compromised the results of the Box's M test of homogeneity which is very key in the MDA methodology.

5. Empirical Results

The data was tested for the assumption of multivariate normality of all the predictor variables using the Shapiro-Wilk test as shown in Table I below and the results showed that adequacy and sustainability met the requirement whereas integrity failed the test (adequacy, p= .137; sustainability, p= .527 & integrity, p= .021).

Table I: Multivariate Normality Test Results

	Kolmogorov-Smirnova			**Shapiro-Wilk**		
	Statistic	**df**	**Sig.**	**Statistic**	**df**	**Sig.**
Adequacy	.091	43	.200*	.960	43	.137
Sustainability	.079	43	.200*	.977	43	.527
Integrity	.123	43	.101	.937	43	.021

*. This is a lower bound of the true significance.
a. Lilliefors Significance Correction

The test for the absence of outliers was performed and the results showed that two of the three predictors met the requirement but integrity had one outlier observed as seen in figure 1 below for The Philippines pension system§ seen from the point plotted below the bottom whisker of the integrity plot below. This informed the decision to expunge The Philippines pension system (number 29 in the data checklist-Appendix 1) from the analysis in order to secure favourable results for the homogeneity of the variance/covariance matrix.

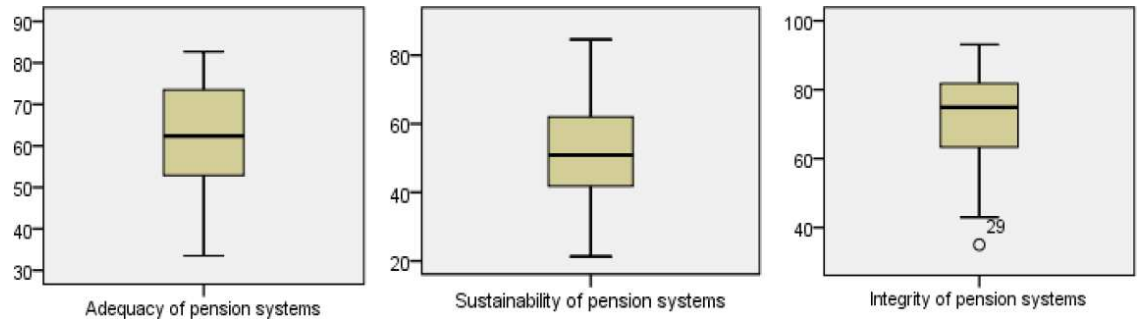

Figure 1: Results for the Outliers Test with All the 43 Pension Systems

After excluding Philippines from the data, a revision of the outlier test showed that all the predictors satisfied the requirement as there were no points plotted above the top whisker or below the bottom whisker.

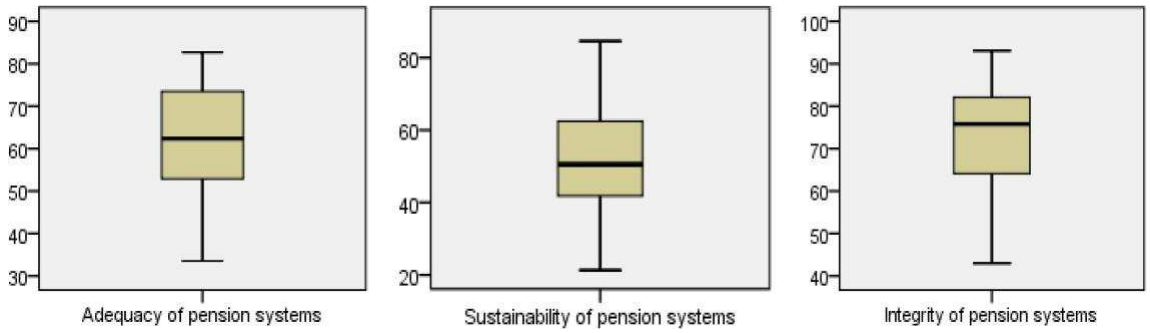

Figure 2: Results for the Outliers Test after Expunging the Philippines Pension System

§ Philippines had an integrity score of only 35.0 in the 2021 pension index which was apparently too low to pass the outlier test to which the MDA methodology is very sensitive. Even though its exclusion did not make the data satisfy the multivariate normality, the methodology is robust enough to give valid results even with this violation.

After removing the outlier (Philippines) from the study, the integrity variable was now able to pass the outlier test as per figure 2 above. It should be noted that the violations to the multivariate normality assumption are not "fatal" and the resultant significance tests are still reliable unless such violations are as a result of outliers.

The assumption of homogeneity of variances was tested and found to be tenable using Box's F (12, 3600.092) = 18.440, p = .191. Table II below shows a high score of homogeneity of variances given that this test uses a very conservative significance level of .01.

Table II: Homogeneity Test Results

Test Results		
Box's M		18.440
F	Approx.	1.336
	df_1	12
	df_2	3600.092
	Sig.	.191

Tests null hypothesis of equal population covariance matrices.

Additionally equality of covariance matrices was upheld as per Table III since the log determinants values of the three groups were close together.

Table III: Homogeneity of Covariance Matrix Test Results

Log Determinants		
Rank of pension systems	**Rank**	**Log Determinant**
WORST	3	13.607
FAIR	3	13.807
BEST	3	10.827
Pooled within-groups	3	13.470

The ranks and natural logarithms of determinants printed are those of the group covariance matrices.

There is statistical significance for all the three variables; Thus, adequacy of pension systems was significant, $F(2, 39) = 28.734$, $p < 0.001$; sustainability of pension systems was significant, $F(2, 39) = 21.352$, $p < 0.001$ and integrity of pension system was significant, $F(2, 39) = 23.006$, $p < 0.001$ as shown in Table IV below.

Table IV: Statistical Significance Test Results

Tests of Equality of Group Means					
	Wilks' Lambda	**F**	**df1**	**df2**	**Sig.**
Adequacy of pension systems	.404	28.734	2	39	.000
Sustainability of pension systems	.477	21.352	2	39	.000
Integrity of pension systems	.459	23.006	2	39	.000

The chance that the MDA model accurately classified the pension systems is found to be very high at 90% for “WORST”, 95.2% for “FAIR” and 100% for “BEST”. Only one pension system has been misclassified for each of the “WORST” and “FAIR” groups but all “BEST” pension systems have been correctly classified. The misclassified pension systems are for Austria (misclassified as “FAIR” yet it’s “WORST”) and Canada (misclassified as “BEST” yet it’s “FAIR”). This is a very high level of reliability of the model since out of 42 pension systems, 40 systems have been correctly classified which is a 95.2% accuracy level as seen in Table V below .

Table V: Results for Classification Accuracy of the MDA Model

		Rank of pension systems	Predicted Group Membership			Total
			WORST	FAIR	BEST	
Original	Count	WORST	9	1	0	10
		FAIR	0	20	1	21
		BEST	0	0	11	11
	%	WORST	**90.0**	10.0	.0	100.0
		FAIR	.0	**95.2**	4.8	100.0
		BEST	.0	.0	**100.0**	100.0
Cross-validated[b]	Count	WORST	9	1	0	10
		FAIR	1	19	1	21
		BEST	0	0	11	11
	%	WORST	90.0	10.0	.0	100.0
		FAIR	4.8	90.5	4.8	100.0
		BEST	.0	.0	100.0	100.0

a. 95.2% of original grouped cases are correctly classified.

b. Cross validation is done only for those cases in the analysis. In cross validation, each case is classified by the functions derived from all cases other than that case.

c. 92.9% of cross-validated grouped cases correctly classified.

The discriminant function is identified as the one with the highest eigenvalues and function 1 is chosen with a canonical correlation of 0.905 in Table VI below. This is squared to obtain an effect size of 82% which is high and therefore very good since it confirms a high magnitude of the effect of adequacy, sustainability and integrity on the pension ranking of the various pension systems.

Table VI: Results for Eigenvalue and the Effect Size

Eigenvalues				
Function	**Eigenvalue**	**% of Variance**	**Cumulative %**	**Canonical Correlation**
1	4.500[a]	96.6	96.6	.905
2	.156[a]	3.4	100.0	.368

a. First 2 canonical discriminant functions were used in the analysis.

From Table VII below, it's evident that Function 1 is significant with a Wilk's Lambda =.157, ($p < 0.001$). This show a very high level of explained variation at .843 since Wilk's Lambda shows the level of unexplained variation.

Table VII: Results for Discriminant Function Significance

Wilks' Lambda				
Test of Function(s)	**Wilks' Lambda**	**Chi-square**	**df**	**Sig.**
1 through 2	.157	70.299	6	.000
2	.865	5.518	2	.063

6. Conclusion

From the results of the multiple discriminant analysis, it's been proven beyond any conceivable measure of doubt that the Mercer Global Pension Index is valid. The data used for the predictors though composite in nature was carefully assembled by the developers of the index and the validity of the index is guaranteed given that multiple discriminant analysis has very mean specifications which could very easily have discounted the significance of the pension index and the rankings thereof if there was a problem with these variables. A global index has rarely been so persuasively validated by an arm's length study premised on the quest for objectivity in empirical work than in the current study. The Mercer Global Pension Index report 2021 evokes policy interests across the world, far away from the immediate domain of the crafters and it's important that reasonable confidence be reposed in it, which this study has unequivocally assured.

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Appendices

Appendix 1: Data without Transformation of the Index Value

Serial No	Country	Overall Index Value	Adequacy	Sustainability	Integrity
1.	Argentina	41.5	52.7	27.7	43.0
2.	Australia	75.0	67.4	75.7	86.3
3.	Austria	53.0	65.3	23.5	74.5
4.	Belgium	64.5	74.9	36.3	87.4
5.	Brazil	54.7	71.2	24.1	71.2
6.	Canada	69.8	69.0	65.7	76.7
7.	Chile	67.0	57.6	68.8	79.3
8.	China	55.1	62.6	43.5	59.4
9.	Colombia	58.4	62.0	46.2	69.8
10.	Denmark	82.0	81.1	83.5	81.4
11.	Finland	73.3	71.4	61.5	93.1
12.	France	60.5	79.1	41.8	56.8
13.	Germany	67.9	79.3	45.4	81.2
14.	Hong Kong	61.8	55.1	51.1	87.7
15.	Iceland	84.2	82.7	84.6	86.0
16.	India	43.3	33.5	41.8	61.0
17.	Indonesia	50.4	44.7	43.6	69.2
18.	Ireland	68.3	78.0	47.4	82.1
19.	Israel	77.1	73.6	76.1	83.9
20.	Italy	53.4	68.2	21.3	74.9
21.	Japan	49.8	52.9	37.5	61.9
22.	Korea	48.3	43.4	52.7	50.0
23.	Malaysia	59.6	50.6	57.5	76.8
24.	Mexico	49.0	47.3	54.7	43.8
25.	Netherlands	83.5	82.3	81.6	87.9

Serial No	Country	Overall Index Value	Adequacy	Sustainability	Integrity
26.	New Zealand	67.4	61.8	62.5	83.2
27.	Norway	75.2	81.2	57.4	90.2
28.	Peru	55.0	58.8	44.2	64.1
29.	**Philippines**	**42.7**	**38.9**	**52.5**	**35.0**
30.	Poland	55.2	60.9	41.3	65.6
31.	Saudi Arabia	58.1	61.7	50.9	62.5
32.	Singapore	70.7	73.5	59.8	81.5
33.	South Africa	53.6	44.3	46.5	78.5
34.	Spain	58.6	72.9	28.1	78.3
35.	Sweden	72.9	67.8	73.7	80.0
36.	Switzerland	70.0	65.4	67.2	81.3
37.	Taiwan	51.8	40.8	51.9	69.3
38.	Thailand	40.6	35.2	40.0	50.0
39.	Turkey	45.8	47.7	28.6	66.7
40.	UAE	59.6	59.7	50.2	72.6
41.	UK	71.6	73.9	59.8	84.4
42.	Uruguay	60.7	62.1	49.2	74.4
43.	U.S.	61.4	60.9	63.6	59.2
	Average	**61.0**	**62.2**	**51.7**	**72.1**

Appendix 2: Data with Index Value Transformed to Categorical Data (the Rank)

Country	Category	Rank	Adequacy	Sustainability	Integrity
Argentina	WORST	1	52.70	27.70	43.00
Austria	WORST	1	65.30	23.50	74.50
India	WORST	1	33.50	41.80	61.00
Indonesia	WORST	1	44.70	43.60	69.20
Japan	WORST	1	52.90	37.50	61.90
Korea	WORST	1	43.40	52.70	50.00
Mexico	WORST	1	47.30	54.70	43.80
Philippines	WORST	1	38.90	52.50	35.00
Taiwan	WORST	1	40.80	51.90	69.30
Thailand	WORST	1	35.20	40.00	50.00
Turkey	WORST	1	47.70	28.60	66.70
Belgium	FAIR	2	74.90	36.30	87.40
Brazil	FAIR	2	71.20	24.10	71.20
Canada	FAIR	2	69.00	65.70	76.70
Chile	FAIR	2	57.60	68.80	79.30
China	FAIR	2	62.60	43.50	59.40
Colombia	FAIR	2	62.00	46.20	69.80
France	FAIR	2	79.10	41.80	56.80
Germany	FAIR	2	79.30	45.40	81.20
Hong Kong	FAIR	2	55.10	51.10	87.70
Ireland	FAIR	2	78.00	47.40	82.10
Italy	FAIR	2	68.20	21.30	74.90
Malaysia	FAIR	2	50.60	57.50	76.80

Country	Category	Rank	Adequacy	Sustainability	Integrity
New Zealand	FAIR	2	61.80	62.50	83.20
Peru	FAIR	2	58.80	44.20	64.10
Poland	FAIR	2	60.90	41.30	65.60
Saudi Arabia	FAIR	2	61.70	50.90	62.50
South Africa	FAIR	2	44.30	46.50	78.50
Spain	FAIR	2	72.90	28.10	78.30
USA	FAIR	2	60.90	63.60	59.20
UAE	FAIR	2	59.70	50.20	72.60
Uruguay	FAIR	2	62.10	49.20	74.40
Australia	BEST	3	67.40	75.70	86.30
Denmark	BEST	3	81.10	83.50	81.40
Finland	BEST	3	71.40	61.50	93.10
Iceland	BEST	3	82.70	84.60	86.00
Israel	BEST	3	73.60	76.10	83.90
Netherlands	BEST	3	82.30	81.60	87.90
Norway	BEST	3	81.20	57.40	90.20
Singapore	BEST	3	73.50	59.80	81.50
Sweden	BEST	3	67.80	73.70	80.00
Switzerland	BEST	3	65.40	67.20	81.30
UK	BEST	3	73.90	59.80	84.40