The Wealth Index In Yemen

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Abstract:

The sample size is 14077 households which has been taken from the HBS 2005-2006. The distribution of the Wealth Index of the Yemeni HBS 2005-2006 households has approximately normal distribution. Since Yemen has not a wealth index, this study aims to establish a Wealth Index and to compare the Wealth Index between areas and governorates. For rural areas, the distribution of the Wealth Index is quite skewed to right, indicating that many households were concentrated on the lower end of the distribution and considered poor. The mean value of the Wealth Index for urban households is 1.21 times than the rural households, indicating that the urban households are 1.21 times wealthier. 12.7% of the HBS households considered poor and 25.8% wealthy. 89.9% of the rural households are poor whereas 90.2% of the urban are rich.

The Wealth Index distributions for Aden, Sana'a City and Hadramout governorates, reveal that the households are more wealthier than others. There are 23.2% of households in Sana'a City, 10.7% of households in Hadramout and 8.5% of households in Aden. Also 18.7% of households in Al-hodeida, 13.1% of households in Hajja, 8.3% of households in Dhamar, 8.0% of households in Ibb, and 7.2% of households in Taiz governorates which were considered poorest. In Shabwah Governorate, 54% of urban and 46% of rural households were considered poorest (the Poorest Quintile).

Introduction:

Measures of socio-economic position are crucial for health research, program targeting, and policy monitoring and evaluation. There are many indicators which reflect the wealth of population. Among of these, Health, Educational, Income, and Expenditure indicators that appear the well-being of economic status of population. The World Bank used the Wealth Index for its policy and program recommendations and has recently produced reports which used the Index for each 52 countries participating in the Demographic and Health Survey (DHS) program [Gwatkin et al, 2007]. The Wealth Index adopted for general use in (DHS) reports and in UNICEF's Multiple Indicator Cluster Survey (MICS) reports [Rutstein, 2008]. Household income is used as indicator of wealth. However, it is extremely difficult to measure accurately because many, if not most, people do not know their income or only know it in broad ranges and most people try to hide their income from interviewers, especially if the interviewers are from a government agency. Another alternative indicator is using consumption expenditures as a proxy for wealth which depends on income factor. Household consumption expenditures are often used as a proxy for household income so that measures have a monetary value. Traditional economic measures include income and consumption expenditure, but data collection for these measures is difficult and time-consuming, particularly in low- and middle-income settings [Deaton and Zaidi, 1999]. So that these indicators are not precisely.

It was noted that the proportion of households in developing countries with a surface water source (lake, pond, river, stream) is likely to decrease with increasing wealth, and the proportions of households with a TV or a refrigerator is likely to increase with wealth. Having a motorcycle is likely to peak at mid levels of wealth, with poorer households likely to have bicycles only or no vehicles, and wealthier households likely to have cars and trucks. Therefore, the study try to establish an index as indicator to Yemen Population depending on HBS 2005-2006 data. The HBS 2005-2006 Wealth Index originally will be constructed from existing data on household assets, services and amenities to tabulate nutrition, health, education, and population indicators according to economic status. It is considered as one of the most useful background characteristics available from the survey data.

The proposes of the study are:

- To construct the wealth index for Yemen,
- To compare the values of the wealth index by area,
- To compare the values of the wealth index by Governorates.

What is the wealth index?

Information on the wealth index is based on data collected in the Household Questionnaire. This questionnaire includes questions concerning the household's ownership of a number of consumer items such as a television and car; dwelling characteristics such as flooring material; type of drinking water

source; toilet facilities; and other characteristics that are related to wealth status (see Table 1). The wealth index is a composite measure of a household's cumulative living standard. The wealth index is calculated using easy-to-collect data on a household's ownership of selected assets.

Why is the wealth index important?

Wealth is a household characteristic that often has a large affect on health, nutrition and economic status. For example, type of flooring, type of toilet, and type of water supply were asked because of their relationship with diarrhea. The wealth index allows for the identification of problems particular to the poor households, such as unequal access to health care, as well as those particular to the wealthy. The HBS wealth index also allows governments to evaluate whether public health services, vaccination campaigns, education, and other essential interventions are reaching the poorest. HBS separates all interviewed households into five wealth quintiles to compare the influence of wealth index on various households within areas and governorates.

Data Source:

The wealth index is presented in the HBS 2005/2006 since it is the Final Reports and survey datasets as a background characteristic. The raw data of Household Budget Survey (HBS) 2005/2006 in Yemen was used for this study [Household Budget Survey 2005/2006]. SPSS 18 statistical package was used for data analysis [Pasw SPSS (18), 2009]. The sample size was 14077 households.

Construction of the HBS Wealth Index:

The general methodology used to calculate the Wealth Index is given in Filmer and Pritchett (2001) and described by Rutstein and Johnson (2004). The HBS Wealth Index is based on the assumption that an underlying continuum of economic status exists which is related to the wealth of a household. In the HBS, it is assumed that the possession of observable or easily asked about assets, services, and amenities is related to the relative economic position of the household in Yemen.

Table 1 presents the list of assets and services currently asked in the standard HBS questionnaire that can be used for calculating the Wealth Index.

Table 1: Assets and Services Usually Asked in HBS Surveys

Factors	Categories	Factors	Categories
Persons per sleeping room	scores	Water Supply	water public net work cooperative water private water source pipe outside house by foot by animal by car by rented car other sources water
Type of Flooring	Concrete cement floor tiles floor soil floor stone floor marble floor other floor		
Type of Transport	by vehicle by cars by motorcycle by cycle by taxi by bus other	Electricity	Public network Cooperative network Private network Generator Kerosene Gas Other
Sanitation Facilities	toilet flush connected not flush toilet connected toilet other not toilet	Ownership of Dwelling	Owner Renter
		Telephone	Fixed Mobile
Ownership of Agricultural Land	has, does not have	Washing Machine	has, does not have
Radio	has, does not have	Computer	has, does not have
Television	has, does not have	Sewing Machine	has, does not have
Watch	has, does not have	Satellite	has, does not have
Refrigerator	has, does not have	Fan Electric	has, does not have
Air conditioner	has, does not have	Video	has, does not have
Water Heater	has, does not have	Electric Generator	has, does not have

Each of the above categorical items (such as type of water supply) is separated into dichotomous indicator variables (has, does not have), and together with continuous variables (such as number of persons per bed room) they are in a principal components analysis (PCA) by using the Factorial Analysis Procedure. The first principal component is taken as the underlying index of wealth, and each household's position on it is calculated using the PCA weights [Filmer and Pritchett, 2001; Howe et al. 2008]. The PCA procedure produces an index that is "normalized" so that it has a mean value of zero and standard deviation of one.

A second step is necessary for most uses of the Index: distinguishing the poor from the not poor. Together with analysts from the World Bank

[Rutstein, 2008], it was decided that dividing the Index into quintiles of the national household population was the most useful grouping for the majority of analyses of health equity. Each household asset for which information is collected is assigned a weight or factor score generated through principal components analysis. The resulting asset scores are standardized in relation to a standard normal distribution with a mean of zero and a standard deviation of one. These standardized scores are then used to create the break points that define wealth quintiles as: Lowest, Second, Middle, Fourth, and Highest [Rutstein and Johnson, 2004].

The Statistical Analysis:

The descriptive statistics will be used in this study for the distribution of households by the HBS wealth index for Yemen. Six summary statistics are given: maximum, minimum, mean, median, mode, and standard deviation for households. The mean of the wealth index scores are close to zero since the index is standardized for households to produce z-scores. The median and mode, when compared to the mean and to each other, indicate the amount of skewing in the distribution (also measured by the skewness statistic).

Table 2: HBS 2005-2006 Wealth Index Distribution

Frequency	Maximum	Minimum	Mean	Median	Mode	Sd
14077	2.79	-1.74	-0.09	-0.14	-1.50	0.99

Table 2 is based on the household population of the HBS 2005-2006 rather than on households themselves. The mean vale of the Wealth Index is approximately different from exact zero and the standard deviation is also approximately different from exact one. The mode, median and mean values reveal that the distribution of the wealth index is slightly different from the normal distribution. The median and mode values are below the mean but the mode is much lower, indicating that the distribution of the wealth index scores of the HBS households is slightly skewness to the right. Therefore, the Wealth Index scores are more concentrated on the lower (poorer households) end (Figure 1).

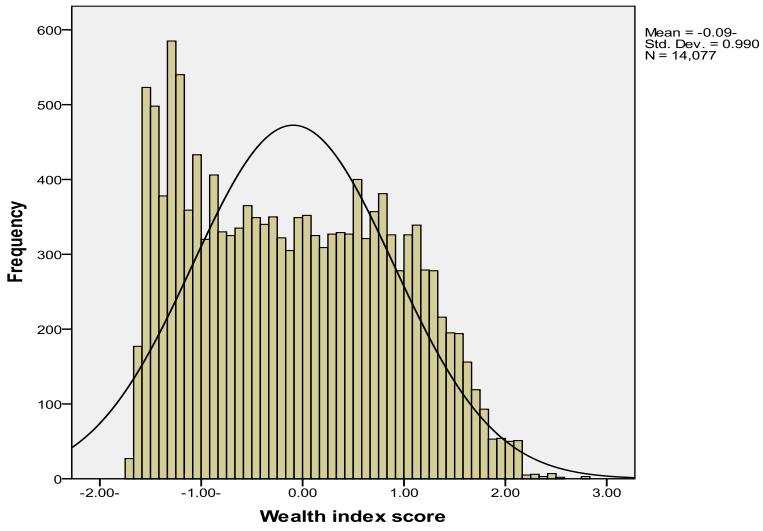

Figure 1: HBS 2005-2006 Wealth Index Distribution

To see the differences between the urban and the rural areas, the descriptive statistics of the households HBS Wealth Index were presented in Table 3.

Table 3: HBS 2005-2006 Wealth Index Distribution by Area

Area	Wealth Index Score							
	Min.	Max.	Mean	Median	Mode	Sd	t-test	P-value
Urban	-1.71	2.79	.39	.44	0.95	.83	90.081	0.000
Rural	-1.74	2.52	-.82	-1.06	-1.50	.74		

Table 3 shows that the mean value for the urban area is far 1.21[0.39 –(-0.82)] units above of the rural area which indicates that the urban households are wealthier than the rural households. Figure 2 shows, in rural areas, that the mean, median and mode values are negative which reveal that there are households are considered as poorer. The median and the mode values in the rural area are below the mean which reveal that the distribution of the Wealth Index scores for households in rural areas is skewed to the right

(Figure 2). In rural areas, the distribution of the Wealth Index is skewed to the right which indicates that there is more concentration in the lower (poorer households) end of the Wealth Index. It should be noted that there are differences between the means wealth index of households for urban and rural areas and these differences are highly significant (P-value <0.05).

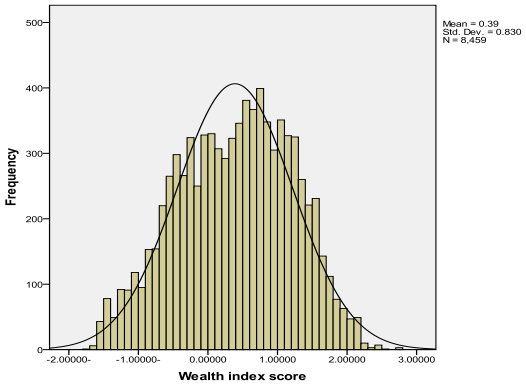

Figure 2: HBS 2005-2006 Wealth Index Distribution for Urban Areas

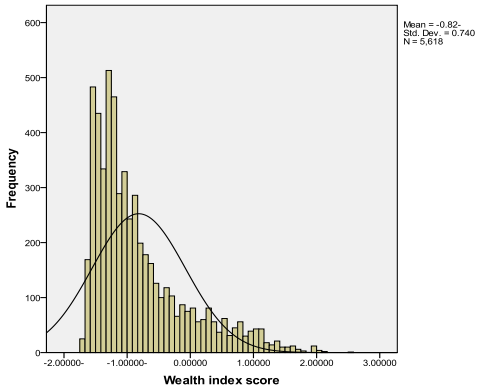

Figure 3: HBS 2005-2006 Wealth Index Distribution for Rural Areas

Table 4: HBS 200-2006 Wealth Index Distribution by Its Quintiles

Wealth Index Quintiles			Wealth Index Score			
	Min.	Max.	Mean	Median	Mode	Sd
Poorest	-1.74	-1.30	-1.47	-1.48	-1.50	.09
Second	-1.29	-0.93	-1.14	-1.15	-1.27	.11
Middle	-0.92	-0.32	-.63	-.62	-.53	.18
Fourth	-0.31	0.70	.19	.19	.14	.30
Richest	0.69	2.79	1.21	1.15	1.51	.37

Table 4 shows the values of the descriptive statistics of the Wealth Index by its quintiles. The values of the poorest, second and middle quintiles are most negative among HBS households which indicates that the households are considered as poorer. On the other hand, the values of the fourth and richest quintiles reveal that the households are fairly wealthy.

To see the differences between the urban and the rural areas, Table 5 displays the results of the distribution of the households HBS Wealth Index scores by the Wealth Index Quintiles.

Table 5: HBS 200-2006 Wealth Index Distribution by Its Quintiles and Area

Area	Wealth Index Quintiles	Wealth Index Score					
		Min.	Max.	Mean	Median	Mode	Sd
Urban	Poorest	-1.71	-1.30	-1.45	-1.45	-1.50	.09
	Second	-1.29	-0.93	-1.11	-1.10	-1.29	.11
	Middle	-0.92	-0.32	-.58	-.54	-.53	.16
	Fourth	-0.31	0.69	.21	.22	.14	.30
	Richest	0.70	2.79	1.22	1.17	1.51	.37
Rural	Poorest	-1.74	-1.30	-1.47	-1.48	-1.50	.09
	Second	-1.29	-0.93	-1.15	-1.17	-1.27	.11
	Middle	-0.92	-0.32	-.68	-.71	-.62	.18
	Fourth	-0.31	0.69	.12	.09	.50	.28
	Richest	0.70	2.52	1.11	1.04	.96	.34

For urban areas, it should be observed from Table 5 the following points:

- Nearly, all the minimum and maximum of the Wealth Index Quintiles scores have the same lower and upper limits for both areas.
- The households of the HBS Wealth Index for the poorest, second and middle quintiles were considered they poorer households whether they were living in the urban or rural areas since they had a negative statistic scores (minimum, maximum, mean, median and mode).

- For urban areas, the mean for the richest quintiles is [1.22-(-1.45)]=2.67 units above the poorest quintiles, indicating that the richest households are far wealthier than the poorer households.
- Also, for rural areas, the mean for the poorest quintiles is [1.11-(-1.47)]=2.58 units below the richest quintiles that indicates that the richest households are far wealthier than the poorer households.

To see the differences between the governorates, Table 6 displays the results of the distribution of the households HBS Wealth Index scores by the governorates.

Table 6: HBS 200-2006 Wealth Index Distribution by Governorates

Governorates	Wealth Index scores							
	Min.	Max.	Mean	Median	Mode	Sd	F-test	P-value
Ibb	-1.65	2.22	-.22	-.36	-1.52	.96		
Abyan	-1.57	2.15	.17	.33	.87	.94		
Sana'a city	-1.05	2.79	.68	.74	1.09	.71		
Al-baida	-1.16	1.93	-.03	-.02	.62	.84		
Taiz	-1.67	2.25	-.26	-.48	-1.56	.96		
Al-jawf	-1.56	1.72	-.76	-.94	-1.40	.66		
Hajja	-1.74	2.15	-.60	-.95	-1.55	.93		
Al-hodeida	-1.74	2.17	-.50	-.83	-1.58	1.02		
Hadramout	-1.63	2.52	.61	.69	1.06	.92		
Dhamar	-1.62	2.35	-.47	-.60	-1.50	.82		
Shabwah	-1.56	2.45	.42	.47	1.08	.89	223.87	0.000
Sa'adah	-1.68	1.85	-.38	-.53	-1.30	.87		
Sana'a region	-1.67	1.25	-.72	-.88	-1.55	.77		
Aden	-0.94	2.45	.81	.94	2.06	.74		
Laheg	-1.63	1.98	.01	.13	.96	.95		
Mareb	-1.66	2.23	.03	-.02	-.24	.91		
Al-mahweet	-1.62	186	-.28	-.24	.14	.87		
Al-maharh	-1.37	1.82	.23	.34	1.15	.77		
Amran	-1.56	1.57	-.31	-.46	1.51	.83		
Al-dhale	-1.56	1.94	-.19	-.27	-1.28	.86		
Remah	-1.65	0.79	-1.09	-1.21	-1.21	.41		

Table 6 shows that the following points:

- The mean, median and mode values are negatives for Remah, Al-jawf, Sana'a region, Hajja, Al-hodeida, Dhamar, Sa'ada, Taiz and Ibb governorates. These governorates were ranked from the lowest mean to the highest mean scores.
- Also, it should be noted that the distribution of the Wealth Index scores for these governorates, separately, are quite skewed to the right which indicates that there are concentration of the households (poorer) in the lower end of the Wealth Index.
- The households of Remah governorate were more concentrated is on the lower end of the distribution of the Wealth Index since the standard deviation of the Wealth Index is the smallest.
- Only Mareb governorate has quite skewed to the right with positive mean and negative median (i.e. 0.03, -0.02, respectively).
- The distributions of the Wealth Index scores of Al-mahweet and Al-baida governorates are quite skewed to left with mean and median of (-0.03, -0.02) and (-0.28, -0.24), respectively.
- For other governorates the distribution of the Wealth Index for each governorate is slightly skewed to left, that is Amran, Al-baida, Laheg, Abyan, Al-maharah, Shabwah, Hadramout, Sana'a City, and Aden governorates which were ranked from the smallest mean value to the highest.
- It should be noted for these governorates, the distribution of the Wealth Index is more concentrated on the upper end of the Wealth Index, that is the households in the upper end of the Wealth Index are considered as wealthy status.
- The distribution of the households of the HBS 2005-2006 Wealth Index scores for Aden, Sana'a City and Hadramout governorates separately were considered more wealthier than others. These results may be due to the improvement of assets and services of education, health and nutrition.
- The results of analysis of variance reveal that there are differences between means wealth index for governorates and these differences are highly significant (P-value <0.05).

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Table 7: the Distribution of the HBS 2005-2006 Wealth Index Quintiles

Wealth Index Quintiles	Frequency	%
Poorest	1789	12.7
Second	1984	14.1
Middle	2563	18.2
Fourth	4104	29.2
Richest	3637	25.8
Total	14077	100.0

Table 7 presents the proportions of the HBS 2005-2006 households by the Wealth Index Quintiles. It was noted that the proportions of HBS households are increasing with the Quintiles of Wealth Index except the Richest Quintile.

Table 8 displays the comparisons between the Wealth Index Quintiles and the urban and rural areas.

Table 8: Wealth index quintiles Distribution by Areas

Area	Wealth index quintiles					Total
	Poorest	Second	Middle	Fourth	Richest	
Urban	181	356	1326	3314	3282	8459
	10.1%	17.9%	51.7%	80.8%	90.2%	60.1%
Rural	1608	1628	1237	790	355	5618
	89.9%	82.1%	48.3%	19.2%	9.8%	39.9%
Total	1789	1984	2563	4104	3637	14077
	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

Really, it was expected from Table 8 that the proportions of the Yemeni households who lived in urban areas are increasing with the Wealth Quintiles. On the other hand, for rural areas, the proportions of the Yemeni households are decreasing from the poorest to the richest quintiles. While there are differences of the proportions of households at each quintiles between areas, the differences are large, the most difference is about 80% points between the lower (poorest) as well as between the highest (richest) quintiles.

Also, Table 8 shows that 10.1% of the Yemeni households were considered as poorer in the urban areas whereas 89.9% of the Yemeni households were suffered from poor status in rural areas. In urban are as, 90.2% of the Yemeni HBS households who were considered as wealthy. In contrary, in rural areas, 9.8% of households were wealthier.

In reality, the households in the lower urban quintiles may be wealthier than households in any of the rural quintiles, since in most developing countries most people in poorer urban areas and slums are better off than most people in rural areas (Rutstein, 2008).

These results may be due to the health care and the services for education, health and nutrition are improved in the urban areas and most of households had many assets such as cars, phone, TV, health facilities, healthy sources of drinking water and so on.

Table 9 compares the results of the Wealth Index Quintiles between the Yemeni Governorates.

Table 9: HBS Wealth Index Quintiles Distribution by Governorates

Governorates	Wealth index quintiles					Total
	Poorest	Second	Middle	Fourth	Richest	
Ibb	143	144	219	278	201	985
	8.0%	7.3%	8.5%	6.8%	5.5%	7.0%
Abyan	34	52	71	167	161	485
	1.9%	2.6%	2.8%	4.1%	4.4%	3.4%
Sana'a City	0	4	185	586	845	1620
	.0%	.2%	7.2%	14.3%	23.2%	11.5%
Al-baida	52	39	161	242	131	625
	2.9%	2.0%	6.3%	5.9%	3.6%	4.4%
Taiz	128	179	204	230	200	941
	7.2%	9.0%	8.0%	5.6%	5.5%	6.7%
Al-jawf	95	146	128	83	19	471
	5.3%	7.4%	5.0%	2.0%	.5%	3.3%
Hajja	235	149	123	157	93	757
	13.1%	7.5%	4.8%	3.8%	2.6%	5.4%
Al-hodeida	335	208	184	219	208	1154
	18.7%	10.5%	7.2%	5.3%	5.7%	8.2%
Hadramout	32	44	50	264	388	778
	1.8%	2.2%	2.0%	6.4%	10.7%	5.5%
Dhamar	149	160	239	223	101	872
	8.3%	8.1%	9.3%	5.4%	2.8%	6.2%
Shabwah	13	30	63	172	204	482
	.7%	1.5%	2.5%	4.2%	5.6%	3.4%
Sa'adah	109	139	215	221	110	794
	6.1%	7.0%	8.4%	5.4%	3.0%	5.6%
Sana'a Region	105	44	68	70	23	310
	5.9%	2.2%	2.7%	1.7%	.6%	2.2%
Aden	0	3	34	164	308	509
	.0%	.2%	1.3%	4.0%	8.5%	3.6%
Laheg	46	51	47	127	123	394
	2.6%	2.6%	1.8%	3.1%	3.4%	2.8%
Mareb	32	52	63	186	110	443
	1.8%	2.6%	2.5%	4.5%	3.0%	3.1%
Al-mahweet	101	74	125	214	101	615
	5.6%	3.7%	4.9%	5.2%	2.8%	4.4%
Al-maharh	8	23	51	107	121	310

Governorates	Wealth index quintiles					Total
	Poorest	Second	Middle	Fourth	Richest	
	.4%	1.2%	2.0%	2.6%	3.3%	2.2%
Amran	62	138	195	219	101	715
	3.5%	7.0%	7.6%	5.3%	2.8%	5.1%
Al-dhale	27	98	94	148	88	455
	1.5%	4.9%	3.7%	3.6%	2.4%	3.2%
Remah	83	207	44	27	1	362
	4.6%	10.4%	1.7%	.7%	.0%	2.6%
Total	1789	1984	2563	4104	3637	14077
	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

Table 9 reveals the following points:

- For the Poorest Quintiles, there are 18.7% of households in Al-hodeida, 13.1% of households in Hajja, 8.3% of households in Dhamar, 8.0% of households in Ibb, and 7.2% of households in Taiz who were considered as poorer households. Since Sana'a City and Aden Governorate have not rural areas, there is no households in the poorest quintiles (i.e. 0%).
- For the Richest Quintiles, it should be noted that 23.2% of households in Sana'a City, 10.7% of households in Hadramout, and 8.5% of households in Aden Governorate who were considered as wealthier. In Remah Governorate, there is only one household which is considered wealthy.

To compare the Wealth Index Quintiles for the Yemeni households between areas within the governorates, Appendix 1 reveals these comparisons. The results are summarized as follows:

- While there are differences of the proportions of households at each quintiles between areas, the differences are large,
- For the Poorest Quintiles, there are no households in urban areas for Mareb, Al-maharah, Amran, and Aldala Governorates, indicating that all the rural households for these governorates suffer from poor status.
- In Shabwah Governorate, 54% of urban and 46% of rural households were considered as poorer (the Poorest Quintile), whereas, for Remah Governorate, it was noted that all the rural households were considered as wealthier (the Richest Quintile).
- For other Governorates, it should be noted that when the proportions of the urban households are increasing from the lowest to the highest quintile, the proportions of the rural households are decreasing from the lowest to the highest quintile.
- Also, there are large differences between the areas for the governorates at each quintile level.
- There is a larger difference between areas within each quintile for all governorates except Sana'a City, Aden and Sana'a Region.

Conclusions:

From the previous analysis, the results are summarized in the following points:

- The distribution of the Wealth Index for the Yemeni HBS 2005-2006 has approximately normal distribution with mean -0.09 and 0.99 standard deviation but its mode (-1.5) is much lower the mean, indicating that the households in the lower end of the distribution, are poorer.
- The distribution of the Wealth Index for urban areas is approximately normal but quite skewed to right in rural areas.
- The mean value of the Wealth Index for urban households is 1.21 units above the rural households, indicating that the urban households are 1.21 times wealthier.
- For both areas, the mean, median, and mode values for the poorest, second, and middle quintiles are negative which reveal that the households for these quintiles are poorer.
- The urban households that belong to the richest quintile are wealthier by 2.67 times than those for the poorest.
- The rural households that belong to the richest quintile are wealthier by 2.67 times than those for the poorest.
- The most scores of the Wealth Index distribution are concentrated on the lower end for Remah, Al-jawf, Sana'a Region, Hajja, Al-hodeida, Dhamar, Sa'ada and Ibb governorates, respectively, indicating that the households of these governorates are poorer since these governorates have negative mean, median and mode values.
- In contrary, the most scores of the Wealth Index distribution for Amran, Al-baida, Lahg, Abyan, Al-maharah, Shabwah, Hadramout, Sana'a City and Aden, separately, are concentrated on the upper end of the distribution, indicating that the households are wealthier than others.
- The Wealth Index distributions for Aden, Sana'a City and Hadramout governorates, separately, which reveal that the households are more wealthier than others.
- There are 12.7% of the HBS households were considered as poor and 25.8% as wealthy.
- 89.9% of the rural households are poorer whereas 90.2% of the urban are wealthier.
- At each quintile, there are large differences of the proportions for the households between areas.
- 18.7% of households in Al-hodeida, 13.1% of households in Hajja, 8.3% of households in Dhamar,

8.0% of households in Ibb, and 7.2% of households in Taiz governorates who were considered as poor.

- 23.2% of households in Sana'a City, 10.7% of households in Hadramout and 8.5% of households in Aden governorates were considered as wealthier.
- For the Poorest Quintiles, there are no households in urban areas for Mareb, Al-maharah, Amran, and Aldala Governorates, indicating that all the rural households for these governorates suffer from poor status.
- In Shabwah Governorate, 54% of urban and 46% of rural households were considered as poorer (the Poorest Quintile), whereas, for Remah Governorate, it was noted that all the urban and most the rural households were considered as wealthier (the Richest Quintile).

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Appendix 1: Area * Wealth index quintiles * Governorate

Governorate	Area	Wealth index Quintiles					Total
		Poorest	Second	Middle	Fourth	Richest	
Ibb	urban	0.07	0.08	0.45	0.73	0.87	0.51
	rural	0.93	0.92	0.55	0.27	0.13	0.49
Total		143.00	144.00	219.00	278.00	201.00	985.00
Abyan	urban	0.03	0.02	0.32	0.75	0.94	0.62
	rural	0.97	0.98	0.68	0.25	0.06	0.38
Total		34.00	52.00	71.00	167.00	161.00	485.00
Sana'a City	urban		1.00	1.00	1.00	1.00	1.00
Total			4.00	185.00	586.00	845.00	1620.00
Al-baida	urban	0.08	0.10	0.41	0.77	0.82	0.59
	rural	0.92	0.90	0.59	0.23	0.18	0.41
Total		52.00	39.00	161.00	242.00	131.00	625.00
Taiz	urban	0.03	0.08	0.28	0.94	0.99	0.52
	rural	0.97	0.92	0.72	0.06	0.01	0.48
Total		128.00	179.00	204.00	230.00	200.00	941.00
Al-jawf	urban	0.29	0.68	0.81	0.95	0.89	0.69
	rural	0.71	0.32	0.19	0.05	0.11	0.31
Total		95.00	146.00	128.00	83.00	19.00	471.00
Hajja	urban	0.15	0.23	0.39	0.87	1.00	0.46
	rural	0.85	0.77	0.61	0.13	0.00	0.54
Total		235.00	149.00	123.00	157.00	93.00	757.00
Al-hodeida	urban	0.18	0.42	0.85	0.95	1.00	0.63
	rural	0.82	0.58	0.15	0.05	0.00	0.37
Total		335.00	208.00	184.00	219.00	208.00	1154.00
Hadramout	urban	0.19	0.00	0.12	0.63	0.78	0.62
	rural	0.81	1.00	0.88	0.37	0.22	0.38
Total		32.00	44.00	50.00	264.00	388.00	778.00
Dhamar	urban	0.03	0.09	0.34	0.75	0.98	0.42
	rural	0.97	0.91	0.66	0.25	0.02	0.58
Total		149.00	160.00	239.00	223.00	101.00	872.00
Shabwah	urban	0.54	0.07	0.38	0.71	0.63	0.59
	rural	0.46	0.93	0.62	0.29	0.37	0.41
Total		13.00	30.00	63.00	172.00	204.00	482.00
Sa'adah	urban	0.14	0.24	0.60	0.89	0.90	0.60
	rural	0.86	0.76	0.40	0.11	0.10	0.40
Total		109.00	139.00	215.00	221.00	110.00	794.00

Governorate	Area	Wealth index Quintiles					Total
		Poorest	Second	Middle	Fourth	Richest	
Sana'a Region	rural	1.00	1.00	1.00	1.00	1.00	1.00
Total		105.00	44.00	68.00	70.00	23.00	310.00
Aden	urban		1.00	1.00	1.00	1.00	1.00
Total			3.00	34.00	164.00	308.00	509.00
Laheg	urban	0.04	0.18	0.34	0.59	0.83	0.52
	rural	0.96	0.82	0.66	0.41	0.17	0.48
Total		46.00	51.00	47.00	127.00	123.00	394.00
Mareb	urban	0.00	0.06	0.62	0.80	0.91	0.66
	rural	1.00	0.94	0.38	0.20	0.09	0.34
Total		32.00	52.00	63.00	186.00	110.00	443.00
Al-mahweet	urban	0.03	0.18	0.68	0.81	0.95	0.60
	rural	0.97	0.82	0.32	0.19	0.05	0.40
Total		101.00	74.00	125.00	214.00	101.00	615.00
Al-maharh	urban	0.00	0.09	0.59	0.36	0.65	0.48
	rural	1.00	0.91	0.41	0.64	0.35	0.52
Total		8.00	23.00	51.00	107.00	121.00	310.00
Amran	urban	0.00	0.05	0.57	0.89	0.95	0.57
	rural	1.00	0.95	0.43	0.11	0.05	0.43
Total		62.00	138.00	195.00	219.00	101.00	715.00
Al-dhale	urban	0.00	0.11	0.34	0.81	0.88	0.53
	rural	1.00	0.89	0.66	0.19	0.13	0.47
Total		27.00	98.00	94.00	148.00	88.00	455.00
Remah	urban	0.00	0.00	0.05	0.26	0.00	0.03
	rural	1.00	1.00	0.95	0.74	1.00	0.97
Total		83.00	207.00	44.00	27.00	1.00	362.00

الملخص:

هدفت الدراسة إلى بناء مؤشر الثروة للأسر اليمنية نظرًا لعدم وجود دراسة على هذا الموضوع. اعتمدت الدراسة على مسح ميزانية الأسرة والذي تم في 2005- 2006 وكانت عينة الدراسة 14077 أسرة. تم استخدام المتغيرات الاقتصادية والاجتماعية وممتلكات الأسرة باستخدام التحليل العاملي وبطريقة المكونات الرئيسية تم بناء مؤشر الثروة. وكانت نتائج الدراسة أن توزيع المؤشر تقريبًا طبيعي بشكل عام ويكون إلى حد ما متجهًا نحو اليمين بالنسبة للأسرة الريفية مما يشير إلى وجود كثافه للأسر في الطرف الأيسر والذي يدل على أن هذه الأسر فقيرة. يدل متوسط توزيع مؤشر الثروة لدى الأسر الحضرية أن الأسر الحضرية ثرية بـ 1.21 مرة من الأسرة الريفية. كما وجد أن 12.7٪ من الأسر تعد أسرًا فقيرة بينما 25.8٪ من الأسر هي أفضل ثراءً. وأن هناك 89.9٪ من الأسر في الريف فقيرة بينما 90.2٪ من الأسر في الحضر أفضل ثراءً. كما أن الأسر في أمانة العاصمة ومحافظة حضرموت ومحافظة عدن تعد حالة ثرائها أفضل من غيرها حيث وجد أن 23.2٪ و10.7٪ و8.5٪ من الأسر، على الترتيب، هي أفضل ثراءً من غيرها. كما وجدت الدراسة أن 18.7٪ من الأسر في محافظة الحديدة و13.1٪ في محافظة حجة و8.3٪ في محافظة ذمار و8.0٪ في محافظة إب و7.2٪ في محافظة تعز تعد أفقر الأسر. بالإضافة أن هناك 54٪ من الأسر الحضرية و46٪ من الأسر الريفية في محافظة شبوة والتي صنفت وفقًا لمؤشر الثروة بأنها أفقر الأسر، وهذه هي النسبة الأعلى عند المقارنة بين حضر وريف المحافظات.