

## Designing Cost of Living Index for Classification of Statistical Region Units-Level 2

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### Abstract

*The cost of living index is one of the indicators for preparation of more efficient policies of income distribution, wage and investment and for determination of the cost of continuation a given life standart for different areas. By taking this index consideration , it would be possible to make master plans for reduction of migration tendency, minimization of cost of living differences among regions and overcoming of wealth differences among residential areas. Also, by the aid of this index, the cost of the same life standart would be comparable for different residential areas. The aim of this study is to design a cost of living index for Statistical Area formed in Turkey and to compare this index with consumer prices index. The most comprehensive research conducted by TURKSTAT for Turkey, 2003 Household Budget Survey's data set is used in this study and definitions, explanation and mean price values for commodity basket are inferred from 2003 Consumer Prices Index's data set. At the phase of index counting, the method of ACCRA (AMERICAN CHAMBERS OF COMMERCE RESEARCHERS ASSOCIATION), applied in usa, is used. The calculated values of index basket on the same matter, or the same level of benefit for different regions to obtain to cost were compared. As a result, within Classification of Statistical Region Units (SRE)- level 2, the İstanbul Region is more expensive compared to other statistical areas have been identified.*

**Key words:** Cost of Living Index, Standart of Living, CPI, SRE

### Introduction

The importance of the global economy increases day by day. For that reason, more statistical information is needed in order to understand and predict future economic patterns.

By using index numbers, the past and present can be compared and conclusions drawn can be used for future preparations. Currently, the most popular methods used to compare the past and present are product cost price and cost of living index calculations.

This study was designed to meet the following aims:

- Determine the cost of continuing a given life standard for different areas
- Aid in the preparation of more efficient wage, investment, and income distribution policies
- Suggest ways to reduce migration tendencies
- Provide an explanation of wealth differences among residential areas and how to overcome them
- Create a medium by which people can compare the cost of living for a person who travels frequently between two residential areas

Consumer Price Index (TUFE, CPI), is an index which is calculated to determine fluctuations in price. If the CPI value is assumed to be 100 every year in each place this will not provide enough information about basic year price between residential areas. The Index application would be the same for every residential area for new price data, but using this assumption would not show price differences for residential areas and would not reflect regional cost of living differences. Thus, a new index study is needed by local policy analysts so that they can determine price differences between two residential areas. For this purpose, the American Chambers of Commerce Researchers Association (ACCRA) designed the Cost of Living Index (COLI,YME), which has been used in the USA for 48 years to compare cost of living differences between metropolitan areas.

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## 1. Cost of Living Index (Coli)

### 1.1. Definition

Cost of Living Index (COLI) is a type of index study which is used to examine expenses that people incur to maintain a regular life **standard** including food, clothing, housing and social activities.

The Cost of Living Index is, with the help of two different price data sets, a comparison of the necessary minimum expenses that are needed in order to maintain the same financial status and life standard level.

The most important aspect about the definition of COLI is the "...maintenance of a life standard..." statement has to take part. (Triplett, 1999)

### 1.2. Significance

This study will contribute to the calculation of the cost of living values of different residential areas and will improve the usage of income distribution, wage and investment policies. Cities with a low cost of living will become magnets for migrants in the future. During periods in which regional differences are extreme, the cost of maintain the same regional life standard can be determined with the help of the cost of living index.

Migration between cities for educational or work purposes has become increasingly popular. The cost of living index can help us determine how much it would cost for a migrant to maintain the same standard of life at his or her new destination.

### 1.3. Literature

Today, countries or groups still keep counting index values according to their needs. Most of the economical studies for consumers to calculate cost of living index were conducted by using the installing deviation<sup>1</sup> (Braithwait, 1980; Loyd, 1975; Manser and McDonald, 1984); the basic power of index which were designed for specific residents (Hagemann, 1982; Jorgenson and Slesnick, 1983; Lewbel, 1985; Michael, 1979); and different features of the cost of living index ( Diewert, 1976; Pollak, 1971). Deaton and Muelbauer (1980) and Jorgenson and Slesnick (1983) conducted very important studies for installing deviation, which existed at COLI calculation, to be taken into consideration by using econometric methods.

With this regression model, Haworth and Rasmussen (1973) aimed to explain the cost of living differences between metropolitan areas. Using this model, the size, shape and geographical features of a city, which are thought to be possible sources for the different costs of living, served as the independent variable. The cost estimation done by BLS in 1970 for 4 member families served as the dependent variable. As a result, 3 variables can be used as criterion to express differences between regions but it is asserted that a more detailed study needs to be conducted.

Cebula (1980) tried to show the cost of living differences between metropolitan areas in the USA. It was discovered that there is a negative relationship between population density and cost of living. Less production and more trade, which makes a society economy come together, was expressed as a reason for this. After experimental studies, it is asserted that while there is a negative bond between cost of living and population size, there is a positive correlation between the cost of living and population density (since transportation and costs of sales will increase). Ostrosky (1983) claimed that as long as the cost of gas is ignored, this analysis can be accepted.

Thomas (1980) compared Lima, capital of Peru, and the rural Peruvian city of Sierra to show the differences in cost of living between urban and rural regions. As a result, he explained that the cost of living is two times more expensive in Lima than Sierra. Because, except food, there are less products in the basic basket in Sierra than Lima and this is the main reason of the difference.

In addition to his explanation about geographic cost of living differences that are caused by how densely populated a region is, Langsten (1985) also suggested a new explanation using rent theory. He said that there is a positive correlation between high rent and population density of urban residential areas, thus the cost of living increases in large cities.

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<sup>1</sup> Installing deviation tries to express the reactions that were given by consumer caused by changes in prices and preference deviation of producers.

Kokoski (1987) conducted a study about 3 basic topics in which the cost of living index is used. Installing deviation emphasized the effect of the preferred similarity curve on index calculation in circumstances where the differences and features of various demographics are not homogeneous. He also calculated the cost of living index by using the Quadratic Expenditure System (QES).

Nelson (1991) conducted a study and suggested an easy econometric method to calculate the cost of living index between states by using shopping data which was collected in standard metropolitan statistical areas. Also McMahon and Melton (1978) created a new model to calculate the cost of living index by using an econometric method. In this model, variables were symbolized so that the cost of living was represented by the letter C, individual income was Y, population change was  $\Delta P$ , cost of buying was V, the value of a single person's house in 1978 and population dispersion for each mile-square was D. Basically, approaches that were suggested by ACCRA were taken consideration. By using index numbers which were found as a result of this study, not only was it possible to make significant comments about the cost of living but it was also easier to analyze how much state teachers should be paid according to cost of living index for states. (Refer to [www.coli.org](http://www.coli.org))

With their study Dumagan and Mount (1997) tried to create a new COLI theory and formula which is theoretically solid and practicable, independent of installing and income deviations, uses regular demand functions but does not hypothesize special consumer structure. This study showed what kind of results price indexes can produce with COLI calculations.

In a study which was prepared to provide data to the Associate Enterprise Project for Enterprise Problems and Employee Rights, Lally (2005) gave a brief summary of studies that have been conducted to determine the minimum cost of living in Turkey. Since there have been high inflation rates for long periods of time in Turkey, he asserted that Turks used appropriate methods to calculate cost of living.

Lally also explained that there have been ongoing, periodic studies conducted by TURKSTAT and other associations about the cost of living in Turkey and he claimed that even if there is diversity in the approach of different associations, each of them makes the same assumption about the family which includes a mother, a father and two kids. There is also the assumption that only one person in the family earns an income. He expresses that Turks describe this estimation as a living wage. After examining the studies which were conducted by associations to determine the minimum cost of living, similarities between these assumptions and techniques used to determine the cost of living were apparent.

By employing the ACCRA cost of living index methodology which was already being used by ACCRA in 2000 for Aspen city, Mattingly (2005) conducted the "Year 2005 Aspen City Cost of Living Study". In studies conducted by the Aspen City Finance Department there were some hypotheses and limitations which were completely different from those of the ACCRA methodology.

A COLI study was conducted by Council for Community and Economic Research (C2ER, 2008) for The Fairbanks North Star Borough city in state Alaska for years between 2004-2008. The main purpose of that experiment was to demonstrate COLI values for Fairbanks and Anchorage and afterwards to compare those values with the calculated CPI. As a final calculation, it was shown that regional CPI value prices did not go up as much as COLI value did.

## 2. Theory

The COLI theory was asserted by Konus in 1924 for very first time. Konus based his theory on the hypothesis which says all consumers have basic rational behaviors.

The COLI theory can be summarized as a proportion of the least amount of money needed to maintain the same quality of life for what price in what area.

According to this, the COLI Formula can be expressed as being the lowest cost for a given quality of life by measuring this cost during a recent period of time.

$$\text{It is formulated as } \text{COLI} (P_1, P_0) = \frac{C(U_t, P_1)}{C(U_t, P_0)} \quad (1.1)$$

### 2.1. COLI as Inflation Weigh Tool

The inflation index reflects the change in total value of a product or service group that exists between two time periods. But COLI, to be able to stay on the same similarity curve in theory, reflects the change in cost of expenses for a product or service group. Because of this, considering COLI as an inflation tool depends on its usage and content.

### 2.2 COLI as a Measurement of Price Increases

Price increases are usually important when salaries are paid. Therefore, if a company would like to provide its employees with the same life standard, COLI can be used as a measurement to adjust salaries.

### 2.3. Comparison of COLI with CPI

According to their data sources and the ways they are used, the Cost of Living Index and the Consumer Price Index have things in common. But after conducting this research, we can express the following differences between them:

- Both COLI and CPI show the change in price of a service or products which are directly sold at market such as food and clothing. But, while COLI measures relative wealth, CPI conveys inflation.
- While out of market products such as air pollution, crime rate, suicide, divorce are not taken consideration for CPI, COLI measurements can express the effect of these factors.
- COLI measurements can focus on specific portions of data and their differences, but CPI has more general content.
- While CPI is used as an income balancer, the same thing cannot be said for COLI.
- CPI uses the foreign visitor survey, the institutional population individual expense survey and managerial records as sources, but COLI used the Household Budget Survey as its sole source and it fails to take into consideration those who migrate.
- COLI's function is to estimate the cost of living differences for different residential areas which are in same region, but CPI measures the inflation rate for all places.

According to the explanations above, to consider any CPI value as a COLI value, it has to have the following fundamental aspects;

- ✓ specific quality of life and wealth level
- ✓ specific consumer definition
- ✓ specific physical or social environment definition

### 3. Practice

By measuring various consumer patterns, it is possible to discover a regular life standard.

When we deal with two different terms, we will balance/equalize the periodic cost values with each other to maintain a steady life standard in order to arrive at the cost of living index figure.

#### 3.1. The COLI Method Developed by ACCRA

The COLI method which was developed by the American Chambers of Commerce Researchers Association, consists of a ratio where regional values are the nominator and national values are the denominator. The aim of this technique is not to compare regional and national values, but rather to compare regional values of the same nominator.

#### 3.2. The COLI Method Developed by ACCRA

In the COLI methodology that was developed by ACCRA, its structure was classified by using householder range, store range and practicing terms range.

Household Range; since there is always a frame definition for every index study, there is also one for the ACCRA study. According to the ACCRA-COLI methodology, a sample household has to have the following features;

- Consists of a mother, father and one kid
- Both parents have to university degrees and at least one of them has to be paid a salary and have a professional career in which their responsibilities increase day by day.
- Income of the household has to be in the highest 20% range of the regional income chart.

Store Range; the cost values which are going to be used to create an index have to be taken from stores where household members go shopping, renting or buying house values of his/her community, individual expenses and other miscellaneous expenses such as the hairdresser, laundries and going to the movies.

Practicing Term Range; there are some limitations for residential areas which will take part in the index study. After research, residential areas with the following features were included in the index study;

- 1000 people for per square-mile
- residential areas with a population of more than 35,000

More than 50,000 prices of approximately 60 products which are considered for the index study are collected one thursday, friday and Saturday of January, May and September and published four times in one year. ( It should be noted that for CPI approximately 360,000 prices were compiled monthly). The fourth publication shows the average of the all data collected during that year. For each of the three monthly terms, standard price compilation is completed in three days. Compiled prices have to correspond to defined products. After pre-research, it was decided that the price of the product has to be taken from five different stores, but if five stores are not available, this requirement can be decreased to three stores. Products were categorized into 6 groups which were: Grocery Items, Housing, Utilities, Transportation, Health Care, and Miscellaneous Goods and Services.

### **3.3. Restrictions and Hypothesis**

To conduct ACCRA's cost of living index study in Turkey, we needed to establish some restrictions and develop a hypothesis.

It is decided that the Household Budget Survey and Consumer Price Index, which were conducted by TURKSTAT, are the most convenient data sources for use in index calculations.

- From the Household Budget Survey in 2003, we only used expense data from four member families, living in a city, with an income in the highest 20% range.
- Groups were created according to the 12 basic groups of product
- To define groups and prices, data from the 2003 Consumer Price Index was used.

### **3.4. Creation of The Basket (Life standard considerations)**

The "basket" is a reference to the collection of considerations taken when determining an average quality of life and a list on page add-1 outlines what specific items were included. During the process of creating the basket to be used for this index calculation, the Household Budget Survey (HBS) consuming data set was classified into 5 income groups and only the top 20% range was taken into consideration. From this top 20% income range, only four member families living in cities were chosen. With the purpose of obtaining values for places around Turkey from regional house group values, widener coefficients that were calculated by TURKSTAT were used and main group total expense values were obtained.

By classifying the products, both within the group expense and total expense, the size of the items, was found. 265 products with a 0.001 weight of the general expense were picked. This item list, which was obtained from HBS data set, was matched with CPI data set and 112 matchings were obtained. According to their regional availability, weight and purpose in the index, a basket with 72 items<sup>2</sup> was created to be used when calculating the COLI.

### **3.5. Calculation of The Index**

According to codes of the items in the basket, CPI 2003 arithmetic average price values were used. First the regional average price value was divided by average price values for the country (Turkey), afterwards its percentage was calculated, and the result was then multiplied by the item's weight. Therefore the importance of the product as it relates to the category index was determined (2.1). Importance of the item within a category index can be interpreted also as its correlation to expense within its own group. Importance for category index

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<sup>2</sup> Look for item list add-1.

$$= \left( \frac{\text{Regional Average Price Of Product}}{\text{National(Turkey) Average Price Of Product}} \times 100 \right) \times \text{Product's group weight} \quad (2.1)$$

After the same calculation was repeated for each item group, the weight of each group in the total expense was determined. Multiplication of the Category Index Value by Item Group Size gives us the weight of the groups as they relate to the Compound Index.

$$\text{Support to Compound Index} = \text{Item/product Category Index Value} \times \text{Size of the Item Group} \quad (2.2)$$

Finally, by using totalling the weights of the item groups as they relate to the compound index, we can find COLI values for specific areas.

### 3.6. Usage and Interpretation of the Index Value

The main goal of index usage is not to compare one specific residential area with all other residential areas, but rather to compare it only with one other area. Since when people move from one city to another, they do not compare their life standard values with national values. Alternatively, they compare their current life standard values with the city where they will move to. So, the formula below was developed by ACCRA to compare 2 residential areas.

$$100 \left[ \frac{\text{CityA} - \text{CityB}}{\text{CityB}} \right] \quad (2.3)$$

For example, let say the index value of city A is 132,59 and the index value of city B is 109,93 and so it is obvious that city A is %20,61 more expensive than city B. As well as it is used for 2 cities, this comparison can be used to compare a city to a region and also a region to another region. According to this, with our study, we calculated the index values for Statistical Regions in Turkey. As a result, when we compared the Statistical Regions of Kars and Erzurum, we can see that to have same life standard in the Kars Region is %3.75 cheaper than in the Erzurum Region.<sup>3</sup>

$$\text{COLI}_{KE} = \frac{\text{COLI .value.of .the.Kars.Re gion} - \text{COLI .value.of .the.Erzurum.Re gion}}{\text{COLI .value.of .the.Erzurum.Re gion}} \times 100$$

$$\text{COLI}_{KE} = \frac{93,22 - 96,85}{96,85} \times 100 = -\%3,75 \quad (2.4)$$

### Regional Index Values

Region				Region			
Code	Region Name	COLI		Code	Region Name	COLI	
1	56	SİİRT	85,41	14	22	EDİRNE	94,66
2	1	ADANA	89,25	15	57	SİNOP	94,81
3	42	KONYA	89,39	16	67	ZONGULDAK	94,97
4	45	MANİSA	89,55	17	61	TRABZON	96,62
5	38	KAYSERİ	89,90	18	25	ERZURUM	96,85
6	31	HATAY	90,65	19	10	BALIKESİR	97,33
7	21	DİYARBAKIR	91,27	20	27	GAZİANTEP	97,78
8	55	SAMSUN	92,02	21	65	VAN	99,82
9	50	NEVŞEHİR	92,23	22	16	BURSA	100,34
10	44	MALATYA	92,86	23	6	ANKARA	103,68
11	20	DENİZLİ	93,17	24	35	İZMİR	105,78
12	36	KARS	93,22	25	7	ANTALYA	107,26
13	41	KOCAELİ	93,67	26	34	İSTANBUL	125,94

<sup>3</sup> Because of internal and external reasons, there might be deviations for index numbers. For this reason, difference values less than 4% were not taken into consideration in the index study.

### **Suggestions**

This study was designed with the purpose of proving that it is possible to use the ACCRA-COLI methodology, which is still in use and was developed for regional classification in the USA, in Turkey. Thus a new kind of index study was added to the list of index studies for Turkey. This study is still at a project stage and needs to be further developed. For this reason the household group has to be defined in detail and the geographic range and regional classification should be perfected. With use of this index, regional salary arrangements, regional tax arrangements, distribution of subsidies and money support to regions will be done effectively. With the help of this method, many things can be done to diminish regional differences. For example, an index which focuses on the difference of gas consumption among regions will be calculated easily.

### **Conclusion**

When using an index it is really difficult to illustrate the market environment in which individual prices are compiled. It is possible that prices will vary from place to place, store to store, and seller to seller. For this reason, it is hard to demonstrate index values which include an entire society. So, it is likely more preferable to examine small groups with specific features rather than an entire society.

The basis of the study conducted was to compare the cost of the hypothetical item basket, created for this study in accordance to the needs of the highest income group, in different areas examined by the index. The main purpose of the study is to demonstrate the cost of living differences between residential areas and to improve macroeconomic plans in order to balance it.

The first study that needed to be conducted in our country was to define the COLI theory and explain how to use it. By using the Cost of Living Index calculation method, which was improved by American Chambers of Commerce Researchers Association and has been used by them for 48 years, index values were calculated according to Statistical Region Unit classification Level-2 differentiation.

According to the values obtained from a comparison of the regions, İstanbul Statistical Region is shown to be the most expensive among the 26 regions. But it should not be forgotten that study results do not express the certain values and that the index was created from items and prices which were only samples.

The COLI method, which was conducted by ACCRA, should not only be thought as a tool to weigh people's cost of living. With this method, many things can be done in order to diminish regional cost of living differences. For example, an index study about gas consumption is going to demonstrate to us that cold regions are more expensive, so it is going to help us to fix this problem. It will also help us to show how tax, social cooperation and wage policies should be.

As a conclusion, this method is going to give us an opportunity to compare regional differences in our country according to facts that were taken into consideration.

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**Add-1 Definition and Explanation of Items in the Basket**

All item definitions, unit and explanations, which were used in this study, were picked from TURKSTAT 2003 CPI basket.

<b>Madde Kodu</b>	<b>Tanım</b>	<b>Birim</b>	<b>Açıklama</b>
1 111101010	Rice (Baldo)	KG	price of a kilo of package or wholesale middle quality rice (Akel, Reis, Kiler)
2 111201010	Flour	KG	price of a kilo of high quality package flour to make baklava or cake (Pınar, Soke, Piyale)
3 111301010	Regular Bread	KG	price of a kilo of 100% made of flour bread
4 111401010	Regular Biscuit	KG	price of a kilo of specially package regular or milk flavored biscuit (Ulker, Eti)
5 111405010	Birthday Cake	KG	price of a kilo of circle shaped birthday cake with fruit, chocolate or dried nuts
6 111405050	Cookie	KG	price of a kilo of sweet or salty cookie
7 111411010	Baklava with Walnut	KG	price of a kilo of baklava with walnut and butter
8 111415040	Sheet of Dough (Row)	KG	price of a kilo of half cooked package or wholesale sheet of dough
9 112201100	Ground Veal Meat	KG	price of a kilo of middle fat veal ground meat
10 112201120	Chopped Veal Meat	KG	price of a high quality chopped veal meat
11 112401040	Sheep Meat With Bone	KG	price of a kilo of high quality middle fat sheep or lamb meat
12 112501170	Whole Chicken	KG	price of a kilo of package or wholesale chicken (koytur)
13 112701010	Sausage (coil or finger)	KG	price of a kilo of packed or wholesale made of 100% veal meat (Pınar,Sultan,Cumhuriyet)
14 113101080	Anchovy	KG	price of a kilo of anchovy
15 114101060	Long Lasting Milk	LT	price of a liter of pastozized, long lasting milk in special boxes with different sizes (Pınar,Ulker)
16 114301060	Yogurt with Cream (plastic pot)	KG	price of a kilo of made of cowmilk fat yellowcheese in vacuumed packs with different size (Sek,Sutas, Pınar)
17 114401010	White Cheese (Cow Milk)	KG	price of a kilo of wholesale middle fat white
18 114402020	Yellow Cheese (Fresh)	KG	price of a kilo of made of cowmilk fat yellow cheese in vacuumed packs with different size (Sek,Sutas)
19 114501020	Egg	PIECE	price of a piece of egg
20 115201010	Margarine	KG	price of a kilo of vegetable margarine in special 250gr packages.
21 115301030	Olive Oil (Riviera)	LT	price of a liter of riviera olive oil in plastic or glass bottle or meatl box (Komili,Taris,Kristal)
22 115302010	Sunflower Oil	LT	price of a liter of refined sunflower oil in plastic or glass bottle or meatl box (Komili,Taris)
23 116101020	Orange (fresh)	KG	price of a kilo of yafa or washington orange
24 116112010	Apple (fresh)	KG	price of a kilo of Amasya or golden apple
25 116134010	Banana (fresh)	KG	price of a kilo of Anamur or chicita banana
26 117122010	Tomato (fresh)	KG	price of a kilo of tomato

27	117162010	Cucumber (fresh)	KG	price of a kilo of middle size cucumber	
28	117506050	Black Olive (for meal)	KG	price of a kilo of high quality wholesale meal	olive
29	118101010	Ground Sugar (package)	KG	price of a kilo of package or wholesale sugar	
30	118102010	Cube Sugar	KG	price of a kilo of cube sugar in cartoon box (Balkupu,Mert,Eko Bal)	
31	118303020	Chocolate Cream (plastic pot)	KG	price of a kilo of chocolate in plastic or glass pots (Ulker,Sarelle,Nestle)	
32	121201010	Tea (package)	KG	price of a kilo of high quality tea which is produced by foreigner compaines (Dogus,Ofcay)	
33	122301040	Fruit Juice (in cartoon package)	LT	price of a liter of fruit juice in vacuumed packages (Pinar,Tamek,Cappy)	
34	213001040	Beer (bottle)	BOTTLE	price of a 50cc bottle beer (Efes,Troy)	
35	312110090	Jeans (for man)	PAIR	price of a pair of classic man jeans with pocket and zipper (Mavi Jeans, Levis, Lee)	
36	312112110	Wool Sweater (for man)	PAIR	price of a 50% wool 50% acyrlc regular man sweater (Sabri Ozel, Arslanli,Cottonbar)	
37	312117010	T-shirt (for man)	PAIR	price of a 100% cotton male t-shirt (Halifax,Penyelux,Sabri Ozel)	
38	312216100	Jeans (for woman)	PAIR	price of a pair of classic woman jeans with pocket and zipper (Mavi Jeans,Levis,Lee)	
39	312219200	Wool Sweater or Blouse (for woman)	PAIR	price of a 70% wool 30% acyrlc regular woman sweater or blouse (Desen,Sabri Ozel,Sanfa)	
40	312224020	T-shirt (for woman)	PAIR	price of a 95% viscon 5% licra regular woman t-shirt (Tuzun,Desen,Hey)	
41	312315090	Jeans (for kids)	PAIR	price of a pair of regular kid jeans with pockets and zipper (Camgoz,Minikids,Bucuruk)	
42	321304010	Leather Sneakers (for kids or baby)	PAIR	price of a pair of leather size 30-35 kids walking sneakers (Letoon,M-police,Kinetix)	
43	410001010	Rent	MONTHLY	price of a month's rent	
44	441001010	Water Bill	M3	price of a M3 water which is supplied by Municipality including tax.	
45	451001010	Electricity Bill	KWH	price of a KWH electricity including tax	
46	452201020	LPG Gas (12 kg for tank)	UNIT	price of a 12kg gas tank	
47	454001020	Imported Coal	TONE	price of a tone of imported coal (delivery fee is not included) (from Russia,Africa)	
48	454002010	Wood Price	TONE	price of a tone of chopped oak or pine tree (delivery fee is not included.)	
49	561101010	Washing Detergent (for automatic machines)	KG	price of a kilo of powder detergent in plastic bag or boxes for auto machines (omomatik)	
50	561101160	Clothes Softener	KG	price of a kilo of liqued clothes softener in plastic bottles (Vernel,Yumos,Quanto)	
51	561102030	Dish Soap Liquid (to wash with hands)	KG	price of a kilo of liqued dish washing soap in plastic packages	
52	562104010	Maid Fee	DAILY	daily fee of the maid	
53	621201010	Doctor Check up Fee	TIMES	price of a periodically doctor check up of person	one

54	622002010	Tooth Filling Fee	TIMES	price of 2 ways amalgam molar tooth filling
55	722001010	Lead Gas	LT	price of a liter of lead gas
56	722001020	Benzin Süper	LT	Super Gas
57	722002010	LPG (for car)	LT	price of a liter of LPG for car
58	722003010	Diesel Oil	LT	price of a liter of diesel oil
59	723002030	Car Maintenance	TIMES	price of a hour maintenance for car at each 30,000km. 4 wheel break pad change in small areas, sparker change, oil change (materials are not included)
60	732201010	Cab Fee (in City)	TIMES	price of a kilometer travel with cab in city
61	942204010	Movie	TIMES	price of a ticket for movie for 1 person
62	1030002010	Private Tutoring (University preparation)	HOUR	price of a hour tutoring for high school senior student who is preparing for university
63	1050001050	Licance Course	HOUR	price of a hour daily licence course taken from center directed by government
64	1110103010	Adana Kebab	PORTION	price of a portion of adana kebab in 2. class restaurant
65	1110104010	Groundmeat Pide	PORTION	price of a portion of groundmeat pide in 2. class restaurant
66	1110104100	Turkish Pizza	PIECE	price of a piece of turkish pizza in 2. class restaurant
67	1211101010	Hair Cut (for man)	TIMES	price of a haircut in 2. class hairdresser
68	1211201020	Blow-Drying (for woman)	TIMES	price of a blow-drying in 2. class hairdresser for woman (hair wash is excluded)
69	1211201050	Hair Dying (for woman)	TIMES	price of a hair-dying in 2. class hairdresser
70	1213013010	Shampoo	KG	price of a kilo of shampoo in 200-400gr plastic bottles (Pantane,Elidor)
71	1231001020	Golden Bracelet	GR	price of a gram of 22 carat golden bracelet (workman ship is excluded)
72	1240001010	Nursery School	MONTHLY	monthly price of a nursery school for kids age 0-6, tax is included,transportation is not.