

The necessities of updating the weights of the commodity basket constituting the consumer price index for the year 2012 in Iraq

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Abstract

The consumer price indices in Iraq have gone through many base years, the last of which was the base year 2012, which is used to calculate the number to measure so far. Therefore, it is increasingly important to reconsider calculating the rigid consumer basket for years, by reassessing the relative importance of its components and inserting new items that have become a major part from the spending of the Iraqi family as a paragraph (personal loans, for example), the research problem (Is introducing new components to the commodity basket and rearranging their priorities important in order to provide new indicators of poverty and changes in prices, wages or income?), The hypothesis of research (the presence of factors affecting spending The consumer, which is reflected in the price index, and therefore the current model does not accurately reflect the reality of consumer spending), the research aims to identify the models of the commodity basket for the consumer and study them well in order to present a proposed model to update the weights of the commodity basket for the Iraqi consumer within the framework of the existing models for selected base years and analyze the factors Affecting consumer spending behavior, which in turn reflects consumer spending according to the developments of the Iraqi economy.

The research concluded that the existing model includes many shortcomings that do not make it valid for expressing the reality of inflation. The research recommended the need to follow a model that takes into account the weights of the current consumer spending components of the consumer.

Key words: Consumer price index, commodity basket, Laspeyres index, inflation rate, Iraqi economy.

Introduction

External factors played a prominent role in influencing the Iraqi consumer basket after 2003 due to the openness of the Iraqi economy to the outside world, which caused most of the components of the consumer basket to be imported, which made the Iraqi economy vulnerable to price fluctuations in the world, whether negative or positive, which reflected in an increase in inflationary pressures in the event of an increase in world prices for goods and services imported from abroad. Therefore, it became necessary to identify the price trends represented by the Consumer Price Index (2012)

Research problem

The research problem lies in the form of the following questions;

1-Is the introduction of new components of the commodity basket and the rearrangement of its priorities important in order to provide new indicators of poverty and changes in prices, wages or income?

2-Do the current prices do not reflect the dimensions of the real problem of the economy by virtue of many factors and variables, especially that the weights of the commodity basket are old because they are still dependent on the household income and expenditure survey 2012?

Research importance

The price index relies heavily on policy makers to know the current inflation trends in the economy, and periodically updating the weights of the food basket is of economic importance in order to reach inflation rates matching reality.

Research hypothesis

The research assumes that there are factors that affect consumer spending, which is reflected in the price index, and therefore the current model does not accurately reflect the reality of consumer spending.

Search objective

The research aims to identify the models of the consumer basket and study them well in order to present a proposed model to update the weights of the commodity basket for the Iraqi consumer within the framework of the existing models for selected base years and analyze the factors affecting the consumer spending behavior, which in turn reflects consumer spending according to the developments of the Iraqi economy.

TOPIC ONE

A conceptual introduction to consumer price indices

Many economic researchers resort to measuring the amount of consumer spending on goods and services using several indicators, foremost of which is the consumer price index, which is widely used to measure the inflation rate for a limited period of time¹. The consumer price index measures the prices of goods and services contained in the family or consumer basket, which constitute the bulk of the total expenditure of the Iraqi family or consumer alike.²

¹ - Saad Zaghloul Bashir, Some Practical Aspects of Calculating Weights and Pricing the Goods Part of Compiling the Consumer Price Index, Ministry of Planning, Central Statistical Organization, Baghdad 2004, P.1`

First: The concept of the consumer price index

There are many concepts and terms related to the consumer price index, as follows³

1-Consumer Price Index: The consumer price index is defined as a statistical measure of changes in the prices of a fixed market basket of goods and services.

2-The basket of goods and services: It is the real group of goods and services that the household consumer spends on for living purposes.

4-Household Expenditure and Income Survey: The Household Expenditure and Income Survey is a survey that reflects patterns of spending on goods and services by households, and also reflects the income level of families. The results of the Household Expenditure and Income Survey are used to find out the relative distribution of spending on goods and services included in the composition of the price index of the consumer.

4-Household expenditure: It is the value of what all family members spend during the reference period in exchange for obtaining goods and services (consumer and non-consumer), whether this expenditure is related to the family, such as: spending on food, housing, electricity, the acquisition of durable goods, or what It relates to spending by its members, such as spending on clothes, personal tools, and others.

5-The relative importance of goods and services: It is the share of spending on a good or service out of the total expenditure of all goods and services within the consumer basket.

6-Points of sale: These are establishments or units from which price data of goods and services included in the basket of goods are collected, such as retail stores such as groceries and clothing stores, in addition to shops providing various services to the consumer such as physicians' services, rental units and other services.

7-The alternative sample: a group of reserve points of sale that are returned to when it is

² ,Abdul-Hussein Al-Zayni, Records, Higher Education Press, Baghdad, 1988,P.6

³ General Authority for Statistics, Kingdom of Saudi Arabia.
<https://www.stats.gov.sa/ar>

necessary to replace one of the main points of sale because it was not possible to obtain the price from it for any reason, such as closing the shop permanently or permanent unavailability of the commodity.

8-The price of the comparison period: It is the recorded price of the good or service in the current period of time.

9-Monthly, quarterly and annual inflation: It is the rate of changes in prices for each month, season or year compared to the previous month or quarter of the same year, or the rate of price changes for each month, season or year compared to the previous year, and it is called the term change on an annual basis.

10-Consumer price⁴: It is the monetary value that the consumer pays in return for obtaining a good or service for his family needs.

11-Base year prices: are the average prices of goods and services in a year with which current prices are compared. When choosing a base year, it is required that prices be relatively stable and natural, far from crises and booms that affect the consumption pattern of society.

Price indices are considered one of the most important indicators for calculating the inflation rate and knowing its extent in the national economy, as well as an indicator that measures the total consumer spending on current goods and services through the weights that make up this indicator and government spending on current goods and services⁵, as it is a measure that expresses about the amount of the hidden tax for the price of holding money, if the individual expects a rise in the price level in the future and consequently a decrease in the purchasing power of money, he will spend it and acquire goods instead, which leads to a decrease in the demand for money and thus an increase in the speed of its circulation⁶ as used by central banks. In determining the target inflation rate in the context of setting and implementing monetary policy, it also contributes to providing

national accounts with data on household consumption expenditures or purchasing power parity used in comparing real consumption levels between different countries.⁷

Second: Methods of calculating the change in prices according to the consumer price index⁸

1-The method of ownership, related to the period during which the family obtains goods and services, and when calculating the weights, the total value of those goods and services provided during a certain period is taken into consideration, and the consumer price index in this way measures the change (inflation) in the cost of owning the commodity over time.⁹

2-Method of use or consumption. In this way, the index measures the change in the cost of using the commodity over time, as its measurement is related to the period during which the commodity was used or consumed (by the family)

3-Payment method, this method is related to the period in which the amount of obtaining the commodity was paid, and this period differs from the period in which the commodity is obtained or used, and therefore the index calculated in this way measures the change in the cost of purchasing the commodity over time.

Since the index aims to calculate the change in the cost of living, mixed methods are used to calculate it, for example, the method of use is adopted for the residential homes owned by their owners and the method of payment for the rest of the consumer goods.¹⁰

Third - Types of indices according to the classification in Iraq

According to the classification of (COICOP, 2009), individual consumption is classified into 12 main sections and the base year is 2007 and it is recommended to use it for the purposes of international comparisons. The classification has adopted the requirements of Iraq, within these main groups, subgroups are also divided

⁴ Price indices, Abu Dhabi Statistics Centre.

<https://www.scad.gov.ae/Release Documents>

⁵ Mustafa Salman and others, Principles of Macroeconomics, Dar Al-Maysara for Printing, Publishing and Distribution, first edition, Jordan 2002, P.225.

⁶ Akram Haddad and Mashhour Hanloul, Money and Banks: An Analytical and Theoretical Introduction,

Wael Publishing House, first edition, Amman 2005,P.120

⁷ ILO/IMF/OECD/UNECE/Eurostat/The World Bank,2004,P.3.

⁸ ,Practical Guide to producing consumer price indices, United Nations,2009,P.19-20

⁹ Consumer Indices Manual,Ilo,2004,P.1

¹⁰ Consumer Indices Manual,Op.Cit,pp.484

into lists at the level of individual goods and services, the materials included in the calculation of the consumer price index, or what is known as the consumer basket, are also determined. Which is done by classifying materials into major spending groups according to a specific classification system, preferably an appropriate classification within the international requirements¹¹ and recommendations. Which represents: food and non-alcoholic beverages, tobacco, clothes and shoes, housing, water, gas and electricity, furniture, furnishings and household goods, transportation, communications, entertainment and culture, education, restaurants, health, and various goods and services¹².

TOPIC TWO

Evolution of the commodity basket for the consumer price index in selected Arab countries

Most Arab countries follow the latest internationally approved methodologies in preparing consumer price indices, and developing them if necessary in accordance with the current reality of each country and the peculiarities that are unique to it in this regard. Most of the Arab countries mentioned below also follow the latest recommendations adopted by international institutions, in particular the recommendations of the International Monetary Fund.

The size of the sample and the geographical scope that is relied upon when calculating the consumer price index varies from one country to

another according to the individual characteristics of each country separately, as follows;

First: the consumer price index in Algeria

The National Office of Statistics follows the internationally approved methodologies, adapting them if necessary to the Algerian reality, in particular the recommendations of the International Monetary Fund's guide to the consumer price index, where the index is calculated according to the "Laspere" formula in terms of sample size and degree of representation, the index coverage rate in terms of household consumption expenditures is equivalent to (95%). The index consists of 261 items and about 791 items consumed by households distributed in eight main groups followed by 63 sub-groups.

In terms of the geographical areas covered by the survey and their distribution between urban and rural areas, price data is collected from four main areas and four attached areas, with a total of 17 cities. For example, field monitoring of the city of Algiers consists of 11 geographical sectors.

With regard to the number of sales centers (major shopping centers, shops, weekly markets and others) and their distribution within those geographical areas covered by the survey, the year 2001 represents the base year, and the data used in calculating the consumer price index is collected and published on a monthly basis through the National Bureau of Statistics, The following is the weighting of groups of goods and services included in the index.

Table (1)(

Fixed Weights of groups of goods and services included in the consumer price index in Algeria (%)

Code	Groups of goods and services	Relative weights
1	Food and drinks	430.9
2	clothes and shoe	74.5
3	Housing	92.9
4	Furniture	49.6
5	the health	62
6	Education and entertainment	45.2
7	Transport and Communication	158.5
8	Miscellaneous	86.4

Source: National Office of Statistics, Algeria, (2021)

¹¹ Ashraf Samara, Guide to Price and Index Statistics, May 2011, p. 16-17

¹² - Commodity basket of the consumer price index for the 2012 base year, Ministry of Planning, Central Statistical Organization, Directorate of Indices,

Second: the consumer price index in Tunisia

The National Institute of Statistics calculates the Consumer Price Index based on monthly, quarterly and semi-annual periodical surveys. The survey is conducted directly using modern technologies in addition to use of telephone and e-mail. The index of the consumer price index is calculated based on the Laspeyres " formula, and the base year (2015) is adopted to calculate the base prices, as well as the weighted value of the

included items. With regard to the geographical scope, it includes all state centers (24 states), counties and municipalities with a high population density (50 thousand people and above). In addition to the weekly markets in each state to represent the rural areas whose residents are often supplied with basic materials from these markets.

The fixed weights for groups of goods and services included in the index are as follows;

Table (2)(
Weights of groups of goods and services included in the consumer price index in Tunisia(%)

Code	Groups of goods and services	Weights - base year 2015
1	Nutrition and drinks	26,2
2	Tobacco and alcoholic beverages	2,8
3	clothes and shoes	7,4
4	Housing and home energy	19,0
5	Furniture and home furnishing	5,9
6	the health	5,8
7	Transport	12,7
8	communications	4,6
9	Entertainment and culture	2,1
10	Education	3,2
11	Restaurants and hostels	4,6
12	Other materials and services	5,6
	Total	100,0

Source: National Institute of Statistics, Tunisia, (2021)

Third: the consumer price index in Syria

The Central Bureau of Statistics prepares the price index through a monthly periodic survey using paper forms or through field visits, using the "Laspeyres" formula. The price level is calculated for each item within the different commodity groups, and then the average levels that are weighted by weights are calculated. The index is extracted at the commodity level as a minimum using the weights available at the level of each commodity. As for the sample size and the degree of its representation, each item has its prices collected from four sales centers of the same market, including 13 governorates and

covering about 53 markets out of about 200-250 establishments from which prices are collected.

With regard to the number of geographical areas covered by the survey and their distribution between urban and rural areas, the approved sources cover all governorates of the Republic and include the most important and most popular markets. The sources from which prices are collected are characterized by diversity and comprehensiveness of all classes of society. The year 2010 is the base year for the consumer price index. Regarding the weights of groups of goods and services included in the index, they are as follows;

Table (3)

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Weights of commodity groups included in the consumer price index in Syria (%)

Code	Groups of goods and services	Weights - base year 2015
1	Food and drinks	399.0
2	clothes and shoes	55.9
3	Housing included (housing rent, housing repair and water supply)	194.8
4	electricity	60.6
5	Restaurants and hotels	20.7
6	Furniture, including (household fixtures and equipment, and routine maintenance	40.5
7	the health	38.2
8	Education	15.6
9	Transport	70.6
10	communications	42.4
11	Entertainment	9.5
12	Miscellaneous goods and services	52.2

)Source: Central Bureau of Statistics, Syria, (2021

Fourth: The consumer price index in Lebanon

The calculation of the consumer price index is based on twelve time series according to the classification of individual consumption by purpose of the United Nations, designed specifically to measure the consumer price index on a monthly and annual periodicity using fixed weights extracted from the reality of the "National Survey of Household Living Conditions and Budget 2011-2012". These weights reflect the average household spending on goods and services without taking into account the family's size, income, and marital status. The consumer price index in Lebanon is

calculated using the Geometric Laspeyres formula.

The sample size is about 30,000 of goods and services. The geographical areas of the capital include: Beirut, Mount Lebanon, North, Bekaa, South, Nabatieh. The number of sales centers is about 2500 centers. The year 2013 represents the base year on which the consumer price index is based. The data used in calculating the consumer price index are collected on a monthly, quarterly and annual basis. The Central Statistics Department publishes the index on a monthly and annual basis. Regarding the fixed weights of groups of goods and services included in the index, they are as follows;

Table (4)(

Fixed weights of groups of commodities included in the consumer price index in Lebanon (%)

Code	Groups of goods and services	Relative weights
1	Food and drinks	21.4
2	clothes and shoes	5.2
3	Housing	16.6
4	Electricity, water, gas, electricity, other fuel	8.11
5	Restaurants and hotels	2.8
6	Furniture, including (household fixtures and equipment, and routine maintenance	3.8
7	The health	7.7
8	Education	6.6
9	Transport	13.1

10	communications	4.5
11	Entertainment	2.4
12	Miscellaneous goods and services	4.1

Source: Central Administration of Statistics, Lebanon, (2021)

Fifth: The consumer price index in Egypt

The Central Agency for Public Mobilization and Statistics prepares the CPI using the Jevons formula at the initial aggregate level, then the short-term or modified Laspeyres formula is used at the higher aggregate stages. In preparing the indicator, the device uses the statistical data of the periodic survey that it conducts monthly, through paper and telephone forms. It publishes the monthly consumer price index. With regard to the number and distribution of goods and services included in the index, the

basket of consumer price indices contains about 479 goods/services, including approximately 950 items/kinds. Prices of goods/services are tracked in 44 regions, including 141 geographic regions, divided into 92 urban regions, and 49 rural regions. In addition, the prices of goods and services are tracked from 15,000 sources (sale outlets) representing urban and rural areas of all governorates of the Republic. The year 2017/2018 represents the base year to which the survey is based. With regard to the weights of groups of goods and services included in the index, they are as follows;:

Table (5)

Fixed weights groups of commodities included in the consumer price index in Egypt (%)

Code	Groups of goods and services	Relative weights
1	Food and drinks	3.60
2	clothes and shoes	4.7
3	Housing(Included electricity)	18.1
4	Electricity,	2.8
5	Restaurants and hotels	4.3
6	Furniture	4.1
7	The health	9.0
8	Education	4.4
9	Transport	6.0
10	communications	2.3
11	Entertainment	2.1
12	Miscellaneous goods and services	6.2

Source: Central Agency for Public Mobilization and Statistics, Egypt, (2021)

Sixth: The consumer price index in Morocco

The consumer price index is calculated using the serial "Laspeyres" formula to calculate the indicative number of prices, where the average prices are calculated for each good or service whose prices are collected from different areas on a weekly basis for a number of commodities, and on a monthly and semi-annual basis for some commodities according to the importance

of the sample size. The division of the geographical sphere is based on the representation of all social groups. The selection of the quality of goods and services, the subject of the research sample, is based on the best-selling goods and services, according to a sample that includes 546 items, and 1391 types, representing 83.9 percent of household expenditures.

As for the number of geographical areas covered by the survey and their distribution between urban and rural areas, the research is concerned with the urban field represented by about 18 cities, representing all regions of the Kingdom according to the current administrative division.

The year 2017 represents the base year on which the consumer price index in Morocco is based. The High Commission for Planning publishes the index monthly. The fixed weights of the groups of goods and services included in the index are as follows

Table (6)(

Fixed weights of groups of goods included in the consumer price index in Morocco (%)

Code	Groups of goods and services	Relative weights
1	Food and non alcoholic drinks	37,502
2	Alcoholic drink and tobacco	1,507
3	clothes and shoes	4,323
4	Housing(Included electricity, water and other fuel	14,575
5	Furniture, including (household fixtures and equipment, and routine maintenance	4,877
6	The health	7,741
7	transport	10,04
8	communications	2,958
9	Entertainment	2,735
10	Education	5,636
11	Restaurants and hotels	1,461
12	Miscellaneous goods and services	7,115

Source: High Commission for Planning, Morocco, (2021)

It is clear from the foregoing that the weights of the Arab consumer basket in (Algeria, Tunisia, Syria, Lebanon, Egypt and Morocco) share that the group (education, health and communications) constitute major weights in the consumer price index, with the exception of the group of foods and non-alcoholic beverages, in addition to the fact that the group has been updated the commodity basket of some countries (Egypt and Morocco) to suit the economic situation of these countries.

The total spending on the (education, health and communications) group was (26.6%) in Algeria, (13.6%) in Tunisia, (10%) in Syria, (18.8%) in Lebanon, (15.7%) in Egypt and (16.3%) in Morocco

TOPIC THREE

The commodity basket for the Iraqi consumer: reality and modernization

First: The stages of development of the commodity basket for the Iraqi consumer

The Consumer Price Index is one of the most important statistical indicators issued by the Ministry of Planning and the Central Bureau of Statistics on a regular basis. This figure reflects changes in consumer spending on a fixed market basket of goods and services during a specified period of time.

Work continued with a base year 1993 until 2009 after a new commodity basket was prepared based on the Iraq Household Social and Economic Survey (IHSES) which was carried out in 2007, and was taken as a base year in the pricing of goods and services included in the composition of the consumer price index, as it was considered a representative year for changes in the standard of living of the family, the structure of family consumer spending and the

economic situation in the country¹³ in general, for the first time reports were issued at the level of Iraq indices, and the commodity basket was classified into (12) sections under the classification of individual spending by purpose (COICOP), then work continued to prepare this number is up to 2016, after a new commodity basket was prepared in 2012 and taken as a base year as the year in which the last family social and economic survey (IHSES) was carried out in Iraq,¹⁴ and some commodities that were considered important from the consumer's point

of view were added and at the same time, goods were deleted as I thought were unimportant to the consumer, even though they appeared with an expenditure of more than 25 dinars, and the relative importance of each good and service was calculated based on the average monthly expenditure per capita taken from the socio-economic survey of the family in Iraq for the year 2012,¹⁵ and as shown in the table (7)

Table (7)(

The totals constituting the consumer price index and the weights for the two base years (2007, 2012 = 100)

100 =2012	group	100=2007	group	Code
weight		weight		
29.605	Food and non-alcoholic drinks	30.059	Food and non-alcoholic drinks	1
0.615	tobacco	0.720	Alcoholic beverages and tobacco	2
6.472	clothes and shoes	7.330	clothes and shoes	3
25.359	Housing*, water, electricity ,fuel	31.305	Housing*, water, electricity, fuel	4
6.524	Household fixtures and equipment and maintenance	6.377	Household fixtures and equipment and maintenance	5
4.142	the health	2.308	the health	6
15.185	Transport	11.086	Transport	7
3.109	communications	2.926	communications	8
1.998	Entertainment and culture	1.619	Entertainment and culture	9
0.922	education	0.989	education	10
1.527	Restaurants	1.403	Restaurants	11
4.542	Miscellaneous goods and services	3.878	Miscellaneous goods and services	10
100	general record	100	general record	

¹³ - Report of index numbers in Iraq for the year 2020, the Central Statistical Organization, Directorate of Index Numbers

¹⁴ The report of the consumer price index in Iraq for January 2016.p.2

¹⁵ The report of the consumer price index in Iraq of December 2016,p.2

70.395	The percentage of non-food spending	69.941	The percentage of non-food spending	
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Source: Annual Inflation Report of the Iraqi Economy for 2013, Department of Economic and Financial Policies / Market Study Department, March 2014, p. 5, and consumer price index reports for the years 2016-2020

Actual and estimated rent weight = 21.221*

Actual and estimated rent weight = 17.123

Source, commodity basket and weights for the consumer price index for the base year 2007 and 2012, respectively, Directorate of Index Numbers, Ministry of Planning/Central Statistical Organization.

Second: The Evolution of Monthly Consumer Expenditure Rates for Individuals and Families According to the Base Years 2007 and 2012.

In the year 2007, as a result of the relative improvement in the standard of living of the individual and the economic openness of the country, the contribution rate of spending on foodstuffs decreased to (30.1%), and this is evidence of the individual's well-being and the transformation of a large part of his income to spending on additional goods, and in 2012 the expenditure structure showed significant improvement in the living situation, where the group of expenditures on food recorded (29.6%) of the total expenditure, and this is an indication of the rise in the standard of living, as the increase in the income of the individual or the family leads to directing expenditures to other non-food goods and services, and this is what is illustrated by the rise in the indicator The average non-food expenditure increased from approximately (50.7%) in the years of the natural periods (1963, 1979, 1988) to (70.2%) in 2007 and 2012, while this percentage did not exceed (36.8%) in 1993, due to the insufficient

per capita income to meet other additional needs due to the rise in prices in general and the arrival of the Iraqi economy to hyperinflation.

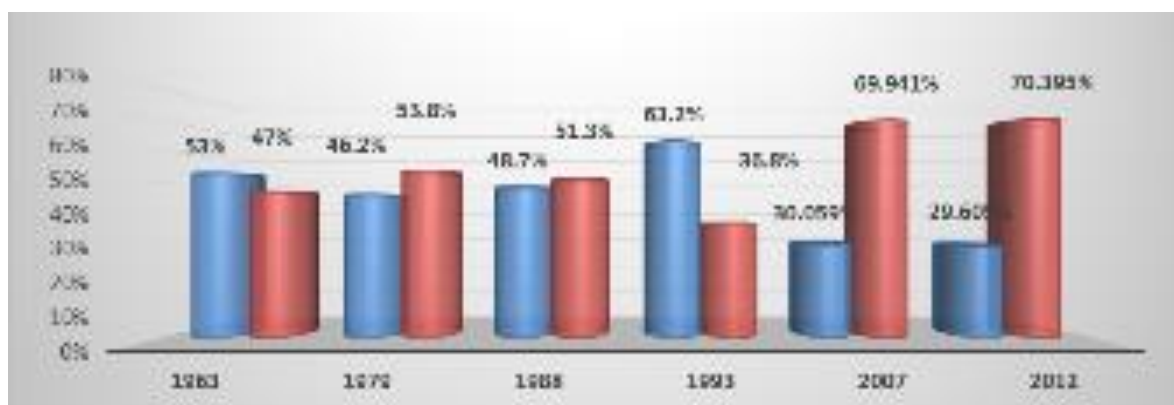
With regard to the contribution of the rent item , it decreased from approximately (18.1%) during the period 1979-1988 to (11.5%) in 1993, due to the inability of the Iraqi citizen during that period to spend additional amounts on this item , thus raising the rent contribution by a noticeable percentage amounting to average (21.1% and 17.12%) for the years 2007 and 2012, respectively, this is due to the growing demand for residential homes offered for rent against the relative decrease in the number of these housing units, as well as the limited government and private investment in the building and construction sector and the high construction costs (wages of labor and building materials), in addition to the high prices of land allocated for construction.¹⁶

According to the above, there has been a significant change in the expenditure items, and this is illustrated by the classification of the main aggregates constituting the consumer price index. The expenditure aggregates increased from (8) group in 1963 to (9) groups for the years 1979-1993 and (12) group for the years 2007 and 2012, This is due to the change in the per capita spending pattern and the development of economic life, as well as a noticeable change in the expenditure structure. While the weight of oil products and electricity did not reach (3%) in the period prior to 2007, we note that the average weight of these commodities approached (9%) for the years 2007 and 2012 due to the reduction of subsidies on petroleum products and the increase in their spending value, in addition to directing part of the per capita income to obtain electricity (generators)

Figure 1 Expenditure on food and non-food commodities for the index for the years 1963-2012

¹⁶ Najlah Shamooun Shlaymoon, Analysis of the costs of inflation and its impact on living standards in Iraq for the period 1990-2012, Master's thesis,

College of Administration and Economics, Al-Mustansiriya University, 2015.p.72.



Percentage of non-food expenditure

Percentage of expenditure on food

Source: Bulletin of the development of consumer and wholesale price indices for the period (1981-2011), Ministry of Planning, Central Statistical Organization, Directorate of Index Numbers, September / 2012, p. 1. And Statistical Group, Division of Prices and Indexes for the period 1971-1981.

According to the foregoing, it appears that there are several factors that played a major role in changing the spending behavior of the Iraqi consumer, as follows;

--Government intervention (government decisions to control the price system or lift subsidies etc.

The crises and shocks that the Iraqi economy is exposed to-

Change in the structure of wages and salaries (income)-

-The development of economic and social life

Availability of government services-

The nature of the prevailing economic system (totalitarian, market economy)-

-Tastes, preferences, customs and traditions

- Time period-

The nature of the monetary and financial system-

The contribution of the impact of the above-mentioned factors on changing the spending behavior of the Iraqi consumer is evident through the price trends for the base years 1963-2012 measured by the change in the consumer price index (inflation rates)¹⁷ and as follow;

Inflation rate for the years 1963-1988 reached (3.5%), a period during which the Iraqi economy experienced a period of stability in prices, during which the prices of some materials with extensive family consumption were determined and the prices of some products were reduced by the government, while it amounted to (8.9%) in 1979, a period in which it witnessed an increase in the volume of government spending targeted to finance the economic development process in that period and the resulting imbalance in the structure of supply and demand for some products, in other words, an increase in demand for certain products in exchange for a decrease in the price flexibility of these products, as well as the subjection of some products included in the composition of the index to the supply and demand, such as the furniture industry by the private sector and the rise in wages in this industry due to the wide demand for this type of work, but in 1988 the inflation rate rose by (18%), as a result of the effects of the Iraqi-Iranian war, and in 1993 the inflation rate increased by (207.6 %), a large percentage that reached very high levels, in which inflation took the form of hyperinflation due to the first Gulf

¹⁷ For the purposes of accurate analysis, then taking inflation rates for the base years 1963-2012, because the index numbers in the base years are equal to 100

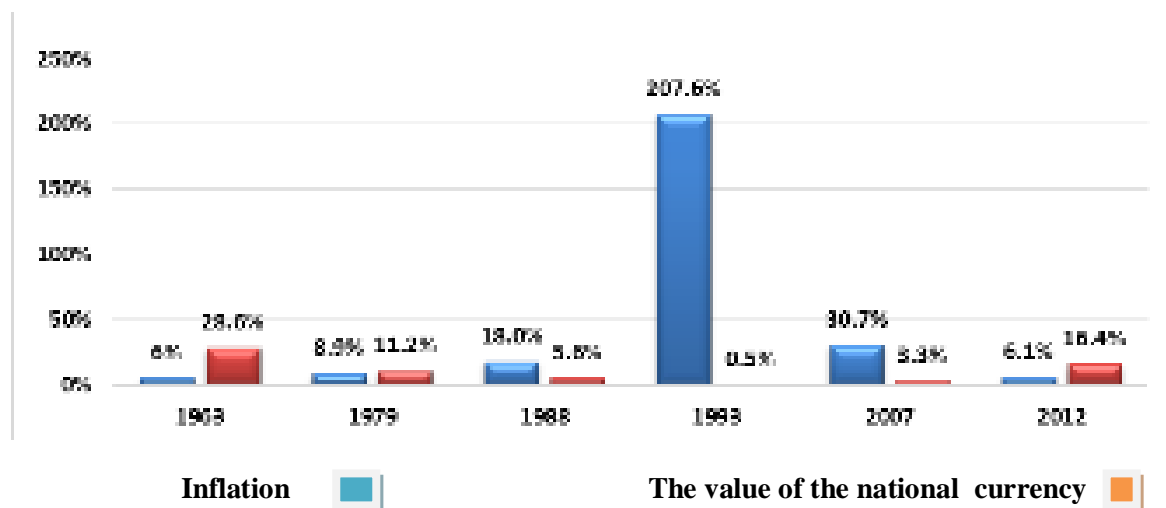
War in 1991, an economic blockade that led to the suspension of imports for most production requirements and a decline in the growth of the industrial sectors, this led to a rise in prices, as well as a halt in exports, and consequently a decrease in the volume of foreign reserves, an increase in the volume of cash issuance, and a deterioration in the value of the national currency. The value of the national currency for the years 1963, 1979, 1988 and 1993 recorded a percentage (28.6%, 11.2%, 5.6%, 0.5%), respectively

As for the years 2007 and 2012, in which the political and economic system moved from a totalitarian system to a planned market economy system after 2003, in addition to the increase in oil imports derived from crude oil export operations, as Iraq is an oil country that depends for its revenues on foreign currency, in addition to the gradual improvement in the exchange rate of the Iraqi dinar against the US dollar, especially since the function of managing the foreign currency sale center as an organized exchange market allows the Central Bank to intervene in a manner that ensures the stability

of exchange rates and influences the levels of local liquidity, as the change in the value of foreign currency has become the focus of monetary policy attention with regard to regulating the growth of the monetary mass according to the requirements of economic stability, especially after Iraq abandoned the multi-exchange system that appeared due to the stability of the exchange rate in the market.

The inflation rate reached (30.7%, 6.1%) respectively, and the value of the national currency recorded an increase by (3.3%, 16.4%), respectively, and Figure (3) illustrates the contribution of the impact of the above-mentioned factors in changing the spending behavior of the Iraqi consumer through price trends. The base years 1963-2012 measured by the change in the consumer price index (inflation) and the value of the national currency.

Figure 2 Price trends for the base years 1963-2012 as measured by the change in the consumer price index - inflation - and the value of the national currency



Third: The commodity basket for the Iraqi consumer on the basis of 2012 and the possibility of updating it.

The Central Statistical Organization has updated the mechanism for calculating the methodology of some commodities, such as rents in the housing department, as well as updating the prices of cars in the transportation department, starting in January 2020, and in October, fast-changing commodities such as

cars, phones, computers and cameras were updated, as a result of the exposure of the Iraqi economy to a multilateral shock due to the Covid-19 pandemic.

Some important aspects of updating the Iraqi consumer basket have been neglected, as no reference was made to updating the weights of some currently important commodities to match the real changes in prices, and the nature of the weights given to the commodities

included in the composition of this figure, which adopted the consumption pattern for 2012, does not represent the reality. The current cost of living, due to the significant change in the consumption pattern of the Iraqi family in light of the significant changes in the level of income and expenditure, and this figure depends on the prices established by the seller (shop owners) and not on the basis of the price reaching the consumer, some consumers pay prices in excess of the real prices when purchasing some goods, as well as other factors determining consumer spending that were mentioned previously. The composition of the index in the base year of 2012 has become the general trend of changing the prices of the commodities included in its composition without the possibility of showing the reality of the actual prices of the Iraqi consumer. For example, it was noted that non-food expenditures for the 2012 base year compared to the 2007 base year are almost constant, reaching nearly (70%) despite the events and developments that the Iraqi economy has witnessed so far, such as the development of intellectual capital represented by the education clause, whose relative weight has not changed until 2021, with the show is that education in Iraq after 2016 has witnessed a major change, represented by the emergence of the so-called parallel and electronic education, the increase in the number of private universities recognized by the Ministry of Higher Education and private schools, and the increase in the number of students. The health item was neglected to update in spite of large spending, due to Corona pandemic, the increase in private hospitals and clinics, and the rise in the prices of medicines and medical supplies due to the devaluation of the currency. The education, health and communications items have become of the items that are no less important than the foodstuffs item, as the total expenditures for these items together amounted to (8.2%) of the weight of the consumer basket, which is the opposite of what was observed for the Arab consumer basket that was mentioned in topic two, so it requires updating some items such as the foodstuff item and the housing (rent) item in terms of its relative weight (i.e. reducing it) to fit these two items with the initiatives presented by the Central Bank regarding the industrial and agricultural sectors and the housing and real estate sector, as well as its initiative to purchase in residential complexes for the year 2021 as follows;

-Initiative (5.5) trillion Iraqi dinars: Its purpose is to finance medium and large projects, pump money into the market through them, raise production in the agricultural and industrial sector, and establish housing projects that contribute to the development of the infrastructure of the Iraqi economy. It is distributed through three banks, in addition to the Housing Fund, so that the following amounts were allocated to each of them;

□ Industrial and Agricultural Bank: The amount allocated to each of them from the initiative is (30.3%), that is, at a value of (1666) billion dinars, with an interest of (4%) and a payment period of (10) years for the Industrial Bank, and a payment period of (5) years for the Agricultural Bank.

□ The Real Estate Bank: The amount allocated from the initiative is 15.2%, i.e. at a value of (834) billion dinars, with an interest of (3%), and a repayment period of (10) years.

□ The Housing Fund: The amount allocated to it from the initiative is (24.3), i.e. at a value of (1334) billion dinars after adding an amount of (500) billion dinars to the size of the previous allocation of (834) billion dinars, with an interest of (2%), and a payment period of (10) Years.

-The total loans granted within this initiative until 31/12/2020 amounted to (2161.9) billion Iraqi dinars, which constitutes (39.3%) of the total granted amount.

Table (8) shows that the most beneficiaries of this initiative are the Real Estate Bank and the Housing Fund, after the remaining amount of the allocation amounted to (49.6) and (125) billion dinars, respectively, in contrast to that of the Agricultural and Industrial Banks, which were the least benefited from the initiative, the remaining amount of the allocation amounted to (1612.8) and (1550.7) billion dinars, respectively, as an amount of (784.4) billion dinars was used from the total allocated to the real estate bank, as well as the case with the Housing Fund, which used an amount of (1209) billion dollars of its total allocation, while the part that was used of the allocation to the industrial bank amounted to (115.3) billion dinars, and the agricultural bank, the part that was used amounted to (53.2) billion dinars of its allocation.

Table (8)

Payments of the initiative (5.5) trillion Iraqi dinars for the period (2016-2020)

Residual	Allocated	Total	2020	2019	2016 - 2018	Statement years
1550.7	1666	115.3	0	18.6	96.7	industrial Bank
1612.8	1666	53.2	2.4	23.2	27.6	Agricultural Bank
49.6	834	784.4	119.4	0	665	real estate Bank
125	1334	1,209	200	50	959	Housing Fund
3338.1	5500	2,161.9	321.8	91.8	1,748.3	Total

Source: Department of Statistics and Research / Department of Monetary and Financial Statistics, note that the data is preliminary and subject to update

If we follow the spending movement of the Iraqi society in light of the Covid-19 pandemic, we notice a decrease in activities, especially transportation and retail stations by (-26%), and the increase in spending in groceries and pharmacies by (8%),¹⁸ as shown in Table (9)

Table (9)

Trends in changing the movement of public community spending in Iraq during the Covid-19 pandemic

Activities	The rate of movement of the spending of society
Retail and Entertainment	10-
Grocery stores and pharmacies	8+
Transportation stations	16-

Scour; COVID 19 Community Mobility Reports.

According to the foregoing, the proposed commodity basket will be updated to suit the crises and disturbances that society is exposed to and economic developments in the field of monetary, financial, trade and other policies. (Basic inflation measurement) to be more

accurate and reliable by taking out the volatile components, such as energy, food, things related to travel and clothing, from the equation for calculating the basic index, and the table (10) represents the proposed commodity basket.

Table (10)

The proposed commodity basket for the Iraqi consumer

¹⁸ - Covid 19 Community Mobility Reports.

base year=100	the group	Code
Weight		
25.32	Food and non-alcoholic drinks	1
0.62	Tobacco	2
6.47	clothes and shoes	3
21.36	Housing, water, electricity, gas	4
6.52	Household fixtures and equipment and maintenance	5
6.14	the health	6
15.19	Transport	7
6.11	Connection	8
2.00	Entertainment and culture	9
4.21	education	10
1.53	Restaurants	11
4.54	Miscellaneous goods and services	12
100.00	general record	
74.68	The percentage of non-food spending	

The table is from the researcher's work based on the data of the second and third topics

Conclusions

1-The consumer price index is the best indicator for measuring changes in the cost of living, as it represents, to some extent, the prices that the consumer pays to obtain consumer goods, on the basis of which the purchasing power of his income and money is estimated. It also includes most of the goods and services necessary for the Iraqi family, in addition, its data is suitable for measuring domestic inflation in terms of its relationship with the final consumer.

2-The relative importance of the food and energy groups component in the Iraqi consumer basket has risen to what can represent more than half of the weight in the consumer price index, and therefore the measurement of the general index and the index after exclusion, with the exception of the food and energy groups, may be inaccurate in some cases.

3-Periodic updating of the household income and expenditure survey or the survey of the

change in the consumption pattern of the Iraqi and Arab consumer, which helps in adjusting the used weights in calculating price indicators.

4-The problem of the disappearance of some materials and services from one period to another and the rapid change in prices and the availability of goods in the market.

5-The lack of data required to calculate the consumer price index and the core inflation index in a timely manner.

6-The current measurement figure is not compatible with the initiatives presented by the Central Bank regarding the industrial, agricultural, housing and real estate sectors, as well as its initiative to purchase in residential complexes.

Recommendations

1-Updating the basket of goods and services according to the Classification of Individual Consumption by Purpose (COICOP) for the year 2020, which represents the latest internationally applicable classification.

2-Finding a mechanism that allows updating expenditure items while adjusting the weights annually and working to update the base year according to crises or local and global economic developments.

3-Expand the coverage of price data on a larger scale to include all urban and rural areas.

4-Collecting data from more than one commercial place geographically distributed in each city covered by the survey.

5-Benefiting from collecting data on prices of goods and services through websites by relying on price aggregation software and integrating it into the program for calculating price indicators at various levels.

References

- [1] Saad Zaghloul Bashir, Some Practical Aspects of Calculating Weights and Pricing the Goods Part of Compiling the Consumer Price Index, Ministry of Planning, Central Statistical Organization, Baghdad 2004.
- [2] Abdul-Hussein Al-Zayni, Index Numbers, Higher Education Press, Baghdad, 1988.
- [3] General Authority for Statistics, Kingdom of Saudi Arabia
<https://www.stats.gov.sa/ar>
- [4] Ministry of Planning, Kurdistan Region Statistics Authority, the annual report of the consumer price index in the Kurdistan Region for the year 2019.
- [5] Price indices, Abu Dhabi Statistics Center
[https://www.scad.gov.ae/Release Documents](https://www.scad.gov.ae/ReleaseDocuments)
- [6] Mustafa Salman and others, Principles of Macroeconomics, Dar Al-Maysara for Printing, Publishing and Distribution, first edition, Jordan 2002
- [7] Akram Haddad and Mashhour Hanloul, Money and Banks: An Analytical and theoretical Introduction, Wael Publishing House, first edition, Amman 2005
- [8] Ashraf Samara, Guide to Price Statistics and Index Numbers, May / 2011
- [9] Commodity basket of the consumer price index for the 2012 base year, Ministry of Planning, Central Statistical Organization, Directorate of Index Numbers.
- [10] Issa Mohammad Al-Ghazali, Indices, a periodical series concerned with development issues in the Arab countries, the Arab Planning Institute, Kuwait, 19th issue - July 2003
- [11] Saad Zaghloul Bashir, Inflation in the Iraqi Economy for the Period 2003-2011, March / 2013
- [12] Mohmoud Saleh Al-Hadithi, The Role of Monetary Policy in Addressing Inflation for the Period 1960-1980, Master Thesis, Al-Mustansiriya University, College of Administration and Economics, 1988.
- [13] Saad Zaghloul Bashir, Some Practical Aspects of Calculating Weights and Pricing the Goods Part of Compiling the Consumer Price Index, Unpublished Research, Ministry of Planning, Central Statistical Organization, Baghdad 2004.
- [14] Report of indices numbers in Iraq for the year 2020, the Central Statistical Organization, Directorate of Index Numbers.
- [15] Report of the Consumer Price Index in Iraq for the month of December and January, 2016
- [16] Inflation in the Iraqi economy 1984, an unpublished study, the Ministry of Planning
- [17] Qusai Abboud Al-Jabri, Building a Standard Model for Analyzing the Effects of Supply Shock in the Iraqi Economy, PhD thesis, Al-Mustansiriya University, College of Administration and Economics, Baghdad 1995.
- [18] Najlah Shamooun Shlaymoon, Analysis of Inflation Costs and Its Impact on Living Standards in Iraq for the period 1990-2012, Master Thesis, College of Administration and Economics, Al-Mustansiriya University, 2015
- [19] The official website of the Ministry of Planning, Central Statistical Organization.
- [20] National Statistics Office, Algeria, 2021.
- [21] National Institute of Statistics, Tunisia, 2021
- [22] Central Bureau of Statistics, Syria, 2021
- [23] Central Statistics Administration, Lebanon, 2021
- [24] -Central Agency for Public Mobilization and Statistics, Egypt, 2021
- [25] High Commission for Planning, Morocco, 2021
- [26] Department of Statistics and Research / Department of Monetary and Financial Statistics

- [27] ILO/IMF/OECD/UNECE/Eurostat/The World Bank,2004.
- [28] Practical Guide to producing consumer price indices, United Nations,2009.
- [29] Consumer Indices Manual,Ilo,2004.
- [30] COVID 19 Community Mobility Reports.