Analysis The Factors Which Effect on the consumption of the Necessity goods After 2003 in Iraq

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ABSTRACT

The research aims to analyze the factors influencing consumer demand after 2003, to know the relative importance of each group of commodity totals in per capita consumption spending after 2003, and to measure the impact of the factors influencing the consumption function after 2003, assuming the existence of a set of economic variables, internal and external, Which had an impact on household consumption spending in Iraq after 2003.

The study concluded that an increase in oil prices by one unit increases household consumption spending by 0.04, and that an increase in population size by one unit increases household consumption spending by 0.2, and the impact of the Corona pandemic has a negative impact on household consumption spending, as it reduced it by 1.1 percent of spending. consumption on essential commodities, due to the tendency of household consumption to other commodities such as treatment, and an increase in the average per capita share by one unit leads to an increase in household consumption expenditure by 0.06

Keywords:

Introduction:

Consumer behavior is studied and analyzed by studying consumer demand and the factors affecting it, such as income, which determines the purchasing power of the consumer, as well as tastes, expectations, and prices of other commodities, whether they are alternative or complementary, as well as the size of the population, which is fixed in the short term, and in fact, the movement of consumers Between alternatives to commodities and according to what tastes bear is linked to a large extent with the factor of expectations, bearing in mind that short-term factors have the most prominent role in the fluctuations in consumer demand compared to long-term factors. internal and external

Research problem:

The research stems from a problem: that the changes that occurred in the incomes of consumers after 2003, which was represented by an increase in income, led to an imbalance in consumer spending between groups of basic commodities, in addition to the factors that affected consumer behavior towards consumption, which are represented by changes in prices Oil, price changes, population changes, as well as changes in the average per capita share

Research hypothesis:

The research stems from the hypothesis that there is a set of economic variables, both internal and external, that had an impact on household consumption spending in Iraq after 2003.

Search goal:

The research aims at the following:
1.   Analysis of factors affecting consumer demand after 2003.
2. Knowing the relative importance of each group of commodity aggregates in per capita consumption expenditure after 2003.
3. Analysis of the agreement elasticities for each group of commodity aggregates and knowledge of the relative importance of the components of the food group after 2003
4. Measuring the effect of factors affecting the consumption function after 2003.

Research importance:

This research seeks to shed light on the needs and desires that the consumer seeks to satisfy from the necessary commodities, especially foodstuffs, which are considered one of the most important necessities of life because they are linked to the health level and all other activities without which society cannot make any development, and the importance of consumer spending on food commodities, which It occupies a large percentage of spending, as it turns out through research that spending on foodstuffs is a very large percentage of the total spending, and therefore the analysis of consumer demand and consumer behavior is an important issue because it is the means that can reach us to the extent of the food needs necessary for the individual and society, and it is one of Important studies that can guide economic decision makers.

First: the relative importance of commodity totals according to consumer expenditure items

It is clear from the data in Table (1) that the relative importance of spending on the food and non-alcoholic beverages group has decreased from 46.84% in 2005 to 25.91% in 2018 despite the increase in the monetary value of spending on this group from 215.7 in 2005 to 585.65 in 2018 The reason for this may be due to the difference in the average per capita income and the change in tastes and consumption habits after 2003, which prompted individuals to direct spending to non-food groups, which affected the individual's consumption behavior. As for alcoholic beverages and tobacco, we find that the relative importance of spending for them decreased from 1.32. % in 2005 to 0.76% in 2018, as a result of the decrease in demand for this type of commodity aggregates and directing the increase in demand for other types of commodity aggregates.

As for the commodity group of clothes and shoes, its relative importance was almost constant during the period (2005-2014), but it increased in 2018 and reached a percentage of 8.12% after it was 6.95 for the year 2005.

Table (1)
The relative importance of expenditure items to the total expenditure for the years

	2018-2017		2014		2012		2007		2005		sequence
Average spending/total spending	Average household expenditure at market prices (thousand dinars/month	Average spending/total spending	Average household expenditure at market prices (thousand dinars/month	Average spending/total spending	Average household expenditure at market prices (thousand dinars/month	Average spending/total spending	Average household expenditure at market prices (thousand dinars/month	Average spending/total spending	Average household expenditure at market prices (thousand dinars/month	The Group	
25.91%	585.65	28.44%	557.7	31.87%	530.3	35.60%	356.3	46.84%	215.7	Food and non-alcoholic beverages	1

%	value	%	value	%	value	%	value	%	value	name	No.
0.76%	17.1	0.65%	12.8	0.63%	10.5	0.69%	6.9	1.32%	6.1	Spirits and tobacco	2
8.12%	183.6	7.44%	145.8	6.49%	108	6.67%	66.8	6.95%	32	Clothes and shoes	3
21.43%	484.4	22.33%	437.8	23.51%	391.2	28.97%	290	7.49%	34.5	Living	4
6.93%	156.7	6.80%	133.4	6.62%	110.1	6.20%	62.1	9.62%	44.3	Furniture	5
5.14%	116.1	4.71%	92.4	4.13%	68.7	2.12%	21.2	1.78%	8.2	the health	6
17.56%	397	16.60%	325.5	15.27%	254	10.45%	104.6	18.55%	85.4	Transport	7
3.98%	90	3.57%	70	3.01%	50	2.53%	25.3	2.06%	9.5	Telecommunications	8
2.26%	51.1	2.11%	41.4	1.91%	31.7	1.45%	14.5	0.85%	3.9	Leisure, leisure and culture	9
0.83%	18.8	0.83%	16.3	0.83%	13.8	0.85%	8.5	0.54%	2.5	education	10
1.93%	43.6	1.68%	32.9	1.33%	22.2	1.12%	11.2	0.98%	4.5	Restaurants and hotels	11
5.15%	116.3	4.83%	94.8	4.41%	73.3	3.35%	33.5	3.02%	13.9	Other miscellaneous goods and services	12
	2260.35		1960.8		1663.8		1000.9		460.5	total spending	

Source: Republic of Iraq, Ministry of Planning, Central Statistical Organization, Department of National Accounts, different years.

As for the relative importance of spending on the housing and furniture group, it is clear that there is an increase in the relative importance of the housing group, as it reached 28.97 in 2007, which is the highest percentage during the study period and the following years. Housing as a result of population growth, which led to an increase in the number of families, which increased the need for housing. In addition, the increase in the average per capita income led to an increase in demand for this commodity group, which led to an increase in spending on it. As for the relative importance of spending on the furniture group, we note that there is a percentage In spending on this type of commodities, as it ranged from 16.20% to 6.80% between the years (2007-2018).

As for the relative importance of spending on health, it increased from (1.78%) in 2005 to 5.14% in 2018, and we note that the

importance decreased in 2005 to (5.14%) in 2018, and we note a decrease in the relative importance of spending on this group, since most health services in Iraq are provided by institutions The reason for the increase in the percentage to (5.14%) in 2018 is due to the weakness in health services provided by the state to individuals, which prompted individuals to direct part of their expenditures towards this group, which has become mostly provided by health institutions operating by the private sector that provide health services at high prices.

As for the relative importance of the transportation group, we find that it was fluctuating between high and low, as its rate was (18.55%). The reason for reaching these percentages of spending may be due to the increase in individual spending and their demand to buy cars resulting from an improvement in the average per capita income. The communications group came to constitute a continuous increase and a constant percentage in spending on it, as the relative importance of this group reached (2.06%) in 2005 and reached (3.98%) in 2018. This increase came as a result of the rise of the Iraqi market and the entry of new types of communication networks and communication devices, and thus it became These devices

constitute an important need and demand in the consumer life of most members of Iraqi society. As for the relative importance of the education group, we note that the percentages of contribution to this group were fluctuating, because education services in Iraq are provided by the state, so the expenditure directed to this group by individuals is small and this is what This was reflected in the low percentage of contributions to expenditure items.

Second: The relative contribution of the food and non-spiritual beverages group to the total expenditure on the main consumer groups in Iraq for the years (2005-2018):
We note from Table (2) that the expenditure on vegetables came at the forefront of the expenditure on the group of foodstuffs and alcoholic beverages, as the percentage of expenditure on them amounted to (6.7%), with a percentage contribution to the total expenditure, respectively, which amounted to (3.11%) in 2005, and reached (1.14%) in 2018. Meat ranked second in spending, with an average contribution of (1.72%) in the foodstuff group, with contribution rates of (0.33%) in 2005 and (1.13%) in 2018, with an average contribution for the period amounting to (1.15%).

Table (2)

The relative contribution of the food and non-spiritual beverages group to the total expenditure on the main consumer groups in Iraq for the years (2005-2018)

average duration	Percentage of expenditure on foodstuffs / total expenditure 2017-2018	Percentage of expenditure on foodstuffs / total expenditure 2014	Percentage of expenditure on foodstuffs / total expenditure 2012	Percentage of expenditure on foodstuffs / total expenditure 2007%	Percentage of expenditure on foodstuffs / total expenditure 2005%	Spending %	Food and non-alcoholic beverages	sequence
1.33%	0.89%	0.93%	0.98%	1.46%	2.41%	5.2	Cereal	1
1.15%	1.13%	1.18%	1.24%	1.85%	0.33%	6.6	Meat	2
0.16%	0.15%	0.16%	0.17%	0.25%	0.04%	0.9	Fish	3

0.95%	0.63%	0.66%	0.70%	1.04%	1.72%	3.7	Dairy and eggs	4
0.38%	0.26%	0.27%	0.28%	0.42%	0.70%	1.5	Oils	5
0.74%	0.50%	0.52%	0.55%	0.81%	1.34%	2.9	fruits	6
1.72%	1.14%	1.20%	1.26%	1.88%	3.11%	6.7	Vegetables	7
0.59%	0.39%	0.41%	0.43%	0.65%	1.07%	2.3	Sugar and candies	8
0.13%	0.09%	0.09%	0.09%	0.14%	0.23%	0.5	coffee and tea	9
0.13%	0.09%	0.09%	0.09%	0.14%	0.23%	0.5	Other food products	10
0.26%	0.17%	0.18%	0.19%	0.28%	0.46%	1	Mineral water, soft drinks and juices	11
	5.43%	5.70%	6.00%	8.93%	11.64%	31.8	Total Spending %	

Source: Republic of Iraq, Ministry of Planning, Central Statistical Organization, Department of National Accounts, different years.

Cereals came in third place, as the percentage of expenditure on them reached (5.2%) in 2005, with a contribution rate of (2.41%) in 2005, reaching (0.89%) in 2018. With the rise in incomes and the improvement of their standard of living, spending on milk and eggs came in fourth place, reaching (3.7%), with a percentage contribution to spending on foodstuffs (1.72%) in 2005, reaching (0.63%) in 2018, with an average contribution of about Its percentage is (0.95%).

The percentage of spending on fruits represented the fourth rank, as it reached (2.9%) in 2005, and reached (0.50%) in 2018, with an average contribution of (0.74%). On foodstuffs, it reached (1.07%) in 2005, and reached (0.39%) in 2018, with an average contribution rate of (0.59%). Then, spending on oils ranked sixth if the percentage of spending was (1.5%), with a contribution rate that ranged between (0.70%) in 2005. to (0.26%) in 2018, with an average contribution of (0.38%). Then came the expenditure percentages for mineral water, then coffee, tea and other food products.

From this, the difference between the average expenditure of households on the food groups that make up foodstuffs and non-spiritual drinks is clear, as we find that there are groups that occupied a greater relative importance

than others, such as vegetables, meat, and grains, and groups that have decreased relative importance to them from grains, fish, oils, fruits, sugar, coffee, tea, and mineral water, and this indicates Some groups increased the percentage of their income towards consumer spending, while others decreased, due to the amount of income directed towards them. This may be attributed to the consumer obtaining greater levels of satisfaction from these commodities, so spending on them decreased and for the purpose of obtaining satisfaction is better than those commodities for which the amount of spending increased. and the income directed to it.

Third: Income Elasticity of Consumer Groups:

The spending elasticity of demand for consumer groups is an important indicator of changes that occur in consumer spending and behavior, in addition to being an important factor in estimating the expected changes in demand for consumer groups.

We note from Table No. (3) that the sum of food and non-spiritual drinks, i.e. spending, i.e. spending on food commodities, its cell elasticity ranged between (0.72, 0.30), i.e. it is less than the correct one, which is in line with what was proposed by the economic theory that spending on this type of commodities is increasing With the increase in income, but at a lower rate than the increase in income. If we notice the average household income for the years 2005-2018, we find that it is increasing, in addition to that the average per capita share of national income is also increasing, as indicated in Table (4) during the years (2005-2018)

Table (3)
The Income elasticity of the Iraqi families' demand for the main totals of goods and services for the period(2018-2007)

Average Duration of Income % Elasticities	Income elasticity for the year 2017-2018	Income elasticity for the year 2014	Income elasticity for the year 2012	Income elasticity for the year 2007	Major aggregates	Sequence
0.49	0.35	0.30	0.72	0.58	Food and non-alcoholic beverages	1
1.09	2.2	1.26	0.77	0.12	Spirits and tobacco	2
1.41	1.7	2.01	0.91	0.97	Clothes and shoes	3
2.13	0.71	0.68	0.52	6.62	Housing, water, gas and electricity	4
0.97	1.17	1.21	1.14	0.36	Furniture, household fixtures and maintenance	5
2.11	1.72	1.98	3.31	1.41	the health	6
1.35	1.48	1.62	2.11	0.2	Transport	7
1.79	1.92	2.30	1.44	1.48	Telecommunications	8
1.88	1.57	1.76	1.75	2.45	Leisure, leisure and culture	9
1.28	1.03	1.04	0.92	2.13	education	10

1.94	**2.19**	**2.77**	**1.45**	**1.34**	**Restaurants and hotels**	**11**
1.56	**1.53**	**1.68**	**1.76**	**1.26**	**Other miscellaneous goods and services**	**12**
	17.61	**18.61**	**16.80**	**18.92**	**The sum of the income elasticities**	
	-5.37	**10.77**	**-11.21**	**0**	**% change in income elasticity**	

Source: Republic of Iraq, Ministry of Planning, Central Statistical Organization, Department of National Accounts, different years.

The average elasticity for the years (2007-2018) was (0.49). As for beverages, spirits, and tobacco, we note that the values of elasticity for them fluctuated between (0.12-2.2), which indicates that they became in the years (2014-2018) with an elastic coefficient greater than one. It means that it was close to luxury goods, which means that the percentage of spending on them was greater than the change in income.

If we go back to Table (1), we find that the average household spending on this group of commodities is also increasing, although its relative importance decreased from (32%) in 2005 to (0.63%) in 2012. As for the clothing and shoes group, we also find that it is in the years (2014-2018) The values of flexibility indicated that it is among the luxury goods, knowing that it is classified within the economic theory as essential goods.) in the year (2005) to (7.44%) in 2014, and the average flexibility for it was (1.46%). As for the flexibility and spending on the housing group, we find that in 2007 its value was (6.62%), which indicates that it is classified as luxury goods. From 2012 to 2018, we find that the elasticity values fell within the classification of essential goods, with an average elasticity of (2.13%).

The values of flexibility for the furniture group indicate its fluctuation between being necessary and luxury needs, and given that the understanding of the flexibility coefficient in the years 2012-2018 was greater than the correct one, and the reason for this is due to the high average per capita income during this period that prompted individuals to direct a large part of their income to purchase this kind of goods.

As for health, transportation, education, communications, and health, the coefficients of their elasticity were greater than the correct one, because the increase in income prompted individuals to go to the private sector to obtain better health services. The spending on this type of aggregate was greater than the increase in income, and the average elasticity for it was (2.11%). The same analysis applies to the transportation group, as spending on it increased more than the increase in income, and its flexibility coefficients were greater than one for the years (2012-2018) with an average flexibility of (1.35%). kind of goods.

With regard to the education group also, the spending flexibility coefficients were greater than one for the years (2012-2018), with an average flexibility of (1.28%), due to the expansion that took place in non-governmental education run by the private sector, which opened many schools and universities. Families for their children to receive education in private schools and universities.

We also note that the communications group had values of elasticity greater than one for the years (2007-2018), indicating that it fell within the classification of luxury goods due to the increase that occurred in the average per capita income, so the percentage of spending on them was greater than the percentage of change in vinegar, and the average elasticity of spending for them reached (1.79%).

As for the rest of the groups, we note that all of them had elastic values greater than one, indicating that they are within the group of luxury goods, as spending on them increases by a greater percentage than the increase in income, and the average elasticity for them was respectively (1.88%, 1.94%, 1.56%.(% .(

Fourth: Analysis of factors affecting consumer spending for commodity groups

1. Oil prices:

It is clear from Table (4), we find that oil prices fluctuated between rise and fall, and this is reflected in the annual rate of change, which appeared negative in the years (2013-2016), in which oil prices began to decline from (102.26) dollars in 2013 to (36.098) dollars in 2013. 2016 The reason for this is attributed to supply factors with the increase in US oil production and the change in OPEC policies with the shift of some oil-producing countries that were competing for the US markets to compete for the Asian markets, which forced the producers to reduce oil prices

The decrease in oil prices during the aforementioned period was reflected in the decrease in the prices of commodities, especially the essential ones, due to the expectations of the economic slowdown that prevailed in the world during that period.

On the other hand, we note that there are some years in which the price of a barrel of oil increased from 2010-2013, with an annual rate of change of (27.357%) to (-3.537%), which became negative after 2010 until (2017) and then returned. Oil prices to give a negative annual rate of change**.**

Table(4)

Population, average per capita share, oil prices, price index, and annual inflation rate during the period (2004-2021)

annual inflation % rates	General record Basis 2012 =100	annual rate of change %	Oil price (dollars)	annual rate of change %	Average per capita national income / in dinars	annual rate of change %	Population/million people	the years
26.8	26	—	31.28	—	1964317	—	26313838	2004
36.9	35.6	45.97	45.66	35.85	2668619	2.31	26922279	2005
53.1	54.5	18.70	54.2	26.04	3363488	1.95	27448124	2006
31	71.4	22.44	66.36	13.35	3812513	1.69	27911242	2007
12.6	80.4	32.50	87.93	41.90	5409835	1.70	28385739	2008
8.5	87.2	(32.45)	59.4	(21.62)	4240225	2.07	28973157	2009
2.4	89.3	27.36	75.65	18.99	5045449	2.65	29741977	2010
5.6	94.3	38.86	105.05	29.06	6511678	3.31	30725305	2011
6	100	0.91	106.01	14.69	7468023	3.79	31890012	2012
2.4	102.4	(3.54)	102.26	4.16	7778671	3.97	33157061	2013
-0.8	101.6		91.63	(2.23)	7605334		3441194	201

		(10.40)				3.78	9	4
2.4	104	(51.18)	44.73	(32.22)	5154561	3.37	35572269	2015
0.1	104.1	(19.30)	36.098	(0.93)	5106493	2.92	36610632	2016
0.2	104.3	36.61	49.312	8.58	5544451	2.57	37552789	2017
0.4	104.7	33.03	65.6	17.09	6491970	2.35	38433604	2018
-0.2	104.5	(6.92)	61.06	(0.37)	6467657	2.28	39309789	2019
0.6	105.1	(37.09)	38.41	(20.43)	5146086	2.32	40222503	2020
6.1	111.5	78.04	68.386	5.78	5443347	2.38	41179351	2021
9.84		10.21		8.10		2.67		متوسط المدة
	8.4%		4.4%		5.8%		2.5%	النمو المركب%

Source:
1. **Population: The World Bank.**
2. **Oil prices and average per capita income: Republic of Iraq, Ministry of Planning, Central Statistical Organization, National Accounts Department, different years.**
3. **Consumer Price Index: Central Bank of Iraq, official website, annual reports, different years.**
4. **The annual growth rate and the compound growth rate: the researcher's work.**

The rise in oil prices was also reflected in its impact on consumer behavior, as this rise led to a rise in the costs of production and imported services in Iraq (Al-amlah, 2022:15), especially consumer goods, which constitute more than 30% of total imports, which was accompanied by higher prices. Consumer Statistics often indicate that grain prices have risen to more than 30%, which has affected the consumer, most of whom suffer from limited income. As for the compound growth rate of oil prices, it amounted to (10.209), and from here we note that these shocks in oil prices reflected their impact on both sides of supply and demand

2. Consumer Price Index:

The consumer price index is an important main variable that affects the demand function. It is the independent variable affecting the dependent variable, which is the quantity demanded within the demand function. Whenever there is a change in prices, for example, towards an increase, the individual consumer resorts to reducing his consumption, knowing that the amount of reduction in consumption depends on the importance of In addition, the consumer's behavior will push him to search for alternative commodities, or he may dispense with the consumption of some commodities whose price has increased. The rise or fall in prices will reflect its impact on the purchasing power and then the quantity demanded. Consumer behavior towards changing prices.

Table (4) indicates that the consumer price index began to rise for the years (2004-2021), based on the year 2021, as it increased from (26) years (2004) to (11.5) in 2021, at a rate of (8.4) compound growth rate. %) This indicates that the price hike was reflected in its impact on consumer spending for some commodity groups each year, and the reason for this is due to the increase in government expenditures (Al-Ziyara, 2014: 20)

3. **Population**:

Table (4) shows the population growth during the period 2004-2021, as we notice that the annual rate of change is increasing, with a decrease in the annual rates of change for the years (2006-2008). The reason is due to the instability of the security situation during these years (Hussein, 2020: 212), but it rose again during the years. We also note that this percentage was close to the compound annual growth rate, which reached (2.7%) during the period.

This increase in the population reflected its impact on the increase in demand for food and other commodities as a result of the improvement in the level of income and the change in tastes and preferences of the consumer as well as the change in consumer behavior in consumption as a result of the nature of simulation and imitation due to the entry of the Iraqi market for new types of commodities through import operations which is the means Which reflects its impact on the change in consumer behavior in its consumption.

The size of the family and the age structure is also an influencing factor in consumer behavior. The greater the number of family members, the higher their spending, knowing that the family's needs for various consumer goods vary according to age, environment, and income, which leads to a difference in their tendency to consume.

4. **Average per capita income:**

Income is one of the most important components of the demand function as an indicator of the purchasing power of the individual. From the observation of Table No. (4), we find that the average per capita income fluctuated between rise and fall, and this is reflected in the annual rate of change, especially in the years 2009, 2014 and (2015-2020) due to the exposure of the Iraqi economy to external shocks It was represented by the change in oil prices as well as the security instability and economic instability that led to the failure to approve the budget for some years, as is the case in 2019, which negatively affected the average per capita income, reflecting its impact on the change in domestic demand and consumer spending per capita on some types of commodity aggregates, especially essential commodities. The income elasticity of demand is the important measure for measuring the relative change in the required quantity of these commodities when a relative change in income occurs, as well as the presence of other influences that led to a change in consumer spending, which is the price levels as an indicator of the impact on the strength of the local currency and the real purchasing power. From the observation of the table, we find that the rate Compound growth amounted to (5.8%), compared to the compound growth rate of prices, which amounted to (8.4%), and this increase was reflected in the average per capita income.

5. **Corona pandemic:**

The Corona pandemic was negatively reflected in its impact on prices in Iraq (Jubeir, 2020: 57), including the prices of food and basic commodities, as a result of the lack of demand that accompanied pessimistic expectations about the deterioration of the global economy due to this epidemic. Oil prices, which affected oil revenues in Iraq and reflected their impact on the Iraqi budget, and this epidemic had an impact on consumer behavior in Iraq, so the increase in demand became directed towards health matters by individuals to confront the epidemic, so the demand for other basic commodities decreased as a result of directing a percentage From large income towards health requirements.

Fifth: Analysis of the annual rate of change of average consumer spending on commodity aggregates

Table (5)
The relative importance of expenditure items to total expenditure during the period (2005-2018)

| 2018-2017 | | 2014 | | 2012 | | 2007 | | 2005 | | the group | sequence |
Average spending/total spending	Average household expenditure at market prices (thousand (dinars/month	Average spending/total spending	Average household expenditure at market prices (thousand (dinars/month	Average spending/total spending	Average household expenditure at market prices (thousand (dinars/month	Average spending/total spending	Average household expenditure at market prices (thousand (dinars/month	Average spending/total spending	Average household expenditure at market prices (thousand (dinars/month		
25.91%	585.65	28.44%	557.7	31.87%	530.3	35.60%	356.3	46.84%	215.7	Food and non-alcoholic beverages	1
0.76%	17.1	0.65%	12.8	0.63%	10.5	0.69%	6.9	1.32%	6.1	Spirits and tobacco	2
8.12%	183.6	7.44%	145.8	6.49%	108	6.67%	66.8	6.95%	32	Clothes and shoes	3
21.43%	484.4	22.33%	437.8	23.51%	391.2	28.97%	290	7.49%	34.5	Living	4
6.93%	156.7	6.80%	133.4	6.62%	110.1	6.20%	62.1	9.62%	44.3	Furniture	5
5.14%	116.1	4.71%	92.4	4.13%	68.7	2.12%	21.2	1.78%	8.2	the health	6
17.56%	397	16.60%	325.5	15.27%	254	10.45%	104.6	18.55%	85.4	Transport	7
3.98%	90	3.57%	70	3.01%	50	2.53%	25.3	2.06%	9.5	Telecommunications	8
2.26%	51.1	2.11%	41.4	1.91%	31.7	1.45%	14.5	0.85%	3.9	Leisure, leisure and culture	9
0.83%	18.8	0.83%	16.3	0.83%	13.8	0.85%	8.5	0.54%	2.5	education	10
1.93%	43.6	1.68%	32.9	1.33%	22.2	1.12%	11.2	0.98%	4.5	Restaurants and hotels	11
5.15%	116.3	4.83%	94.8	4.41%	73.3	3.35%	33.5	3.02%	13.9	Other miscellaneous goods and services	12
	2260.35		1960.8		1663.8		1000.9		460.5	total spending	

Source: Ministry of Planning, Statistical Group, different years 2004-2020

Contribution rates: the work of the researcher

Table No. (6) indicates that the rate of change for the food and alcoholic beverages group decreased from (65.2%) in 2007 to (5%) in 2018, which means that families began directing their spending towards other commodities with the increase in living standards and the increase in average per capita income This appears clearly from the extraneous elasticities of some types of commodities on which spending has increased by a percentage greater than the increase in income, as is the case in the group of alcoholic beverages, tobacco, clothes and shoes, the group of health, transportation, communications, entertainment and education, as well as other goods and services, as indicated in Table (1).

We also note from Table No. (6) that the rate of change has taken an increasing percentage for the group of alcoholic beverages and tobacco, as the percentage of change increased from (13.1%) in 2007 to (52.2%) in 2012 and (33.6%) in 2018. This is due to the increase in the average share Per capita income, as we note that the annual rate of change of the average per capita income for the years was (13.35%), (14.69) and (7.09), respectively. kind of goods.

Table(6)
Percentages of annual change of average household expenditure at market prices for consumer goods groups in Iraq for the period
(2005-2018)

Sequence	2018-2017	2014	2012	2007	2005	
	Average household expenditure at market prices (thousand dinars/mont (h	Average household expenditure at market prices (thousand dinars/mont (h	Average household expenditure at market prices (thousand dinars/mont (h	Average household expenditure at market prices (thousand dinars/mont (h	Average household expenditure at market prices (thousand dinars/mont (h	the group
1	585.65	557.7	530.3	356.3	215.7	Food and non-alcoholic beverages
	5.0%	5.2%	48.8%	65.2%	-	rate of change %
2	17.1	12.8	10.5	6.9	6.1	Spirits and tobacco
	33.6%	21.9%	52.2%	13.1%	-	rate of change %
3	183.6	145.8	108	66.8	32	Clothes and shoes
	25.9%	35.0%	61.7%	108.8%	-	rate of change %
4	484.4	437.8	391.2	290	34.5	Living
	10.6%	11.9%	34.9%	740.6%	-	rate of change %
5	156.7	133.4	110.1	62.1	44.3	Furniture
	17.5%	21.2%	77.3%	40.2%	-	rate of change %
6	116.1	92.4	68.7	21.2	8.2	the health
	25.6%	34.5%	224.1%	158.5%	-	rate of change %
7	397	325.5	254	104.6	85.4	Transport
	22.0%	28.1%	142.8%	22.5%	-	rate of change %
8	90	70	50	25.3	9.5	Telecommunications
	28.6%	40.0%	97.6%	166.3%	-	rate of change %
9	51.1	41.4	31.7	14.5	3.9	Leisure, leisure and culture
	23.4%	30.6%	118.6%	271.8%	-	rate of change %
10	18.8	16.3	13.8	8.5	2.5	education
	15.3%	18.1%	62.4%	240.0%	-	rate of change %
11	43.6	32.9	22.2	11.2	4.5	Restaurants and hotels
	32.5%	48.2%	98.2%	148.9%	-	rate of change %
12	116.3	94.8	73.3	33.5	13.9	Other miscellaneous goods and services
	22.7%	29.3%	118.8%	141.0%	-	rate of change %

Source: The researcher's work based on the previous tables.

With regard to clothes and shoes, Table No. (6) indicates that the rate of change of the average household expenditure on this group was (108.8%) in 2017 and reached (25.9%) in 2018. The reason is also due to the high standards of living and the desire of individuals to satisfy their desires with this commodities, so consumer spending on them increased.

As for the housing group, we find that the annual rate of change for it was (740.6%) in 2017 and reached (10.6%) in 2018, despite the increase in average household spending on this group, as shown in Table No. (6), because of the high levels of rents to be inhabited by the private sector.

We also note that the rate of change for the furniture group reached the highest rate of change in the year (2012), then the rate of change decreased to (17.5%) in 2018, with the increase in average per capita income during the aforementioned years, families began to direct their spending towards other groups of commodities for the purpose of satisfying their needs.

With regard to the health group, we note from table (6) that the highest rate of change reached (224.1%) in 2012, because families began to tend to obtain health services from the private sector, which seemed to the consumer to be better than the health services provided by the public sector. Then the rate of change reached (25.6%) in 2018.

As for the transportation group, we note that the rate of change has increased from (104.6%) in 2017 to (397) in 2018.
This is due to the opening of car import facilities, which shifted a large proportion of consumer spending towards the demand for this type of commodity, as well as improving the average per capita income.

We also note that the telecommunications group witnessed a growth in its rates of change, as the rate of change increased from (25.3%) in 2007 to (90%) in 2018, and this is due to the huge expansion that took place in spending on communication services of all kinds.

Also, the entertainment and leisure group had a share in directing consumer spending with the improvement of living standards and income. We find that the rate of change for it increased from (14.5%) in 2017 to (51.1%) in 2018. This is due to the desire of individuals to increase spending on this type of commodity aggregates to satisfy their desires.

Education, too, witnessed an increase in the rate of change of spending on it, and its percentage was the rate of change of spending on it. The rate of change was (24%) in 2017 and reached (15.3%) in 2018.

As for the restaurants and hotels group, the rate of change for it in 2017 was (48.9%), and it reached (32.5%) in 2018, and for other goods and services, the rate of change for it was (141.0%) in 2017, and it reached (22.7%) in 2018.

Sixth: The impact of some economic variables on consumer spending in Iraq after 2003:

In principle, the standard model equation used in the application of the standard model is clarified **(ARDL)**:

Y=f (x1, x2, x3, x4, x4)

whereas :
1. Y = household consumption expenditure
2. X1 = population
3. X2= Oil price
4. X3= Dummy variable (corona)
5. X4= Per capita average
6. X5= Consumer price index

1. **The stillness test (Phillips-Pyron):** The Phillips-Pyron test is used to measure the stillness of economic variables
2. , especially when the time series has few observations, and the results are as follows**:**

Table (7)
Phelps-Pyron test

UNIT ROOT TEST RESULTS TABLE (PP) Null Hypothesis: the variable has a unit root		Y	X1	X2	X3	X4	X5
At Level							
With Constant	t-Statistic	-3.2920	0.9386	-2.5966	-0.4032	-2.0070	-9.0710
	Prob.	*0.0229*	*0.9949*	*0.1032*	*0.8978*	*0.2826*	*0.0000*
		**	n0	n0	n0	n0	***
With Constant & Trend	t-Statistic	-1.3330	-2.8871	-2.5418	-1.4521	-1.9785	-2.8635
	Prob.	*0.8627*	*0.1786*	*0.3075*	*0.8269*	*0.5924*	*0.1859*
		n0	n0	n0	n0	n0	n0
Without Constant & Trend	t-Statistic	2.3414	7.8250	-0.1178	0.0000	0.5223	1.3645
	Prob.	*0.9943*	*1.0000*	*0.6360*	*0.6759*	*0.8237*	*0.9539*
		n0	n0	n0	n0	n0	n0
At First Difference		d(Y)	d(X1)	d(X2)	d(X3)	d(X4)	d(X5)
With Constant	t-Statistic	-7.9412	-11.7057	-5.7764	-5.8315	-5.8894	-7.3528
	Prob.	*0.0000*	*0.0000*	*0.0000*	*0.0000*	*0.0000*	*0.0000*
		***	***	***	***	***	***
With Constant & Trend	t-Statistic	-8.8365	-13.6074	-5.6684	-6.1970	-5.9647	-10.1908
	Prob.	*0.0000*	*0.0000*	*0.0003*	*0.0001*	*0.0001*	*0.0000*
		***	***	***	***	***	***
Without Constant & Trend	t-Statistic	-5.8550	-6.3971	-5.8185	-5.7446	-5.7446	-6.2422
	Prob.	*0.0000*	*0.0000*	*0.0000*	*0.0000*	*0.0000*	*0.0000*
		***	***	***	***	***	***

Source: The researcher's work based on the outputs of the E-Views11 program.

It is clear from Table (7) that all the variables were not static at the level and became static at the difference, and thus the Automatically Distributed Deceleration (ARDL) methodology will be used, since this methodology is used if the variables are static at the first difference, the level, or a mixture between them.

3. Standard model safety test:

The safety test of the standard model is considered one of the primitive tests before entering into the short and long-term relationships in order to know the safety of the model from false regression in order to reach real results, as the presence of a false deviation in the model indicates that the results are not valid and the model is unacceptable, Table (8)) shows the results of the integrity of the model as follows:

Table(8)
safety measurements model

safety measurements model			
R-squared	0.507030	**Durbin-Watson stat**	2.029418
F-statistic	7.842465	**Prob (F-statistic)**	0.000000

Source: The researcher's work based on the outputs of the E-Views11 program. It is clear from Table (8) the results of testing the integrity of the standard model, as the results show us the high value of the R-squared coefficient of determination () which amounted to (0.507030). 50%, and that 50% of the changes that induce household consumption spending are the result of other factors not found in the model.

The arrival of the value of Durbin-Wootson (D-W) amounted to (2.029418) indicates that there is no problem of autocorrelation and that the probability (F) amounted to (0.000000), which is very high and indicates that the model is acceptable.

4. Cointegration test:

The co-integration test means that the variables in the standard model are integrated with each other, and the co-integration test in the model shows us the linear co-integration relationship at a significant level of 5%, by comparing the (F-statistic) value with the upper value and the lower value at a significant level 5%, and the presence of linear cointegration leads us to know the long-term effect between the dependent variable and the independent variables, and table (9) shows us

the results of nonlinear cointegration as follows:

Table (9)
Limits test for cointegration

	ARDL Bounds Test	
Test Statistic	**Value**	**K**
F-statistic	21.08459	5
Critical Value Bounds		
Significance	**I0 Bound**	**I1 Bound**
5%	2.39	3.38

Source: The researcher's work based on the outputs of the E-Views11 program.

Table (9) shows us the test of the limits represented by the minimum (I0 Bound) and the upper limit (I1 Bound), as the test results show that there is a linear cointegration relationship between the independent variables and the dependent variable, and accordingly we accept the alternative hypothesis, which states that there is a cointegration relationship Linear, by relying on the value of (F) which was greater than the upper and lower limits of the parameter at a significant level of 5%, as its value amounted to (21.08459), and the economic explanation for the existence of a linear co-integration that corresponds to the economic reality on the one hand and the reality of the Iraqi economy on the other hand As oil prices, the Corona pandemic, population growth, inflation, and the average per capita share are closely related to household expenditure for consumption.

5. **Error Correction Model and Long-Term Parameter Measurement:**

The error correction model is considered one of the most important tests in the standard model, and the error correction model includes long-term parameters, which is the next step after the existence of co-integration. A significant level of less than 5%, as its probability reached (0.0000), meaning that the imbalances that occur in family consumption spending in the short term can be modified or corrected by 100% in the long term, knowing that the error correction coefficient was negative and significant, meaning that it is identical to the items of the correction coefficient The error, Table (10) also shows the long-term parameters of the economic

variables affecting household consumption expenditure, and the results are as follows:

Table (10)
Error correction and measurement parameters in the long run

Variable	Coefficient	Prob.
CointEq(-1)	-1.024922	0.0000
Variable	**Coefficient**	**Prob.**
X1	0.207789	0.0375
X2	0.004022	0.0983
X3	-1.108217	0.0501
X4	0.069181	0.0089
X5	0.033762	0.0393

Source: The researcher's work based on the outputs of the E-Views11 program. An increase in population size by one unit leads to an increase in household consumption expenditure by 0.2 at a significant level of 5%.

a. An increase in oil prices by one unit leads to an increase in household consumption expenditure by 0.04 at a significant level of 5%.

b. The Corona pandemic affected household consumption spending, as it reduced it by 1.1, at a significant level of 5%.

c. An increase in the average per capita share by one unit leads to an increase in household consumption expenditure by 0.06 at a significant level of 5%.

d. An increase in the consumer price index by one unit leads to an increase in household consumption expenditure by 0.03 at a significant level of 5%, But this does not coincide with economic theory.

From the foregoing, it is clear that all variables had a positive impact on household consumption spending, with the exception of the Corona pandemic, which negatively affected household consumption spending

6. **Diagnostic tests:**

A set of standard tests have been conducted to judge the suitability of the model used in measuring the estimated elasticities in the long run, as shown in Table (11).

Table (11)
Diagnostic tests

test name	Prob
ARCH	0.42110
Correlation LM Test	0.71200
Jarque- Bera	0.11590

Source: The researcher's work based on the outputs of the E-Views11 program.

It is clear from Table (11) the probability of each of the test results of the homogeneity stability problem, the autocorrelation problem, and the problem of normal distribution of the residuals, which shows the quality of the standard model and the problem of false regression, and the probability of all diagnostic tests shows that it was greater than 5%, and therefore there are no problems in the model our.

Results:
1. The existence of a cointegration relationship between economic variables (consumer price index, population size, average per capita income, oil prices, and the Corona epidemic) and household consumption spending.
2. An increase in population size by one unit increases household consumption expenditure by 0.2 at a significant level of 5%.
3. An increase in oil prices by one unit increased household consumption expenditure by 0.04 at a significant level of 5%.
4. The impact of the Corona pandemic on household consumption spending negatively, as it reduced it by 1.1%, at a significant level of 5%, as a result of most families tending to spend on other commodities such as treatment.
5. An increase in the average per capita share by one unit leads to an increase in household consumption expenditure by 0.06, with a significant rate of 5%.
6. An increase in the consumer price index by one unit leads to an increase in household consumption expenditure by 0.03 at a significant level of 5%, but this does not match the economic theory.

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