THE IMPACT OF THE MONETARY VALUE OF THE BASKET OF GOODS IN THE ECONOMY OF LONDRINA/PR – BRAZIL

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Abstract

The 2017's super crop harvested in Brazil helped preponderantly to maintain the inflation rate under control. It allowed the inflation rate to reach a historical low level of 2.95% in the year, even below the 3% target set by the Central Bank of Brazil. This performance allowed: a) the release of income for the consumption of a distinct range of products that stimulated the economy, b) a drastic reduction in the basic interest rate, resulting in benefits for both the consumer and the productive sector, and c) to help the government by raising tax revenues and also by inhibiting the fiscal deficit growth. This research aimed at identifying, in terms of monetary value, how much was the liberation provided by the reduction of the value of the national basket of goods in the city of Londrina in 2017. It was found that it reached the amount of R\$ 440,290 million (US\$ 137,788 million) due to an average reduction of 23% in the cost of the basket of goods, also called basic basket or basic food basket, compared to the previous year.

Keywords: inflation, basket of goods, monetary value liberation, Londrina, food price

1. INTRODUCTION

Since the implementation of the Real Plan in 1994, it was the first time that the food and beverage group showed deflation in a period of one year in Brazil. This statement is based on the results released by the Brazilian Institute of Geography and Statistics - IBGE. According to this research institute, from the nine groups that make up the Extended National Consumer Price Index (IPCA) and the National Consumer Price Index (INPC), food and beverage accumulated a 1.87% drop in the IPCA. This fall was even higher in the INPC, a drop of 1.93% in 2017. Therefore, the IPCA ended the year at 2.95% and the INPC at 2.07%, the lowest indexes in 9 years (IBGE, 2018).

The food group inflation causes negative repercussion, as it forces families to rearrange the household budget. It usually results in a worse food intake, both in quantity and quality. It especially reaches economically vulnerable social groups as well as countries in development, where the food group inflation is perceived as high and volatile by numerous authors, and has been a source of constant studies.

One of these studies is the one where Bhattacharya et all (2017) have proposed an investigation into the influence of monetary policies on stabilizing food prices. Another one is from Sekhar et al. (2017). They studied the paths of food inflation in India, a country that belongs to the emergent group, similarly to Brazil, and concluded that from 2006 to 2015 none of the commodities had a uniform inflationary increase, therefore this research corroborates with the idea of volatility in food prices.

In the same way, Furceri et all (2015) had the household inflation as object of study, although their study was made in a worldwide context. It compared the oscillations in the price of food and their impact in several countries according to what could be seen in their native country, the United States.

This research drew attention to the fact that, in the academic world, it is difficult to obtain data samples from developing countries. Data from Brazil in the period between 1960 and 2012 was omitted from the study of Furceri et all (2015) who argue that data from emerging economies are often difficult to find, or discontinuous, and usually have a noticeable lack of quality.

In order to meet this gap and to provide better quality data continuously, several research institutions in Brazil have carried out relevant periodic surveys to understand and allow the management of public and private economic policies. Examples are the Brazilian Institute of Geography and Statistics (IBGE); the

Institute of Applied Economic Research - IPEA; the Getúlio Vargas Foundation – FGV and the Department of Statistics and Socioeconomic Studies - DIEESE. Even so, important gaps persist.

The city of Londrina is located in the north of Paraná state, and it has more than half a million inhabitants (558,439 in 2017 according to projections made by IBGE, 2017). It is the second most populous city in the state, the third in southern Brazil, and 35° in the country, in a universe of 5,570 counties and for a population of 207.7 million residents. It also had a GDP of over R\$ 18 billion (US \$ 5.7 billion) in 2017 and, despite its relevance, it is not listed among the cities that are monitored for the inflation index of the national basket of goods by those mentioned research institutes.

Based on this observation, the Federal Technological University of Paraná – UTFPR in its Londrina campus, took the responsibility to measure and release the price variation of the national basket of goods¹ in the city of Londrina in a monthly basis. The research began in 2001 and it is the longest study of continued inflation measurement within all Brazilian cities except for capitals.

When compared to similar researches, the monthly survey conducted by UTFPR- Londrina campus is in line with the national indicators, showing a significant reduction in the price of the products that make up the basket of goods. This means that there was a release of financial resources that families could channel to meet other needs and it is from this perception that the question that led this analysis arises: How much money was released into the economy of Londrina due to the reduction in the prices of the basket of goods during the year 2017?

Answering this question will help us to understand various aspects of local economic behavior and will raise questions about the impact that a reduction in the cost of food has on developing economies.

2. THE BRAZILIAN NATIONAL CONSUMER PRICE INDEX

The National System of Consumer Price Indices - SNIPC, a structure linked to IBGE, continuously and systematically produces two indicators: the National Consumer Price Index (INPC) and the Extended National Consumer Price Index (IPCA).

Both are calculated continuously and systematically for the areas covered by the SNIPC. It includes the cities and metropolitan areas of Belém, Fortaleza, Recife, Salvador, Belo Horizonte, Vitória, Rio de Janeiro, São Paulo, Curitiba, Porto Alegre and the Federal District and the municipalities of Goiânia and Campo Grande.

The INPC was created in order to allow the correction of the purchasing power of wages by measuring the price changes in the basic of goods of the lowest employed population. This income range guarantees a population coverage of 50% of the families whose reference person receives a salary and belonging to the urban areas covered by the SNIPC. It also comprises families with monthly incomes between 1 and 5 minimum wages. (IBGE, 2018)

The IPCA aims to measure the inflation of a set of products and services marketed in the retail, regarding the personal consumption of the families. It is considered the official inflation index of the country. This indicator guarantees the coverage of 90% of the families belonging to the urban areas prospected by the SNIPC. Currently, the target population of the IPCA comprises families that earn from 1 to 40 minimum wages income, regardless of the income source. (IBGE, 2018)

Both indicators, INPC and IPCA, consider the same expenses group, which are explained in table 1, and also identifies the weight assigned to each group according to family income (from 1 to 5 wages and between 1 and 40 wages respectively).

¹ The term Basket of Goods refers to a set of products, raw materials and services which is used to calculate the Consumer Price Index over a period in a country, and can indicate consumer behavior.

Type of expense	IPCA %	INPC %
Food and Beverages	23,12	28,27
Transport	20,54	17,3
Housing	14,62	16,87
Health and Personal Care	11,09	9,67
Personal Expenses	9,94	6,9
Clothing	6,67	8,15
Communication	4,96	2,78
Articles of Residence	4,69	5,64
Education	4,37	4,42
Total	100	100

Table 1. Weight of product groups and services

Source: Compiled from IBGE, Sistema Nacional de Índices de Preços ao Consumidor IPCA e INPC, January 2018.

The most relevant group in both indices is food and beverages. The highest importance is observed in the INPC, since lower income families need to use a proportionally larger amount of their budget for this type of expenditure.

3. THE BASKET OF GOODS AND THE CONCEPT OF AUTONOMOUS CONSUMPTION

The national basket of goods, or minimum ration, consists in a set of food-related items that supplies an individual's need for food in a period of one month, according to a 1938 law (BRAZIL, 1938), which also stipulated the minimum provisions that would compose the basic daily consumption of a worker.

The items and the quantities are different for each of the three regions of Brazil, which were defined by said decree. The specifications attributed to region 3 (which includes the city of Londrina), can be observed in table 2.

Foods	Quantities		
Meat	6,6 Kg		
Milk	7,5 L		
Beans	4,5 Kg		
Rice	3,0 Kg		
Flour	1,5 Kg		
Potato	6,0 Kg		
Vegetables (tomato)	9,0 Kg		
Bread	6,0 Kg		
Powder Coffee	600 g		
Fruit (banana)	90 units		

Sugar	3.0 Kg
Lard/Oil	900 g
Butter	750 g

Table 2. Composition of basket of goods in Region 3

Source: Adapted from Decree-Law 399/38, attached tables.

The basket of goods, understood as the minimum ration for an adult to survive can also be understood within the context of autonomous consumption proposed by John Maynard Keynes in his book General Theory.

In proposing the consumption function, an economic formula that represents the household consumption, Keynes defined it as formed by autonomous consumption and consumption induced by income. Income-induced consumption is that which increases when income increases proportionally to the marginal propensity to consume.

On the other hand, autonomous consumption is one that, regardless of the individual's income, is fundamental to their survival. It is the minimum level of consumption. According to Sanusi and Babatunde (2017), Keynes stipulated that there is a level of consumption that will always be positive and greater than zero, even when there is no wage - autonomous consumption.

For this analysis it is not relevant to go further into the keynesian consumption theory, being of interest just the concept of autonomous consumption. This theory, regardless of the individual's income or its total lack, considers that the consumption of the basic basket will happen, allowing the analyzes to be carried out considering the population as a whole, without taking into account a minimum income.

4. PREFERENCES, BUDGET RESTRICTION AND EQUILIBRIUM

When the neoclassical microeconomics addresses the theory of consumer behavior or utility theory (Mankiw, 2005; Pinho & Vasconcellos, 2003; Wessels, 2003; Varian, 2010; Albuquerque, 1986), it presents a mathematical notation of families' behavior when they choose goods and services that best suit them by limiting their financial capacity. The term 'best' is a reference to their preferences and 'financial capacity' to the family budget constraint. This section uses these authors to establish the framework that supports the proposed analysis.

4.1. Consumer preferences

The preferences consumption are based on three hypotheses:

- I. The consumer has the ability to list which products they believe best suit them;
- II. They are able to sort their preferences in order to identify that given basket A is better than basket B and B better than C, consequently, A is better than C; and
- III. That the consumer will always prefer to consume more than less from the set they choose.

Based on these assumptions, the consumer will order their preferences according to their tastes and the usefulness of the products individually. Such behavior is called ordinal utility and reveals a scale of preference or indifference in the consumption of each good, without mentioning the values for usefulness or satisfaction.

In this ordinal approach, usefulness is not measured, but compared. So it is by comparing how useful a product will be, that the consumer chooses the different alternatives of goods or set of goods capable to suit their needs.

A combination of different quantities or qualities of two products will compose a basket of consumption that can bring the same level of satisfaction. For example, a consumer basket consisting of 2 theater

entrances and 4 pounds of meat may bring the same level of satisfaction for a consumer as another basket with 1 ticket and 9 pounds of meat.

The combination of baskets that brings the same level of satisfaction to a consumer can be represented by a function of indifference. It is a function that shows combinations of goods to which a consumer is indifferent between, since it brings the same level of satisfaction. The graphical representation of this function is called the indifference curve, and the set of all consumer indifference curves is called the indifference map, as shown in Figure 1.

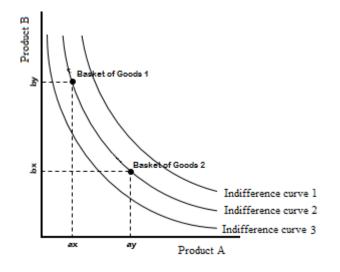


Fig. 1. Set of indifference curves representing a map of indifference

Source: Adapted from Hal R. Varian, Intermediate Microeconomics - a modern approach, 8th ed., 2010, p. 65.

An indifference curve represents all the combinations of baskets that provide the same level of satisfaction to a person, who is therefore indifferent to the baskets of goods represented by the points along the curve. To an individual with indifference curves such as those shown in Figure 1, both basket A (b_y , a_x) or basket B (b_x , a_y) provide the same level of satisfaction, since both are on the same curve of indifference.

The level of satisfaction represented by the indifference curves increases as the curve moves away from the intercept. It means the indifference curve 3 represents a lower satisfaction level than the indifference curve 2, which represents a lower satisfaction level when compared to the indifference curve 1.

Thus, if an individual can choose between several baskets, all located on the same curve of indifference, this individual will be indifferent to them. So if someone can opt for several baskets, distributed by several indifference curves, this individual will choose to move further away from the intercept.

4.2. The budget restriction line

The consumers, as rational as they are, will always look for the best baskets, but they will be conditioned to the ones they can afford.

Assuming there is a set of goods and the consumer can choose two of them, this consumption basket could be represented by (x_1, x_2) , where x_1 symbolizes the quantity of the good 1 and x_2 represents the quantity of the good 2. Knowing that the consumer knows the prices of goods (p_1, p_2) , and that they have the amount of money to spend, their budget restriction will be given by:

 $p_{1, x_{1+}p_{2, x_{2}} \le m}$

Where p_1 , x_1 is the amount of money spent on good 1 and p_2 , x_2 , the amount of money spent on good 2. The amount of money spent on the two goods can never exceed m. These baskets make up their budget package. The amount of money spent on both assets cannot exceed m. Consumer baskets that the consumer can acquire at prices (p_1 , p_2) are those that don't cost more than *m*. These baskets make up the budget package.

When one wants to study the demand for a specific item, one can consider x_1 as being this item and everything else that composes the consumption basket as x_2 . This asset 2 would be represented by the amount of money that can be spent on it and thus $p_2=1$, considering the price of the monetary unit equal to 1. The budget restriction is:

$$p_1, x_1 + x_2 \le m$$

(2)

(4)

The amount of money spent on asset 1, p_1 , x_1 , plus the amount of money spent on the others assets, x_2 cannot be bigger than *m*. When the expenses with the baskets of assests use all the income, this one stays above the budget line represented by:

$$p_1, x_1 + p_2, x_2 = m \tag{3}$$

or

 $p_2, x_2 = m - p_1, x_1$

 $x_2 = m/p_2 - p_1/p_2 \cdot x_1$

This equation is a straight line with inclination = p_1/p_2

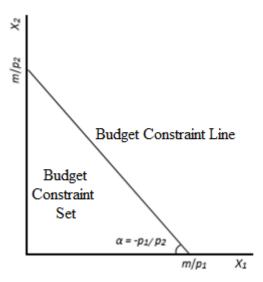


Fig. 2. Budget Restriction Line

Source: Adapted from Hal R. Varian, Intermediate Microeconomics - a modern approach, 8th ed., 2010, p. 85.

When $x_1 = 0$ (4), the vertical intercept is given by $x_2 = m/p^2$ and when $x_2 = 0$ (4), $x_1 = m/p_1$ which is the horizontal interception. The union of the intercepts forms the line of budget restriction shown in figure 2. If the consumer increases their spending on the asset 1 in Δx_1 , they will certainly reduce their consumption of the asset 2 in Δx_2 to offset it, since their income *m* is fixed. Therefore:

$$p_{1,}(x_1 + \Delta x_1) + p_{2,}(x_2 + \Delta x_2) = m$$
(5)

Subtracting from this equation the budget line represented by the equation (3):

$$p_{1,}(x_{1} + \Delta x_{1}) + p_{2,}(x_{2} + \Delta x_{2}) - p_{1}x_{1} + p_{2}x_{2} = m - m$$

$$p_{1}x_{1} + p_{1}\Delta x_{1} + p_{2}x_{2} + p_{2}\Delta x_{2} - p_{1}x_{1} + p_{2}x_{2} = 0$$

$$p_{1}\Delta x_{1} + p_{2}\Delta x_{2} = 0$$

$$p_{2}\Delta x_{2} = -p_{1}\Delta x_{1}$$
(6)

 $\Delta x_2 / \Delta x_1 = - p_1 / p_2$

This is the equation of the budget line inclination. As the consumption of the asset 1 increases, the consumer reduces (replaces) their consumption of asset 2. Thus, the budget line inclination is related to the opportunity cost of consuming asset 1.

When the prices of p_1 and p_2 and the income *m* vary, the budget group changes and since m is not part of the expression of inclination, changes in income shift the budget line parallel to the right, if there is an increase in income, and to the left if there is a drop in income.

However, if there was a change in the price of one of the products, for example, asset 1 becomes cheaper, the horizontal intercept (= $m/p_1\downarrow$) moves to the right. The budget line then shifts outward when $p_1\downarrow$ (figure 3).

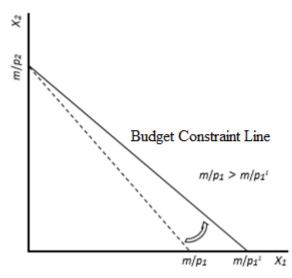


Fig. 3. Displacement of the budget restriction line

Source: Adapted from Hal R. Varian, Intermediate Microeconomics - a modern approach, 8th ed., 2010, p. 160.

4.3. Consumer Equilibrium

The customer choice model is based on the idea that people are rational and choose the basket that brings them the highest satisfaction within their budget constraint.

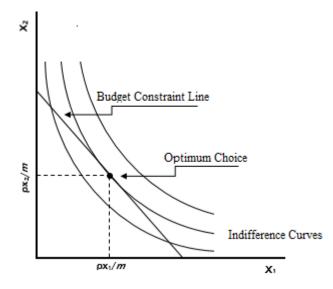


Fig. 4. Overlap of budget constraint and map of indifference

Source: Adapted from Hal R. Varian, Intermediate Microeconomics - a modern approach, 8th ed., 2010, p.118.

The Figure 4 represents the indifference curves and the budget constraint line. The consumer basket that reaches the highest level of satisfaction within the consumer budget is the one in which the curve intersects the budget constraint line. The curves below are not relevant, because the baskets that compose it are less desired than the baskets of the superior indifference curve, although within the budget space. The curves above the budget line have more attractive baskets, but are outside the consumer's budget space.

Now, if the price of product X_1 decreases, the budget constraint line will rotate to the right. But supposing that the consumer was sufficiently satisfied with the quantity of X_1 , they could migrate to a higher level indifference curve, keeping their consumption of X_1 and the surplus being used for the acquisition of X_2 .

This way, the budget line, instead of moving in the abscissa axis, which represents the quantity of X_1 , will shift in the ordinates axis, which represents the quantity of X_2 . The monetary value gained from the reduction in prices of X_1 will be divided by the price of X_2 to find the intercept with the ordinates and thus form the new budget constraint line.

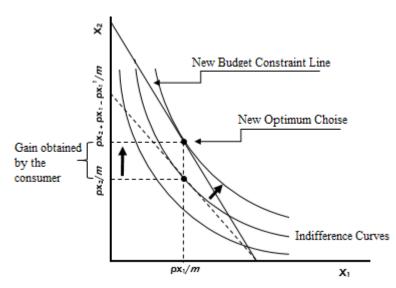


Fig. 5. Displacement of the budget constraint reaching the new indifference curve

Source: Adapted from Hal R. Varian, Intermediate Microeconomics - a modern approach, 8th ed., 2010, p. 166.

The new budget line is represented by (7) where $x_l(p_l-p_l)$ is the monetary value transferred to acquire x^2 .

$$x_{1}(p_{1} - p_{1}^{l}) + x_{2},(p_{2} + p_{1} - p_{1}^{l}) = m$$
(7)

This is exactly the procedure adopted in the analyses proposed by this research, in which the value of the national basket of goods is considered to be the one composed of certain amount of food that is capable of sustaining an adult for a period of one month and even if their perceived income value is equal to zero, they will still have access to this minimum basket to guarantee their survival for the next period, considered then as autonomous consumption.

5. METHODOLOGICAL PROCEDURES

This research aims to find out the amount in cash released due the price reduction of the national basket of goods in the city of Londrina between January and December of 2017. It is a research of applied nature involving local interests, quantitative in the form of approach and descriptive in relation to its objectives.

The research of price variation of the basket of goods in the city of Londrina is conducted by the Universidade Tecnológica Federal do Paraná - UTFPR Londrina campus and its results are made available to the Community through the local media, the institution's website and academic articles. The data of this variation in this analysis were taken from Rambalducci and Feltrin (2017).

In order to reach the monetary value made available to the local economy in this period, the average price variation for each month during 2017 is calculated by comparing it to the average price of the national food basket in Londrina during the year 2016. Then the quantity of baskets that the national minimum wage can acquire in one year and another is calculated. This amount will be used to obtain the monetary value released by each basic basket, due to the decrease in price between one year and another. Equation (8) explains this calculation:

 $AP = \frac{\sum_{I=1}^{n} CBi}{n} X \left[\frac{\left(SM_{1} \sum_{I=1}^{n} \frac{1}{CBi}\right) - \left(SM_{2} \sum_{J=1}^{n} \frac{1}{CBj}\right)}{SM_{2} \sum_{I=1}^{n} \frac{1}{CBi}} \right]$ (8)

At where:

VAP: monetary value released by the reduction of the basic basket price

 SM_1 : national minimum wage in 2017

SM₂: national minimum wage in 2016

CB: basic basket price in the month

i : months of 2017

j : months of 2016

n: 12

The national basic food basket is the one that meets the feeding needs of an adult or two children during a month. In this analysis, it is assumed that people are consuming the necessary for their subsistence and that a reduction in the costs of acquiring this basket means a monetary release that will allow to increase the consumption of any products, that is, the displacement of the budget line rotated to the right, by reducing the costs of the basic basket will generate a proportional injection into the local economy. Therefore, for this analysis the basket of goods is considered necessary and sufficient.

This way, the sum of the comparison results with the reference value multiplied by the number of adults added to half the number of children will result in the monetary value saved in their consumption that will increase the consumption of other products.

TOTAL RELEASED = $(P_a + P_{b/2}) \times VAP \times 12$

(9)

At where:

 $P_{\rm a}$: population above 14 years of age

 $P_{\rm b}$: population up to 14 years of age

For the number of basic food baskets consumed in the city of Londrina in the year 2017, the IBGE data will be considered, which shows the population distributed by age group. The population of children aged 10 years or younger will be divided by two to calculate the number of baskets consumed monthly.

6. RESULTS OBTAINED FOR LONDRINA

Based on the data of the monthly price of the basic food basket in the city of Londrina between January and December of 2016 (Rambalducci, et al, 2017), the medium price of the basket within this year was obtained. So that it was not necessary to apply the monetary restatement due to the inflation process on the prices, in order to make the comparison with 2017, the purchasing power of 2016 minimum wage in number of basic baskets was used.

The minimum wage is corrected by the INPC plus national GDP growth of the two previous years. In the case of 2017, as the GDP of 2015 was negative, the correction on the minimum wage included only

the INPC, allowing the use of its value in purchasing power in number of basic baskets to compare it to 2016. The minimum national wage in 2016 was R\$880,00 while that for 2017 was R\$937,00.

The difference between the quantity of basic baskets purchased in 2017 when compared to 2016, using as reference the minimum wage value of each year, indicates the actual difference in customer purchasing power, as shown in table 3.

Month	Monthly Price	2016 baskets	Monthly Price	2017 baskets	Difference
	X 2016		X 2017		
Jan	R\$ 355,55	2,48	R\$ 338,87	2,77	0,29
Feb	R\$ 359,61	2,45	R\$ 333,65	2,81	0,36
Mar	R\$ 354,70	2,48	R\$ 343,52	2,73	0,25
Abr	R\$ 366,80	2,40	R\$ 344,33	2,72	0,32
May	R\$ 351,12	2,51	R\$ 325,06	2,88	0,38
Jun	R\$ 390,62	2,25	R\$ 312,29	3,00	0,75
Jul	R\$ 396,55	2,22	R\$ 321,77	2,91	0,69
Aug	R\$ 383,69	2,29	R\$ 297,28	3,15	0,86
Sep	R\$ 382,65	2,30	R\$ 295,17	3,17	0,87
Oct	R\$ 393,65	2,24	R\$ 303,36	3,09	0,85
Nov	R\$ 354,89	2,48	R\$ 307,70	3,05	0,57
Dez	R\$ 348,31	2,53	R\$ 327,85	2,86	0,33
\overline{X}	R\$ 369,85	2,38	R\$ 320,90	2,93	0,54

Table 3. Monthly price of basic food basket 2016 X 2017 and medium difference

Source: Based in Rambalducci; Feltrin (2017) and IBGE (2018).

Due to the reduction in the price of food that makes up the basket of goods in the city of Londrina, the purchasing power increased by about 35% in 2017 compared to the previous year. Figure 6 shows the displacement of the budget line provided by the gain obtained with the reduction of the basket price and highlights the area that represents this gain.

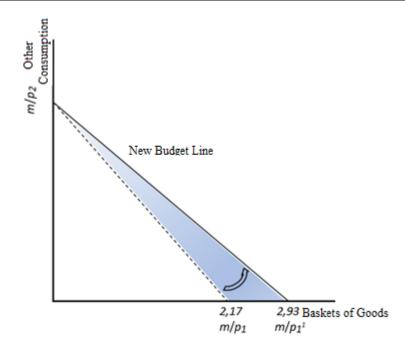


Fig. 6. Gain obtained by the displacement of the budget line between 2016 and 2017

Source: The authors.

In order to know what the gain was in monetary values for the city of Londrina, we multiplied the value of the increase in purchasing power in reais, considered the average price of the basic basket in 2017 multiplied by the consumption of basic baskets of the city and the number of months of the year.

The basket of goods represents the minimum food necessary for the survival of an adult person or the equivalent for the survival of two children. The IBGE populational table shows the age distribution of the population in Londrina according to the past census of 2010, which was 506.701 inhabitants.

According to projections made by the IBGE, the population of Londrina for 2017 is 558.439, or the equivalent to a 10,21% increase. In order to estimate the number of children and adults, the same percentage was uniformly applied to all population strata, according to table 4.

Age	Population
From 0 to 14 years old	108.825
Over 14 years old	449.614
TOTAL	558.439

Table 4. Population distribution until 14 years old and over 14 years old

Source: IBGE (2018).

This way, considering a basic food basket as the necessary food for an adult or two children, the total baskets consumed in the city of Londrina in a monthly basis is 504.026 units and the reduction in the medium monthly cost of the basket was equivalent to R\$112,31, resulting in an amount of R\$679,286 million (US\$212,277 million).

If it is considered that the basic basket represents the food needs of an adult and that, independent of the income, all had access to the consumption of this minimum food, this value represents what was released

in the economy of Londrina for the consumption of other items, here considering that these other items could also include food products of better quality or that better met the individual's preference.

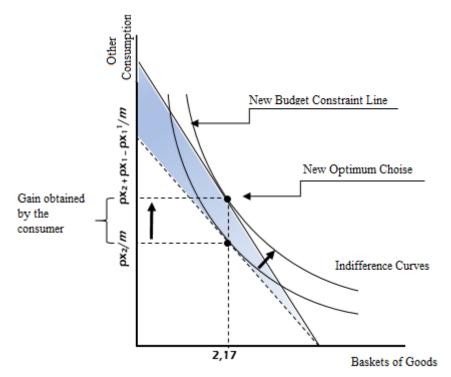


Fig. 7. Gain obtained with the displacement of the budget line between 2016 and 2017

Source: The authors.

Thus, instead of the gain provided by the reduction in the price of the basic basket being used to purchase more baskets, it is possible to consider that this extra revenue is directed towards the purchase of other products and services. In any of the situations, there was an increase in customer satisfaction, which was able to migrate from one indifference curve to another, farther from the origin.

But for the city of Londrina, this increase in the purchasing capacity provided by the reduction of the food price meant the release of funds that fed back the entire economy.

7. CONCLUSIONS

The Brazilian 2017's super crop allowed a significant reduction in the cost of food and, in the city of Londrina specifically, it meant the release of R\$440,290 million (US\$137,788 million) during the year 2017, something close to 2,5% of its GDP, which suggests a contribution of 0,6% in the formation of the Gross Domestic Product of this year, impulsionate by the injection of this amount into the local economy.

The food was responsible for the sharp slowdown in the official inflation of the country, which closed last year at 2,95%, below the government's target of 3% according to IBGE (2018), This happened for the first time since the inflation target system was implemented in the country, in 1999.

With this reduction in inflation, the yearly basic interest rate ended 2017 at 7%, which for the Brazilian standard is something new and is serving as stimulus for the resumption of Brazilian economic growth, since it allows the customer to exchange more expensive debts – including those incurred on overdrafts and credit card – for cheaper debts, especially when it comes about personal loans and payroll deductible loans.

For the companies, cheaper credit means lower costs to invest in the productive sector, generating jobs and income. In addition, with lower interest rates, the financial expenses of the productive activity tend to be lower, also stimulating more productive investments.

The government also benefits, either by reducing the costs of financing the public deficit and refinancing the public debt, or by raising tax revenues and seigniorage gains, helping in the process of rebalancing government bills.

Therefore, we must praise the agriculture as a great pillar for Brazil to overcome the rough times that its economy has been trough over the past years.

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