v. 4, n. 1, 2024

Scientific Journal of Applied Social and Clinical Science

THE USE OF OVERINFLATION (REDUFLATION) BY SOME COMPANIES IN MEXICO

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Abstract: Some companies, especially in inflationary times, have used the decrease in the net content of their products as a way to keep prices accessible to consumers. However, even in times of low inflation, companies not only reduce their content, but also increase their prices well above the average price increase, causing overinflation. The present investigation chose thirty popular consumer products in Mexico and compared the decrease in their net content plus the increase in their prices, with the average increase in the INPC. The results show that this policy, rather than supporting consumers, has allowed companies, deceptively, to raise their prices (and therefore their profits) by applying this policy. It is suggested that the authority regulate this practice, and that, in addition, the INEGI considers this phenomenon when calculating the increase in prices in Mexico.

INTRODUCTION

From very early stages in the history of humanity, various thinkers have dedicated themselves to the study of various economic variables, but one that has particularly been the subject of countless writings is that related to inflation. Since the time of the great Greek philosophers, there has been a concern to try to substantiate the various forms that inflation took, its causes and consequences. For Plato, the existence of money distorts the market, since the true exchange must be considered between real goods and the existence of a monetary entity interferes with the healthy relationships that must occur in the exchange (Reisman, 2021). Furthermore, he was the first to write about "prices" understood as the expression of the value of an object and were determined by adding the value of the exchanged object plus the time used in production plus a small profit for the producer (Acuña, 2012). However, Aristotle is considered the first thinker who laid the foundations of economic science and the first who clearly posed the economic problems that are studied to this day (Roll, 1996). For this thinker, money is something invented by man to satisfy his own needs and, like Plato, he considers that it is an artificial element that distorts exchange relations and that at some point distorts relative price relations.

Another great philosopher and economist, Karl Marx, determined the various functions of money and mentions that by itself, "inflation is a form that crises take", that is, inflation by itself is a crisis; so it is simply a manifestation of a distortion in the capitalist system. Although there is no Marxist theory of inflation, this school is one of those that has most elaborated on its social consequences (Soler, 1987). For the English economist John Maynard Keynes, inflation is a monetary phenomenon that is caused by excess demand and that can be divided into two moments: the first, if there is not full employment in an economy, an increase in the monetary mass. above the level of production will have an effect on the increase in employment and, marginally, on prices. The second moment is reached when full employment is reached and, in this situation, an increase in the monetary mass will have an effect on prices: "as long as there is unemployment, employment will change proportionally to the amount of money and when full employment arrives, prices vary according to the amount of money" (Keynes, 1939).

This way, since ancient times, there have been countless writings that show his interest in this phenomenon. Table 1 shows a synthesis of some of the most recognized approaches, versions and authors on the subject (Acuña, p.12):

As it can be seen in the table, the literature on this matter is extremely broad, which is why it is a topic where there is no consensus on its causes, but none of them talk about redflation

APPROACHES	VERSIONS	AUTHORS
1. QUANTITATIVE o/oP-f(m V) V: constant	1. Money issue 2. Public Debt 3. Government expenditures 4. Expectations: Rational Adaptive	Friedman Brunner-Meltzer Anderson, Carlson Allais Sargent, Wallaces
	5. Worldwide broadcast 6. International liquidity 7. Types of exchange rates	Johnson Swoboda Haberler-Meiselman
2. DEMAND	1. Increase in aggregate spending 2. Sectoral potholes	Lovell-Paunio Hansen-Turvey-Brema
	3. International demand	Link-Waelbroack
3. COST	1. Union pressure 2. Industrial concentration 3. Oligopolistic structure 4. Public guarantees 5. Labor supply control 6. Key raw material	Carter-Ulman-Turner Ross-Goldner-Levinson Bowen-Wilson-Reynolds Samuelson-Solow-France Becker-Lewis-Nutter Eckstein-Fromm
4. BENEFITS o/op=f(B)	1. Mark-up fixation 2. Financing of funds 3. Profit push	Robinson-Davidson Eichner-Wood Weintraub-Davidson
5. BIDDER	1. High tax rates	Laffer-Kristol
6. STRUCTURALIST	1. Union-company struggle 2. Managed inflation 3. Differential productivity 4. Structural sources and pressures	Slichter Schulter-Means Hicks-Edgren-Faxen Sunkel-Pinto-Furtado
7. MARXIST	1. Excess emission 2. Excess liquidity 3. Debt structure	Aganova-Spriridinova Mandel Aglietta
	4. Monopoly fixation 5. Means of valuation 6. Monopoly control	Baran-Sweezy Mandel-Dallemagne Velez-Consuegra
	7. Decreasing profitability	Zafirinn

TABLE 1. GLOBAL THEORETICAL FRAMEWORK OF INFLATION

Extracted from Acuña,ibid.

A	B	C	D	E	F	G	H	I	J
PROD-UCT	Volume or weight in 2003	Volume or weight in 2023	Percentage decrease in weight or volume (Price increase = Subflation)	Product price in 2003	Product price in 2023	Percentage increase in prices of surveyed items	Inflation in the period measured by the INPC *	Real increase in price Si I > G	Overin-flation Percent-age %
1	740 grams	680 grams	8.11	$17.00	$47.00	176.47	137.54%	184.58	47.04
2	158 grams	104 grams	34.18	$7.00	$21.00	200.00	137.54%	234.18	96.64
3	500 grams	460 grams	8.00	$23.87	$78.00	226.77	137.54%	234.77	97.23
4	250 grams	220 grams	12.00	$7.20	$111.50	1448.61	137.54%	1460.61	1323.07
5	170 grams	125 grams	26.47	$2.20	$13.50	513.64	137.54%	540.11	402.57
6	450 grams	400 grams	11.11	$15.00	$110.00	633.33	137.54%	644.44	506.90
7	85 grams	82 grams	3.53	$5.50	$58.00	954.55	137.54%	958.07	820.53
8	100 grams	90 grams	10.00	$5.28	$28.00	430.30	137.54%	440.30	302.76
9	1 litro	845 ml	15.50	$14.72	$58.00	294.02	137.54%	309.52	171.98

10	410 grams	360 grams	12.20	$6.90	$23.00	233.33	137.54%	245.53	107.99
11	397 grams	375 grams	5.54	$8.90	$28.50	220.22	137.54%	225.77	88.23
12	1000 grams	800 grams	2.68	$15.79	$51.80	228.06	137.54%	230.73	93.19
13	550 grams	450 grams	18.18	$19.60	$45.50	132.14	137.54%	150.32	12.78
14	420 grams	310 grams	26.19	$15.45	$33.55	117.15	137.54%	143.34	5.80
15	250 grams	200 grams	20.00	$5.00	$14.50	190.00	137.54%	210.00	72.46
16	360 grams	210 grams	41.67	$4.20	$9.00	114.29	137.54%	155.95	18.41
17	1 kilo	900 grams	10.00	$13.90	$40.60	192.09	137.54%	202.09	64.55
18	900 grams	800 grams	11.11	$61.00	$170.00	178.69	137.54%	189.80	52.26
19	400ml	375ml	6.25	$38.90	$75.00	92.80	137.54%	99.05	-38.49
20	720 grams	610 grams	15.28	$20.85	$80.00	283.69	137.54%	298.97	161.43
21	175 grams	160 grams	8.57	$7.40	$30.00	305.41	137.54%	313.98	176.44
22	400 grams	380 grams	5.00	$9.90	$39.90	303.03	137.54%	308.03	170.49
23	40pzas	36pzas	10.00	$130.50	$365.00	179.69	137.54%	189.69	52.15
24	2 litros	1.83litros	8.50	$39.80	$62.10	56.03	137.54%	64.53	-73.01
25	170 grams	140 grams	17.65	$6.30	$21.00	233.33	137.54%	250.98	113.44
26	200 grams	160 grams	20.00	$14.85	$57.00	283.84	137.54%	303.84	166.30
27	200 grams	150 grams	25.00	$5.20	$18.20	250.00	137.54%	275.00	137.46
28	14 pieces	10pzas	28.57	$15.90	$25.38	59.62	137.54%	88.19	-49.35
29	320 grams	160 grams	50.00	$31.30	$61.00	94.89	137.54%	144.89	7.35
30	950 grams	665 grams	30.00	$29.50	$97.50	230.51	137.54%	260.51	122.97
31	200 grams	180 grams	10.00	$23.65	$65.00	174.84	137.54%	184.84	47.30

Table 1

and, obviously, not about overinflation since it is a term that is being coined in this document. Therefore, we will begin by explaining the term inflation since, ultimately, overinflation is a phenomenon related to the increase in prices. For the purposes of this article, we understand inflation as the generalized and continuous increase in the general price level of goods and services in the economy (Gutiérrez, 2006). In the case of Mexico, inflation is essentially measured by three indicators: the National Consumer Price Index INPC, the Producer Price Index or Mayore IPM and the GDP Deflator. The most used is the INPC and it will be the one that will be used for the analysis of this article. The INPC is an indicator specifically designed to measure the average change in prices over time, through a weighted basket of goods and services representative of the consumption of families in Mexico (Banxico, 2018). There are different levels of inflation: moderate, high and hyperinflation (Perossa, 2015).

The effects of inflation are vast. For (Riutort, 2000; Alcaraz,2013 and Ramones 2014) inflation has its greatest effect on the income of people and, especially, those who have a fixed income; Furthermore, it is the main cause of poverty.

Traditionally, Redflation simply consists of reducing the amount of product in the same container (Irastorza, 2023). It is the reduction of the quantity or volume of the product while maintaining the price for the consumer to see if they do not realize that they are buying less for the same thing. but that is short-term and, in general, counterproductive in the long term (Oliva, 2022). Redflation is considered a supply inflation. The accepted definition of Redflation in terms of this study is that of (Cano, 2022) which consists of the reduction of the amount of product content or the size of its packaging, while the price remains stable or even increases. It contributes to inflation silently and is used by companies to adapt supply to inflationary pressures.

This practice of self-interested "contraction" of the volume of product sold has become very common in periods of high inflation. Academic research has shown that consumers are very reluctant to accept explicit price increases, but instead tend to passively accept reductions in volume, size or quantity that do not imply a price change even when they are noticeable to them. at a glance (BBVA, 2023). Of course, the practice does not occur in times of high inflation, it occurs at all times and, as mentioned in the previous paragraph, it is a deceptive tactic that companies use to increase their profits. Overinflation is a practice that consists of a decrease in the quantity or volume of a product, accompanied by an increase in the nominal price of said product above the average inflation in the economy.

The objective of this article is to verify if there is Overinflation in a sample of thirty basic necessity products manufactured, mostly, by transnational companies during the period 2000 – 2023. The hypothesis from which we start is that companies use this practice as a way to increase their profits unethically and not as a way to make their product accessible to consumers.

METHODOLOGY

PROCEDURE

For this article, the following stages were followed:

Step 1. A sample of 30 basic necessities was taken such as tuna, bread, fabric softener, washing powder, instant coffee, edible oil, etc. that were offered in June 2003 and that continue to be offered in June 2023. The percentage reduction in the volume or weight of said products was measured during the indicated period and it was considered that this reduction in volume was equivalent to an increase in the price since, in the verification carried out, there was no equivalent decrease in content with a reduction in price. It is considered that this reduction in volume or weight is equivalent to the increase in price. This part is what is considered Overinflation.

Step 2. The percentage increase in the price of said products was measured using the formula used by Banxico, which is what is considered when measuring the INPC.

Step 3. The sum of the percentage increase in prices due to the reduction in the content of the products was made with the nominal increase in the prices of said products to find the real increase in prices of said products.

Step 4 The price increase during that period is calculated through the INPC calculated by Banxico and the INEGI and compared with the increase calculated in step 3.

Step 5 If the rate of price increase calculated in step 3 is greater than the rate calculated in step 4, it is concluded that Overinflation exists.

RESULTS

Table 1 shows the results of the analysis carried out. The volume or weight of the same product was compared between 2003 and 2023. Column D shows the percentage decrease of the product during the period. Column G calculates the percentage increase that the product presented during the period. Column H shows inflation in Mexico from June 2003 to 2023 measured by the INPC. Column I was obtained by adding the decrease in the volume or weight of the product (which is considered a "disguised" increase in price) and the observed nominal price increase, column H. This column is called the real increase in the price. Column J shows the difference between the real price of the product and the inflation measured by the INPC. The positive sign in column J shows the increase in the price above inflation, which implies that companies raised the price above inflation, which contradicts the idea that they reduce the content to keep the product accessible. to customers.

CONCLUSIONS

The results show that the hypothesis that was proposed was confirmed, since the reduction in the content of the products does not respond to the concern of the companies to make the products accessible to consumers because if so, the increase in their prices would not have been been higher than the average price increase. Instead, they use it as a way to increase prices and possibly their profits by deceiving consumers. One of the approaches that businessmen have tried to use to keep prices rising is that the quality of the products has improved over time and that they are more environmentally friendly (Mankiw, 2020), however few can say that the quality of the products is better or that their products are more environmentally friendly

The results also show that 27 of the 30 chosen products show Overinflation, that is, that the increase in the prices of these products exceeded the average increase in prices in the economy, so it was not necessary to reduce the weight or volume of its products since, if they wanted to make them accessible to consumers, the increase in their prices would have been very close to the general increase in prices.

In this sense, it is necessary that those in charge of legislating on weights and measures in Mexico address this aspect that threatens the family economy, indicating in a more visible way the net content of the product and preventing companies from unilaterally reducing the content of their products. Another very important aspect is that the INEGI considers this aspect when calculating the increase in prices. Although companies use this practice marginally, reducing the content little by little so that it is almost imperceptible to the consumer, those in charge of measuring inflation must consider it since it is not a practice that is carried out only in inflationary times, as stated by the most of the publications that touch on the subject, but it is a constant practice and in countries like Mexico it is increasingly used. A final aspect to consider is the need for the consumer to be educated in reviewing the information about the content of each product and that there even be a warning on the packaging when a product has changed weight or volume.

Finally, the term Subflation is misleading because in Spanish it seems to indicate that there is a decrease in prices, however, the term Overinflation is much more appropriate to indicate that it refers to inflation above the existing one. It seems like a question of semantics, but if you could calculate the "Excess Profits" that large companies obtain by carrying out this practice, you would see the seriousness that this activity has on the pockets of Mexican consumers.

REFERENCES

Acuña Barrantes H. (2012) La historia de la economía desde Platón hasta los Romanos. Revista Logos Ciencia y Tecnología, 4(1). 82-95.

Alcaraz, C., & Nakashima, C. (2013). Inflación y pobreza en México (1993–2009). Stata Press book chapters.

Banco de México (2009). Índice Nacional de Precios al Consumidor (INPC).

BBVA (2023). ¿Qué es la reduflación y cómo Podemos protegernos de ella. Recuperado de https://www.bbva.com/es/salud-financiera/que-es-la-reduflacion-y-como-es-posible-protegerse-de-ella/

Cano Ortega, R. (2022). La política económica en un contexto de vuelta a la inflación.

DOF - Diario Oficial de la Federación. (s/f-a). Recuperado el 3 de septiembre de 2023, de Gob.mx website: https://www.dof.gob.mx/nota_detalle.php?codigo=689899&fecha=03/09/2003

DOF - Diario Oficial de la Federación. (s/f-b). Recuperado el 3 de septiembre de 2023, de Gob.mx website:https://www.dof.gob.mx/nota_detalle.php?codigo=2052224&fecha=15/03/2000

Gutiérrez Andrade, O. (2006) Sobre la inflación, PERSPECTIVAS, 9 (3) p. 81-115.

HNDM-Publicación. (s/f-a). Recuperado el 3 de septiembre de 2023, de Unam.mx website: https://hndm.iib.unam.mx/consulta/resultados/visualizar/558a3de17d1ed64f17155414?resultado=43&tipo=pagina&intPagina=42&palabras=periodicos-2003

HNDM-Publicación. (s/f-b). Recuperado el 3 de septiembre de 2023, de Unam.mx website: https://hndm.iib.unam.mx/consulta/resultados/visualizar/558a3de27d1ed64f1715549a?resultado=76&tipo=pagina&intPagina=58&palabras=periodicos-2003

INEGI. (2023) Preguntas Frecuentes. Recuperado 20 agosto 2023 de https://www.inegi.org.mx/programas/inpc/2018/PreguntasF/

Irastorza, E. (2023). Cheapflación y Reduflación: sorpresas desagradables al abrir el envase. Emprendedores: las claves de la economía y el éxito profesional, (305), 12-13.

Keynes, J, M. (1939) The General Theory of Employment, Interest and Money. Mc Millan, London 1939.

Mankiw, N.G. (2021): Principios de Economía. Cengage, México

Oliva, J. (2022). Precios dinámicos ¿inflación electrónica?. Anuncios: Semanario de publicidad y marketing, (1667),

Perossa, M., & Waldman, P. (2015). Causas y efectos de la inflación sobre la economía. Obtenido de ResearchGate: https://www.researchgate. net/publication/283422726

Ramones, F., & Prudencio, D. (2014). Los efectos del Fondo de Aportaciones para la Infraestructura Social sobre la pobreza en México. región y sociedad, 26(60), 63-88.

Reisman, David (2021). Plato´s Economics Republic and Control. Edwar Elgar Publishing. USA.

Riutort, M. (2000). Inflación, desempleo y pobreza en Venezuela. Serie Proyecto Pobreza, 14.

Roll, E (1996). Historia de las Doctrinas Económicas, Colombia 2a. edición en español. Fondo de Cultura Económica.

Soler, Y. (1987) El globo de la inflación ECONÖMICAS CUC, 13(1), 24-38.