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REVALUATION OF MINIMUM WAGES IN MEXICO AND ITS FINANCIAL IMPACT ON ORGANIZATIONS AND PRIMARILY ON SMES

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ABSTRACT

The development of this work is aimed at emphasizing the devaluation suffered by the general minimum wage in Mexico, highlighting the need for its revaluation as a response to the economic marginalization of vulnerable sectors and regions with greater lag in the country, as well as a to stop the deterioration of the wage-earners' living standards mainly, taking into account the demands of nations with respect to the new Agreement between the United States, Mexico and Canada (USMCA). However, its recovery must be planned through a gradual process that allows the progressive adaptation with respect to its economic impact. For this, a qualitative and quantitative analysis was carried out, describing its deterioration, the loss of purchasing power, proposing a restitution scheme in a period of six years to avoid affecting financially organizations and SMEs mainly.

Keywords: National index of consumer prices, inflation, purchasing power, SMEs and minimum wage.

RESUMO

O desenvolvimento deste trabalho tem como objetivo enfatizar a desvalorização sofrida pelo salário mínimo geral no México, destacando a necessidade de sua reavaliação como resposta à marginalização econômica de setores vulneráveis e regiões atrasadas no país, bem como uma forma de para parar a deterioração dos padrões de vida dos assalariados, principalmente, prestando atenção às demandas das nações com relação ao novo Acordo entre os Estados Unidos, México e Canadá (USMCA). No entanto, sua recuperação deve ser planejada através de um processo gradual que permita a adaptação progressiva em relação ao seu impacto econômico. Para isso, foi realizada uma análise qualitativa e quantitativa, descrevendo sua deterioração, a perda do poder de compra, propondo um esquema de restituição em um período de seis anos para evitar afetar principalmente organizações financeiras e PMEs.

Palavras-chave: Índice nacional de preços ao consumidor, inflação, poder aquisitivo, PMEs e salário mínimo.

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1 INTRODUCTION

In recent years, the issue of the minimum wage has been the subject of discussion in Mexico, by different sectors of the political, journalistic, business organizations, among others. Currently with the process of signing the new Agreement United States, Mexico and Canada (USMCA), is a central theme that was discussed, derived from the abysmal difference with these countries. The reality is that for Mexicans it has represented the gradual loss of purchasing power, affecting mainly vulnerable sectors, such as the countryside and marginalized areas in federal entities, which in accordance with the data for 2016 of (CONEVAL), National Council of Evaluation of the Social Development Policy (2017), Chiapas concentrates a poverty rate of 77.10% of its population, Oaxaca 70.4%, Guerrero 64.4%, Puebla 59.4%, Michoacán 55.3% and Veracruz 62.2%, these being the highest impact.

The general minimum wage in effect for 2018 in Mexico is 88.36 pesos for a workday of 8 daytime hours, equivalent to 4.63 dollars, of the United States of America at the exchange rate of 19.06 pesos, published in the Official Gazette of the Federation of August 30 of the current year. The above has aroused controversy on the subject, reflecting the deterioration of the population's standard of living, generating different positions, without presenting a coherent plan for the recovery of purchasing power, which does not imply a financial impact on organizations, primarily in small and medium-sized companies, where appropriate, give rise to an inflationary effect.

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Therefore, the appreciation of minimum wages in Mexico cannot be postponed. According to figures from CONEVAL (2017), there are 53.4 million people in the poverty level and 9.4 in extreme poverty. This research is aimed at the general, in order to demonstrate its devaluation. However, the proposed recovery must be planned, structured and applied gradually, so that there is a benefit to the working class and the productive sector has a process of adaptation, mainly that these changes allow a period of maturity of the business sector, including SMEs, a sector vulnerable to changes that impact their economic results.

2 BACKGROUND

Minimum wages in Mexico are regulated in article 123 of the political constitution of the United Mexican States, section VI, which in its second paragraph says that the general minimum wages must be sufficient to satisfy the normal needs of a head of family, in the material, social and cultural order, and to provide the compulsory education of the children. The minimum professional salaries will be set considering, in addition, the conditions of the different economic activities. It also establishes that they are set by a national commission composed of representatives of workers, employers and the government, which may be assisted by special advisory committees that it deems essential for the best performance of its functions.

The deterioration of the purchasing power from the seventies was aggravated, because to determine its increase has been considered as a benchmark inflationary indicator during the year. However, in some of them the price index far exceeded minimum wages established, causing a detriment in its value, such is the case of the periods of 1995 and 1988, in which the burden of the crisis was transferred to the workers who obtained this remuneration or a small amount higher than this, being the way that a reduction in remuneration has gradually accumulated. Then, the effect is shown in these periods, through the application of the national consumer price index (NCPI) and the general minimum wage (SMG).

TABLE 1 – Inflationary effect and detriment of the general minimum wage

Inflationary effect				detriment of the general minimum wage				
Period	NCPI		Inflationary Effect	Period	SMG		percentage increase	Loss vs Inflation
NCPI December 1995	43.471	-1	51.97%	SMG 1995	$ 20.15		31.96%	20.01%
NCPI December 1994	28.605			SMG 1994	$ 15.27			

SOURCE: Comisión Nacional de los de los Salarios Mínimos, (2019).

It was taken as an example from December 1994 to the same month of 1995, to measure the relative to a period of twelve months and as observed the inflation presented in this period was 51.97%, a very high figure, while the general minimum wage was only increases 31.96%, which represents a 20.01% lower. The indexes published in the official newspaper of the federation corresponding to these months were considered. This effect was given in different periods, in some with greater or lesser impact, as an example the year of 1988 is presented with a loss superior to the previous case.

TABLE 2 – Inflationary effect and detriment of the general minimum wage

Inflationary effect				detriment of the general minimum wage				
Period	NCPI		Inflationary Effect	Period	SMG		percentage increase	Loss vs Inflation
NCPI December 1988	11.963	-1	51.66%	SMG 1988	$ 7.765	-1	20.02%	31.65%
NCPI December 1987	7.888			SMG 1987	$ 6.47			

SOURCE: Comisión Nacional de los de los Salarios Mínimos, (2019).

In this period, the inflationary effect is 51.66%, very similar to the previous case. However, the increase to the minimum wage is 20.02% in relation to the previous one, which causes a percentage loss of 31.65% compared to the indicator of increase in prices. In this way, the loss of purchasing power was experienced, mainly impacting on the lowest salaries, derived from the link between minimum wage increases and other remunerations above these. In the resolution of mathematical operations equally, the unit is subtracted to determine the effect by the passage of time, separating the value taken as the basis for its measurement.

It is absurd to think that the minimum wages currently in force, both general and professional, are sufficient to cover the basic needs of a family, related to housing, food, education, clothing and health as established in the Political Constitution of the United Mexican States. This problem in some way directly affects the migration of workers to the United States, the concentration of the population in large cities, the abandonment of the countryside, as well as school drop-out which in turn are the cause of other social problems in an environment with high rates of poverty and marginalization.

3 APPROACH AND DELIMITATION OF THE PROBLEM

The present research work is aimed at highlighting the loss of the purchasing power of the general minimum wage over the last four decades, which urgently requires their recovery as already mentioned, through an orderly process to avoid financially drastic impact to organizations, specifically to SMEs. Likewise, to stop the deterioration of the standard of living of the most vulnerable sectors in the country such as the countryside, indigenous communities, domestic work, regions of greater marginalization, as well as to increase competitiveness in this area with the countries of the North, with the that Mexico has concluded trade agreements. The question that arises as a result of this problem is whether a gradual revaluation of the general minimum wage in an orderly and structured way, will avoid a financial impact that affects the business sector and specifically SMEs.

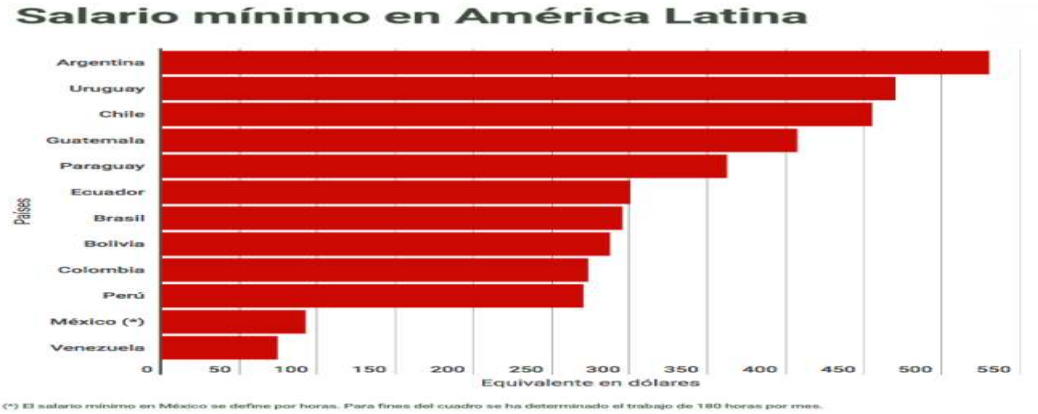
3.1 Research objective

Analyze the devaluation of the general minimum wage in Mexico, to propose an orderly and structured gradual revaluation scheme, avoiding a high financial impact in organizations, mainly in SMEs, but also to restore the purchasing power to workers.

3.2 Justification

In Mexico, by Constitutional provision in article 123 section VI, currently in effect, the minimum wages that workers must enjoy will be general or professional, and are established by a national commission composed of representatives of workers, employers and government. It may be assisted by special commissions of an advisory nature that it deems indispensable for the best performance of its functions. However, its detriment over the last four decades has affected vulnerable sectors, aggravating the poverty indicators in the areas with the greatest marginalization in the country and the purchasing power of the working class has generally deteriorated. On the other hand, worryingly, it is observed that, comparing with other Latin American nations, the penultimate place is occupied as shown graphically in the following image.

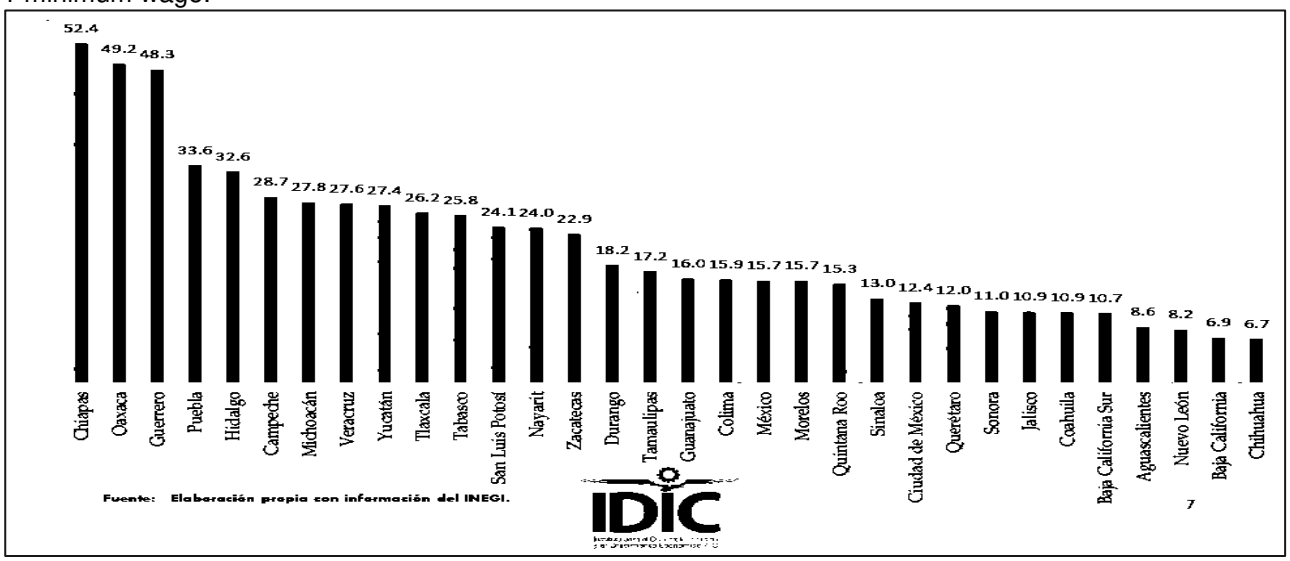
FIGURE1 – Minimum wage in Latin America (Monthly).



SOURCE: EXPANSIÓN in Alianza con CNN (2018)

Argentina and Uruguay are the ones with the highest pay, at the end of the graph is Venezuela, followed by Mexico, which currently has a minimum wage of 88.36 pesos per day, well below the next country, which is Peru. It is understood the reason why the United States of America and Canada, insisted on this issue in the negotiations of the free trade agreement just concluded. In states such as Chiapas, Oaxaca and Guerrero the results are alarming, the level of marginalization creates a worrying gap in relation to others, even though there is a distribution that reflects poverty indicators. In the following image, an ignored economic reality is presented and demands its immediate attention, in the different states.

FIGURE 2 – Percentage of the employed population that does not receive income and with incomes of up to 1 minimum wage.



SOURCE: Institute for Industrial Development and Economic Growth A.C. (2017)

The state of Chiapas has a population that does not receive income and up to a minimum wage of 52.4%, Oaxaca with 49.2%, Guerrero with 48.3%, which are considered to have a higher rate of poverty and marginalization. In all of them it is common the emergence of social problems, in the face of government backwardness and indifference. Puebla and Hidalgo have an indicator above 30%, Campeche, Michoacán, Veracruz, Yucatán Tlaxcala, Tabasco, San Luis Potosi, Nayarit and Zacatecas show figures above 20%, mainly improving the areas where industrial development has flourished. Lacking sufficient resources will cause school dropout, it will also impact on the migration of workers to the United States of America, as well as to centers of economic growth in the country, leaving remote populations and the countryside, which causes agglomeration in the main cities of the country.

4 THEORETICAL FOUNDATIONS

4.1 National consumer price index

The measure of inflation that is most used in the United States according to Samuelson & Nordhaus (2007), is the consumer price index, also called IPC, which they define as a measure of the average change, with respect to time, of the prices they pay urban consumers by a market basket of consumer goods and services. The market basket includes the prices of food, clothing, shelter, fuel, transportation, medical care, tuition and other goods and services purchased for everyday life. Prices of 364 separate classes of goods and services are collected in 23,000 establishments in 87 areas of that country.

According to the National Institute of Statistics and Geography (INEGI, 2013), the national consumer price index measures the average change in the prices of a fixed basket of goods and services purchased, which is representative of the expenditure on goods and services for the consumption of urban homes in the country over time. According to the Bank of Mexico (nd) the NCPI is an economic indicator that is used recurrently, whose purpose is to measure over time the price variation of a fixed basket of goods and services representative of household consumption.

The national price index allows measuring the variation that is originating in the value of goods and services, as a result of the increase in prices, in Mexico it is calculated by the National Institute of Statistics and Geography (INEGI), for which it quotes at least 1,000 products in 30 cities with more than 20,000 inhabitants of 20 states. However, it is an estimated average, for this reason it does not reflect 100% of reality. Also, taking into account that the monetary authorities establish the inflationary goal, a situation that allows manipulation by not considering goods with greater mobility in prices such as gasoline and other oil products, because according to information García (2018) Premium gasoline in December 2012 to August 2018 increased by 80.7%, the magna 76.8% and diesel 81.4%, while the price index officially determined during the same period increased only 24.72%.

The previous increases to fuels and the price index give rise to the comment that the official inflation issued by the INEGI does not reflect the reality, because when fuels increase, the price of goods and services increases directly, as a consequence of the change in the cost of production in the industry and transport services.

4.2 Inflation

Due to the economic importance of the country, it is very important to mention that for the Bank of Mexico (sf.), Inflation is the sustained and generalized increase in the prices of goods and services of an economy over time. The increase of a single good or service is not considered as inflation. If all the prices of the economy increase only once, this is not inflation either. Inflation is a generalized and continuous increase in the general level of prices of goods and services in the economy. Inflation is usually calculated as the percentage change in the consumer price index (CPI), which measures the average prices of the main consumer items (Gutierrez & Zurita, 2006).

For his part Samuelson & Nordhaus (2007), mentions that inflation occurs when the general level of prices rises. It also states that inflation shows different levels of severity. The usual thing is to classify them into three categories: low inflation, galloping inflation and hyperinflation, the first with single-digit rates, the second ranges between two and three digits and the third is highlighted by the disastrous increase in prices.

The above definitions agree that inflation consists of the generalized increase in prices, which causes products mainly of the basic basket to increase their value, causing a deterioration in the standard of living in sectors whose salaries are equal to the minimum or little more, because they do not increase in the same proportion as said goods. In Mexico in recent years, a control has been maintained in this indicator at one-digit levels. however, in previous periods, specifically the decade of the eighties, the figures were alarming, prompting that in 1992 the elimination was decreed of three zeroes to the weight, entering into force this provision in 1993. Said measure aimed at stabilizing the economy, given the high value of goods and services, which to acquire a large amount of money was needed.

4.3 Purchasing power

Purchasing power is the value of a currency expressed in terms of the quantity of goods or services that a unit of money can buy. Purchasing power is important because, other things being equal, inflation decreases the amount of goods or services that could be purchased (Céspedez, 2017).The purchasing power is the availability of resources that a person has to satisfy their material needs. In other words, the purchasing power is associated with the income of the subject to specify the purchase of goods or the contracting of services. Therefore, it is the availability of resources that a person has to satisfy their material needs (Pérez & Gardey, 2015).

The purchasing power of families, determinant of poverty levels, depends on the evolution of prices. Up to now, the Bank of Mexico has made important efforts to avoid further pressure, but it is evident that the dynamics expected for the coming months anticipate an impact on the real wages of workers, especially since prices continue to rise (González, 2017).

The aforementioned authors associate purchasing power with the ability of a person or family to meet their needs through the purchase of goods and services, is directly linked to their income. However, over time inflation has exceeded percentage of this availability, affecting their standard of living by reducing wages, in the same way contributing to higher marginalization and poverty rates.

4.4 SMEs

Companies are a source of income for workers, suppliers, government and businessmen, promote the economic development of society, contribute to the sustainability of public services, represent a means for personal fulfillment or satisfaction, and foster the capacity and development of skills, as well as investment and capital formation (Münch, 2006). The Ministry of Economy (2010), in Mexico, defines small businesses as those businesses dedicated to trade, which has between 11 and 30 workers or generate annual sales of more than 4 million and up to 100 million pesos. It also says that they are independent entities, created to be profitable, whose objective is to dedicate themselves to the production, transformation and / or provision of services to satisfy certain needs and desires existing in society.

The medium enterprises according to the economy secretariat (2010), are the businesses dedicated to trade that have from 31 to 100 workers, and generate annual sales that go from 100 million and can exceed up to 250 million pesos. In addition, it points out that they are economic units with the opportunity to develop their competitiveness based on the improvement of their organization and processes, as well as improving their business skills.SME (Pyme) is the acronym for small and medium enterprises. It is a commercial, industrial or other company that has a small number of workers and that registers moderate income (Pérez & Gardey, 2009).

The above definitions start in principle with the conceptualization of the company, highlighting its role as a source of income for workers, first, then suppliers and finally the government. The minimum wage is the central theme of the present investigation, a means of subsistence that must cover the basic needs of wage

earners. Subsequently, the SME is described, the authors agreeing to describe them considering the number of workers and the amount of their income, without taking into account their administrative and therefore competitive limitations, which makes them vulnerable to drastic changes in the environment.

4.5 Minimum Wage

In Mexico, in accordance with article 90 of the federal labor law (2015), minimum wage is the minimum amount that the worker must receive in cash for the services provided in a work day. It also mentions that it should be sufficient to satisfy the normal needs of a head of family in the material, social and cultural order, and to provide for the compulsory education of the children. The minimum wage includes a benchmark of the irreducible economic amount that, by legal mandate, every person who performs personal and subordinate work must daily receive, in order to satisfy their basic needs and those of their family, in the material, social and cultural order , and to provide compulsory education for their children, as established in article 123 of the Constitution, section A, section VI (National Human Rights Commission, 2018).The minimum wage has been defined as the minimum amount of remuneration that an employer is obliged to pay its employees for the work they have done during a given period, an amount that cannot be reduced by virtue of a collective agreement or an individual agreement (International Labor Organization, nd).The literature consulted agrees that the minimum wage is the lowest amount that a worker must receive by legal disposition, enough to cover the primary needs of a family, a situation that in Mexico has gradually moved away from reality, its deterioration has reached very worrisome levels, due to its impact mainly in some states of the republic already mentioned, where the level of marginalization and impoverishment is increasing every year, also generating social problems, such as food, education, justice among others.

4.6 Unit of measurement and update (UMA)

In accordance with the official newspaper of the federation of December 30, 2016, UMA is the Measurement and Update Unit that is used as the unit of account, index, base, measure or reference to determine the amount of payment of obligations and assumptions provided in the federal laws, the federal entities and the City of Mexico, as well as in the legal dispositions that emanate from said laws.

The Unit of Measurement and Update (UMA) is an approved economic reference and used since January 27, 2016. It was introduced to replace the scheme times the minimum salary (VSM), with which the payment of obligations as fines was calculated, the credits of the INFONAVIT and even the personal deductions. It was created with the aim that an increase in the minimum wage of the workers did not have such a marked inflationary impact, since increasing it not only increased salaries, but also fiscal obligations (Álvarez, 2018).

This economic reference as described in the literature consulted, comes to benefit in the payment of obligations, including those of a fiscal nature. However, it affects workers in the limit of the base salary of contribution. Therefore, in the determination of pensions and their subsequent increase. In the same way, it can impact on some benefits that according to the contract are linked to it.

5 METHODOLOGY

The methodology used for the development of this research is based on a qualitative and quantitative analysis. Qualitative data analysis used in this study derives meaning by reading and reviewing the data several times from electronic, literary and scientific sources, as well as governmental and journalistic statistical information, obtaining the information considered relevant to solve the problems raised in the present work, getting familiar with it and start looking for basic observations or patterns from transcribing the information, revisiting research objectives, developing the framework and identifying patterns and connections looking for common responses. It is considered a descriptive study because it provides valuable information regarding the loss of value of the minimum wage in Mexico, as well as its impact derived from an unscheduled adjustment.

The quantifiable treatment in this research is present when analyzing the variations and effects that have affected the minimum wage, by using economic indicators, as mentioned by Hernández, Fernández & Baptista (2014). The quantitative approach uses data collection to test hypotheses based on numerical measurement and statistical analysis, in order to establish patterns of behavior and test theories. To determine the impact, the data was taken from the year 1970 to date, updating the historical values with the NCPI, using the base December 2010, for practical reasons, as from July 2018 a new one is implemented. The foregoing in order to make a comparison with the current amounts and define the loss of purchasing power.

6 ANALYSIS OF RESULTS

In the background of this research, it was analyzed how the inflationary effect in the years taken as an example, exceeds the percentage increase of the minimum wage, causing a loss in purchasing power, since prices have increased above the increases in this retribution. Over the years, this differential has contributed to the impoverishment of the most vulnerable groups, such as day laborers in the countryside, indigenous communities, workers in rural areas and populations far from areas of development, accentuating more in states such as Chiapas, Oaxaca and Guerrero, in which the situation is worrisome. To illustrate in a reliable manner, the impact of the six-year period from 1982 to 1988 is determined (See table 3).

TABLE 3 – Inflationary effect and detriment of the general minimum wage

Inflationary effect				detriment of the general minimum wage				
Period	NCPI		Inflationary Effect	Period	SMG		percentage increase	Loss vs Inflation
NCPI December 1988	11.963	-1	3709.87%	SMG 1988	$ 7.765	-1	2033.24%	1676.63%
NCPI December 1982	0.314			SMG 1987	$ 0.364			

SOURCE: Own elaboration with data taken from the official newspaper of the federation (2011) and Cárdenas, Peralta, & Cárdenas, (2008).

In this period being President of Mexico Mr. Miguel de la Madrid Hurtado, the inflationary effect is 3,709.87% compared to the percentage increase in salary, of 2,033.24%, generates a differential of 1,676.63%, producing a very strong impact on the power purchasing of employees in general, because the increase to a certain extent serves as a reference for others with higher salaries.

The disparity between the previous percentage figures, proves the decrease in the purchasing power and the level of life of the workers, who finally have gradually loaded the weight of national economic disorders and those generated in the international arena. In the resolution of the mathematical operations equally, the unit is subtracted to determine the effect only by the passage of time, separating the value taken as the basis for its measurement (see table 4).

TABLE 4 – Inflationary effect

Inflationary effect			
Period	NCPI		Update factor
NCPI December 2017	130.813		8056.73
NCPI January 1970	0.016236489142		

SOURCE: Own elaboration with data taken from the Official Gazette of the Federation (2011)

In the previous table, the update factor is determined by the NCPI expressed according to the base of the second half of December 2010, which was set at 100, published in the official newspaper of the federation (Diario Oficial de la Federación, 2011), corresponding the period from January 1970 to the last month of 2017. The result of the previous operation reflects an inflationary impact for the period of time of 8,056.73, this indicator shows the effect due to the time taken for the calculation, applying the official information, that could be different from the real, for this it would be necessary to develop a new investigation (See table 5).

TABLE 5 – Minimum wage update to December 2017

Minimum wage update from 1970 to december 2017	
SMG year 1970	0.032
(*) Update factor	8056.73
(=) Salary updated to december 2017	257.82

SOURCE: Own elaboration

When applying to the general minimum wage corresponding to 1970 the update factor determined according to the previous table, the value is obtained considering the effect derived from the passage of time, resulting in an amount of $ 257.82, two hundred and fifty-seven pesos 82 cents, much higher to the $ 88.36

eighty-eight pesos 36 cents in force for this year of 2018. The above produces a devaluation of $ 169.46, one hundred and sixty-nine pesos with 46 cents, deterioration that generates a decrease in the standard of living of workers and the disproportionate increase of the levels of poverty in the aforementioned areas, which in turn are the source of other problems of a social nature. Therefore, it is urgent to establish a gradual recovery mechanism, which allows organizations and mainly SMEs, to have a period of maturity, to avoid financial problems.

The difference for the devaluation of 169.46, it is advisable to distribute in the following 6 years of government proportionally, considering the inflationary effect with the purpose of not losing value. In recent years, Mexico has maintained this indicator in one digit and the distribution of the projected adjustment proposed is shown in the following table 6.

TABLE 6 – Distribution of the adjustment for the devaluation of the updated minimum wage.

	2018	2019	2020	2021	2022	2023	2024
Difference due to devaluation of the general minimum wage	169.46	181.32	194.01	207.60	222.13	237.68	254.31
Estimated annual inflation	7%	7%	7%	7%	7%	7%	7%
Annual inflationary effect	11.86	12.69	13.58	14.53	15.55	16.64	17.80
Difference mor inflationary effect	181.32	194.01	207.60	222.13	237.68	254.31	272.12

SOURCE: Own elaboration

In the previous table, the determined difference is updated for each year considering an estimated annual inflation of 7%, since when distributed proportionally in the following federal government period, it would retain its value. At the time the real indicator would be applied, in this way the minimum wage would maintain its value. It begins in 2018, because it is the base year to determine the one that will remain valid for the following period. Next, the percentage to be increased to the general minimum wage determined each year, to compensate the accumulated loss is shown. That is, the amount per adjustment that must be added to the amount established by the national minimum wage commission.

TABLE 7 – Increase per year to the minimum wage, from the proposed adjustment.

	2019	2020	2021	2022	2023	2024
Difference mor inflationary effect	194.01	207.6	222.13	237.68	254.31	272.12
Previous year increase		32.34	39.99	43.69	46.89	50.20
Basis of calculation	194.01	239.94	262.12	281.37	301.20	322.32
Percent to increase per year	16.67%	16.67%	16.67%	16.67%	16.67%	16.67%
Amount to increase the minimum wage per year	32.34	39.99	43.69	46.89	50.20	53.72

SOURCE: Own elaboration.

This table reflects the amount that, in addition to the established minimum wage, would be increased to gradually pay the accumulated devaluation in the reference period, starting from the current increase for the year 2019. This in turn taking into account the estimated inflation considered for this case, it would maintain the following behavior.

TABLE 8 – Increase per year to the minimum wage estimated according to inflation.

	2018	2019	2020	2021	2022	2023	2024
General minimum wage	88.36	94.55	101.16	108.24	115.82	123.93	132.60
Estimated inflation	7%	7%	7%	7%	7%	7%	7%
Increase for the following year	6.19	6.62	7.08	7.58	8.11	8.68	9.28
General minimum salary the following	94.55	101.16	108.24	115.82	123.93	132.60	141.89

SOURCE: Own elaboration.

The calculations begin in 2018, as mentioned above, since it is the basis for determining the general minimum wage that will be in effect for the following year. 7% of estimated inflation is applied in each of the

years. In this way, its value is maintained at least coincident with the official data, which does not precisely prove that it is the real one. Finally, the following table summarizes how the projected minimum wage would be, considering the annual increase due to inflation, plus the adjustment per year derived from the accumulated devaluation.

TABLE 9 – Minimum estimated salary plus the proposed adjustment.

	2019	2020	2021	2022	2023	2024
General minimum wage	94.55	101.16	108.24	115.82	123.93	132.60
Adjustment for annual depreciation	32.34	39.99	43.69	46.89	50.20	53.72
Adjustment for devaluation previous years	0.00	32.34	72.33	116.02	162.91	213.11
General minimum salary with adjustment to be paid	126.89	173.49	224.26	278.73	337.04	399.43

SOURCE: Own elaboration

The above calculations consider the increase in the minimum wage taking into account the estimated inflationary effect each year, as well as the adjustment for devaluation, applied in the six-year government period, in order to recover the accumulated loss in the analysis time of the present work, achieving in this way compensating in part the purchasing power of the remunerations in general, as well as improving the quality of life in the areas of greatest poverty. This allows organizations and mainly SMEs to have a period of gradual increase to avoid financial problems by drastically raising their labor costs and taxes on salaries such as worker – employer contributions to the Mexican Social Security Institute, tax on outlays for remuneration to personal work, provided under the direction and dependence of an employer, and contributions to the national housing fund for workers.

The following table shows a calculation of the monetary effect, considering the minimum wage in force for this year 2018, integrating with the minimum benefits established in the federal labor law in this example, for the payment of employer's fees as the legislation indicates, of the social security (IMSS), the institute of the national fund for housing for workers (INFONAVIT), and the tax on outlays for remuneration to personal work, provided under the direction and dependence of an employer (payroll tax). It is necessary to mention that the unit of measurement and updating (UMA) was approved on January 27, 2016. Currently, it has a value of 80.60 established by INEGI, it is mentioned for being used in the determination of the contributions to the IMSS in the examples presented below.

TABLE 10 – Cost for employers' social security contributions and the payroll tax of a minimum wage

	Employer quotas for salaries up to 3 UMA				
	Salary daily fee	Salary base contribution	% of employer fees	Monthly base salary	Monthly employer fees
Employer contribution to the IMSS	$ 88.36	$ 92.35	30.550%	$ 2,862.85	$ 874.60
Employer contribution to INFONAVIT	$ 88.36	$ 92.35	5.0%	$ 2,862.85	$ 143.14
Payroll tax	$ 88.36	$ 92.35	2.0%	$ 2,862.85	$ 57.26
					$ 1,075.00

SOURCE: Own elaboration

As already mentioned for the payment of the IMSS quotas, the payment for daily quota must be integrated with the benefits received by the worker, to which amount the established percentages are applied. For a general minimum salary, the taxes on salaries paid by the company, amount to $ 1,075.00, per month. It is clear that the fees to INFONAVIT, retirement insurance and unemployment in old age and old age, are covered on a bimonthly basis, but for clarity they were calculated for a period of 31 days. The payroll tax is state-owned and the percentage corresponds to Michoacán. Therefore, in other states it may coincide or be different. The effect of these contributions for the remuneration updated from January 1970 to December 2018 is shown below.

TABLE 11 – Cost for employer social security contributions and payroll tax considering the minimum

	Employer quotas for salaries greater than 3 UMA				
	Salary daily fee	Salary base contribution	% of employer fees	Monthly base salary	Monthly employer fees
Employer contribution to the IMSS	$ 257.82	$ 269.47	31.650%	$8,353.57	$ 2,643.90
Employer contribution to INFONAVIT	$ 257.82	$ 269.47	5.0%	$8,353.57	$ 417.68
Payroll tax	$ 257.82	$ 269.47	2.0%	$8,353.57	$ 167.07
					$ 3,228.65

SOURCE: Own elaboration

In employer quotas for the Mexican Institute of Social Security (IMSS), there is a percentage increase, derived from the base salary of the contribution exceeding the equivalent of 3 UMA, whose current value as mentioned is $ 80.60, in accordance with the established in the current social insurance law. When considering the salary updated to December 2017, the taxes to the remuneration are raised from $ 1,075.00 to $ 3,228.65, a two hundred percent more, which implies an increase whose impact can generate financial problems mainly of liquidity in the organizations mainly in the SMEs, have disadvantages in its administration, derived from an unplanned change.

In addition to the increase in taxes on salaries, payroll in the same way will have a substantial increase, depending on the remuneration that has been established, as some organizations handle amounts a little above the established minimums, a situation that will be reflected in the expenses of operation and consequently in the economic results, in the payment of taxes, in the distribution of the profits to workers and in the growth and investment programs, derived from the strategic plans. With regard to SMEs derived from their low average life, it can represent a problem in terms of staying in the market.

Finally, the devaluation of the minimum wage due to increases less than inflation, not only causes injury to the weekly or biweekly perception of the worker, but also transfers to retirement, severance and old age insurance contributions, of the IMSS employer fees reflected in the previous calculations, negatively impacting the pensions when quoting with a low retribution, together with the above the determination of these through the UMA. Similarly affects the contributions to INFONAVIT, reducing the possibility of qualifying for a loan, if necessary have a smaller contribution by the employer.

7 CONCLUSION

This research work shows the process of devaluation of the minimum wage in the period taken as a sample from January 1970 to December 2017, as well as the states with the highest poverty rates, largely due to the gradual loss of power purchasing, result of inflationary indicators superior to the salary increase established. It is also observed that Mexico occupies the penultimate place within the Latin American countries with the worst compensation for this concept and with respect to the United States and Canada, trading partners, there is a huge difference.

Therefore, it is concluded that it is urgent to revalue the minimum wage, benefiting workers who perceive it and in some way those who are slightly above it, to restore purchasing power, also improving the standard of living of those who live in areas with a high rate of marginalization. Among them, day laborers in the countryside, casual workers, domestic workers, especially starting a recovery phase, avoiding the continuation of the punishment of the entry of the most vulnerable sectors and the middle class, as in recent years the increase in salaries is linked to this, resulting in a collateral effect. Similarly, the implementation of the UMA in the pension system, comes to shrink their amounts considerably in retirement, to be left with a lower value.

The revaluation of the minimum wage is proposed gradually, during the period of the incoming government, that is, beginning in 2019, proportionally increasing the sixth part of the accumulated devaluation. It is not recommended immediately, so that the organizations and mainly SMEs, have a period of adaptation with respect to the impact on their costs for salaries, as well as in taxes on salaries, whose increase as shown in the results of this research, rise considerably. The proposed mechanism is based on the application of inflation rates published previously by the Mexican bank (Banco de México), currently by INEGI, which may maintain biases, since the increase in gasoline during the current six-year period, as mentioned, has led to a generalized gradual increase of prices, leaving the published official data in doubt.

The most relevant findings of this research refer to the need to plan a process of revaluation of the minimum wage considering the effects of not establishing an adaptation period. In the same way, the

increase established each year must be proportional to inflation, even that the procedure for determining this is certified by an independent body that guarantees its certainty. In addition to the above, the negative impact on workers' pensions is analyzed, as well as its link with the UMA, which has a negative effect. As for the benefits related to retirement insurance, unemployment in advanced age and old age, provided by the IMSS, are diminished as well as contributions to INFONAVIT, when a low compensation is perceived, putting the worker at a disadvantage with respect to his pension and possibility of obtaining loans for buying a house or acquiring housing for the whole family.

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