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Artículos científicos

# El desempeño gubernativo mediante un análisis de indicadores de ingresos del Gobierno de Nayarit 2015-2019

Government Performance Through an Analysis of Income Indicators of the Government of Nayarit 2015-2019

Desempenho do governo através de uma análise dos indicadores de renda do governo de Nayarit 2015-2019

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#### Resumen

Las entidades federativas tienen como objetivo lograr el bienestar de la ciudadanía. Parte de ello es crear los mecanismos necesarios para generar ingresos propios y lograr el bien común. Actualmente, los procesos recaudatorios de las entidades federativas deben ser acordes a las capacidades de sus contribuyentes, manteniendo un desempeño ideal. Este estudio fue realizado en el estado de Nayarit, donde se analizó el actuar gubernamental tomando en cuenta indicadores de ingresos durante el periodo del 2015 al 2019. Para ello, se empleó una metodología de tipo descriptiva no experimental tomando como muestra cuatro indicadores de ingresos mediante mínimos al cuadrado. Entre los principales resultados resalta una basta dependencia de la aportación federal para sufragar los gastos del estado, lo que a su vez evidencia un deficiente sistema de recaudación y, por ende, una baja generación de ingresos propios durante el periodo del año 2015 al 2019.

**Palabras clave:** administración local, contribución presupuestaria, gobernabilidad, política de ingresos, tributación.

#### Abstract

The federal entities aim to achieve the well-being of the citizenry. Part of this is to create the necessary mechanisms to generate their own income and achieve the common good. Currently, the collection processes of the federal entities must be in accordance with the capacities of their taxpayers, maintaining an ideal performance. This study was carried out in the state of Nayarit, Mexico, where government action was analyzed considering income indicators during the period from 2015 to 2019. For this, a non-experimental descriptive methodology was used taking four income indicators as a sample and using least squared. Among the main results, a large dependence on the federal contribution to cover state expenses stands out, which shows a poor collection system and, therefore, a low generation of own income during the period from 2015 to 2019.

Keywords: local administration, budget contribution, governance, revenue policy, taxation.



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#### Resumo

Os entes federativos visam alcançar o bem-estar dos cidadãos. Parte disso é criar os mecanismos necessários para gerar renda própria e alcançar o bem comum. Atualmente, os processos de cobrança dos entes federativos devem estar de acordo com as capacidades de seus contribuintes, mantendo um desempenho ideal. Este estudo foi realizado no estado de Nayarit, onde a ação do governo foi analisada levando em consideração indicadores de renda durante o período de 2015 a 2019. Para isso, foi utilizada uma metodologia descritiva não experimental, tomando como amostra quatro indicadores de renda por meio do ao quadrado. Entre os principais resultados, destaca-se uma grande dependência da contribuição federal para custear as despesas estaduais, que por sua vez evidencia um sistema de arrecadação deficiente e, portanto, uma baixa geração de renda própria no período de 2015 a 2019.

**Palavras-chave:** administração local, contribuição orçamentária, governança, política de renda, tributação.

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## Introduction

Is it necessary to change the state tax system in Mexico or to make the collection capacity more efficient through government efforts that consider their taxpayers? In its assembly held in 2015, the United Nations Organization (UN) expressed the need to achieve the Sustainable Development Goals. And to achieve them, the modernization of tax systems is of vital importance, that is, improving the collection or tax capacity.

The State is obliged to generate the conditions to achieve well-being in society, but to comply with this obligation, the participation of citizens is necessary through the contribution of the payment of taxes, rights or uses known as own income, which are established in state revenue laws.La política fiscal en México clasifica los ingresos en tributarios, petroleros, por medio de organismos y empresas del estado, no tributarios e ingresos estatales. Para el presente estudio se hablará solo sobre *ingresos estatales*.

Fiscal policy in Mexico classifies income as tax, oil, through state agencies and companies, non-tax, and state income. For this study, only state revenues will be discussed.

Currently, states receive revenue in two ways. The first is known as own income, collected through the tax powers that are generated through the collection of state taxpayers.





And the second as federal transfers, which are received through contributions or participations.

In this sense, María Antonia Ortiz Gallardo (2010) mentions that the highest income for the states is through the federation, this is due to the agreements between the states and the federation embodied in the Fiscal Coordination Law.

Undoubtedly, revenues are vital for a tax system to work, they help to achieve wellbeing, hence the importance of evaluating or analyzing government efforts on collection processes and the capacity that each state has.

In the report presented by the Mexican Institute for Competitiveness [IMCO] (2020), two points stand out. The first, that the concept that generates the most income is state taxes; and the second mentions that the federation collects more than 90% of the total collection of the country and the rest, the federative entities.

Over time, various studies have been presented that underline the lack of use of the states to generate their own income. For example, in the study carried out by Favila and Armas (2018) it is mentioned that the states do not take advantage of the collection capacity, which makes them live off the federation, which, in turn, causes high debts and affects the well-being of the community. citizenship. In the same way, Eufemia Basilio (Vasquez, April 18, 2020) considers that the federal entities must improve their ability to collect their own income. She should point out that Mexico has a very low collection when compared to the rest of the members of the Organization for Economic Cooperation and Development (OECD).

In 2021, in the review of the Income and Miscellaneous Fiscal Law 2022, members of the main federal collection institutions defended the fiscal policy of the federal government (Piña, October 7, 2021). And they stressed that for the current fiscal year (2022), even implementing a new tax regime, the collection process must be improved, that is, it must be simple, understandable and automated. Among the most important changes in federal tax policy was promoting a culture of compliance with obligations for young people over 18 years of age who earn income. In addition, the delegation pointed out that the forms of collection of each federal entity should be evaluated, because they do not improve their local finances, and they proposed realigning incentives through coordination with the federation.





Thus, own income has become vital to finance local development, improve health conditions, education and infrastructure works, basic objectives in government action. For the present study, it is necessary to answer the following questions: how was the government act when generating its own income for the state of Nayarit in the period from 2015 to 2019? And what was the state of Nayarit's own revenue collection capacity like during the same period of time?

#### **Theoretical-conceptual section**

Before continuing, it is important to define the concept of own income. And in this line, Ruiz and García (2020) explain that own income is the "annual sum of taxes, contributions for improvements, rights, products and use, collected by a federal entity" (p. 181). For his part, Madrigal (2021) says of these that "they are taxes, rights, products, contributions and uses" (p. 140).

Taking into account the above, here it is considered that own income is all the concepts that each state collects from its taxpayers, which may be taxes, rights, products, uses, contributions and use of the state's assets, which must be approved in its respective income law and published in the official newspaper of each of these entities.

Another concept that is important to define for this work is the collection of own income. In this regard, Ruiz (2020) explains that the purpose of this action is to support the growth of the region. In fact, raising your own income helps the development of the entity, but why contribute or pay state taxes? Favila and Armas (2018) recall that the Political Constitution of the United Mexican States establishes that one of the obligations of citizens is to contribute to the expenditures of the federation and the states.

Currently, the National Fiscal Coordination System (SNCF) collects the broadest concepts established in the Federal Income Law and leaves the creation of concepts with minimum bases, known as own income, to the federal entities.

In 2017, Rodriguez et al. (2017) presented a study where they observed the performance of state treasuries, using an acir method, where they analyzed variables of capacity, effort and fiscal productivity of all the States in Mexico, having as main results an inverse relationship between the capacity variables and fiscal effort.

Now, to know the capacity or estimate the efficiency of own revenue collection, there are several studies that consider different indicators. In one of them, in the study by Rao





(1979, cited in Favila and Armas, 2018), it is mentioned that revenue collection increases when the political party of the federal government is equal to that of the state government. Another study highlights the formula that suggests that a high level of collection is equal to a high level of economic development (Martín and Uribe, 2010). While Aguilar (2010) comments that an analysis of the administrative efficiency and the tax structure as well as the economic conditions of the place to be investigated is necessary, in addition to a low fiscal effort by the states.

In a later study, Madrigal (2021) establishes three aspects for the collection of own income. The first is to keep the taxpayer registry updated; the second, the evaluation processes, and the last, that there is effective coordination. Likewise, Unda (2021) reminds us that there are three factors that determine collection, namely: economic, administrative and political economy. Regarding the definition of these, Unda himself (2021) does it in the following way: the economic refers to the monetary capacity that each federal entity allocates to collect; the administrative involves the human, material, technological and legal tools, and the political economy, which makes each entity different and the strategies and plans that the ruler has in progress.

This is how there are different concepts, forms and indicators to make an entity's own revenue collection capacity more efficient, however, it is always important to improve the capacity of the taxpayer, a reliable and efficient Government to collect.

# Method

After reviewing the available literature, the present study responds to a nonexperimental type. Regarding this, Hernández and Mendoza (2018) define it as the type of studies where the researcher does not change the parameters or characteristics of the research.

Likewise, the longitudinal design was used. In this case, Hernández and Mendoza (2018) characterize it as one that uses data from different years to make descriptions and future conclusions. One of the most used tools for this is the data panel. Thus, for this research, a non-experimental type with a longitudinal design was considered, carried out in the state of Nayarit, taking into account the period from 2015 to 2019 and a sample of four income indicators.

Once the methodology was mentioned, the variables were defined:





- Variable dependent on the model: the indicator called taxes per capita of the state of Nayarit published by the IMCO was used with the intention of avoiding an error in the model.
- Independent variables: income indicators were used: the first indicator was the gross domestic product (GDP) per capita of the state of Nayarit, to show the level of development of the entity; the second indicator was income from industry in the state of Nayarit, the value of the industry in the economy of the state of Nayarit; the third indicator was the fiscal pressure of the state of Nayarit, which shows the division of state taxes and state GDP; and lastly, the Nayarit fiscal autonomy indicator for the aforementioned period.

The results obtained using the indicators mentioned in the period from 2015 to 2019 of the Government of the state of Nayarit are presented below.

### Per capita taxes

For the dependent variable, per capita taxes are understood as the result of dividing the income of the state of Nayarit by the number of inhabitants of the federal entity under study, which gives as a result the amount that each Nayarit contributed to the state of Nayarit for concepts own income. As a result, an average of 957.56 pesos per year was obtained here, as shown in figure 1.





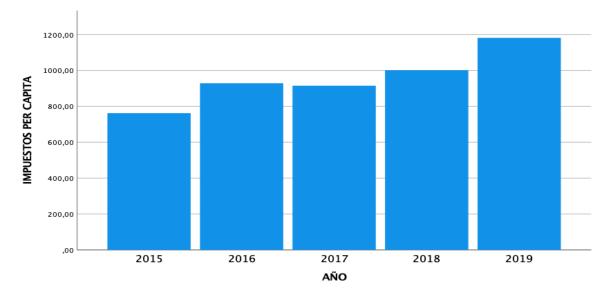


Figura 1. Impuestos per cápita del 2015 al 2019

Fuente: Elaboración propia

### GDP per capita of the state of Nayarit

It is an indicator that describes the level of development of a state; It is also known as an indicator of the quality of life in a country or state. For the present investigation, as previously specified, data from 2015 to 2019 of the state of Nayarit were considered, and these show a null increase in the Nayarit economy, that is, that, once the income generated per inhabitant is equitably distributed , the state of Nayarit was in a range of 1,000 pesos to 125,000 per inhabitant, which indicates that there was a lack of actions in the actions of the Government in turn regarding social investments and government capacity, which is reflected in the quality of life and development , in addition to the lack of negotiations with the federal government through which development in the entity is promoted, as can be seen in figure 2.





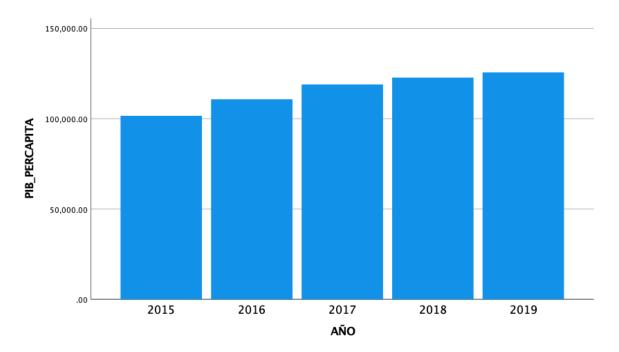


Figura 2. PIB per cápita del 2015 al 2019

## Income by the industry of the state of Nayarit

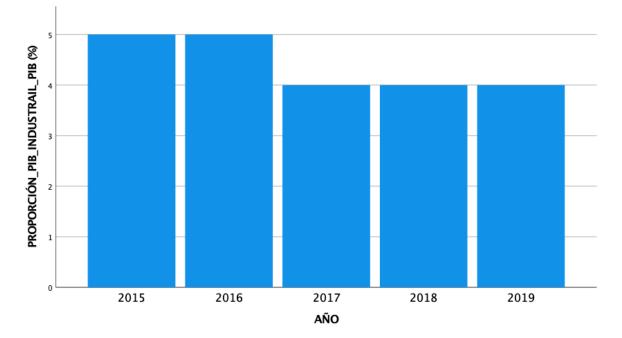
This indicator represents the income that the entity has for the industry, that is, the greater the industry within the state, the greater the increase in income for it. Here, a minimum percentage was obtained, which represents a low industrialization in the state of Nayarit, a situation that gives much to be desired from the Government's actions: not taking advantage of the benefits and the territory that the state has, as shown in the figure 3.



Fuente: Elaboración propia



Figura 3. Ingreso por la industria del 2015 al 2019



Fuente: Elaboración propia

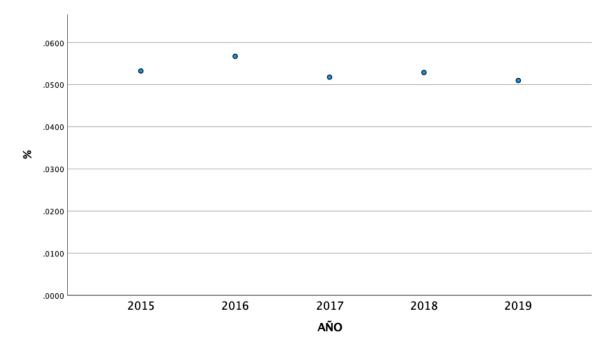
# Fiscal pressure from the state of Nayarit

The local fiscal pressure is an indicator that serves to know the reality of the actions carried out by the Government to improve income, that is, if the fiscal pressure is low there are reasons to think that taxpayer evasion is high and that the Government did not implement a correct collection. For the present investigation, the Government of the state of Nayarit presents a pressure of 0.0500% on average, which is low and gives the opportunity to make its revenue collection more efficient, as can be seen in figure 4.





Figura 4. Presión fiscal local del 2015 al 2019



Fuente: Elaboración propia

## Financial autonomy of the state of Nayarit

This indicator indicates the ability of the state to collect its own revenues with respect to its total revenues. And it shows the dependence that the state has on the federal government. Indeed, figure 5 shows the percentage that the state of Nayarit had from 2015 to 2019, which reflects a high dependence on the federal government and a poor collection of its own income.





OUDDING 4 2015 2016 2017 2018 2019 AÑO

Figura 5. Autonomía financiera del 2015 al 2019

## **Information processing**

The model used corresponds to a linear panel. This type of model has the advantages of increasing the econometric efficiency in the estimation, expanding the scope of economic questions to be resolved. For the present study, the SPSS system supported by the method of least squares was used. Thus, the following was achieved (see table 1).



Fuente: Elaboración propia



Variable dependiente: Impuestos per cápita				
	Méto	do: Panel de datos		
	Mue	estra: 2015-2019		
Periodos incluidos: Cuatro				
Total de observaciones: 12				
Indicadores	Coeficiente	Error estándar	Estadístico t	Valor <i>p</i>
Presión fiscal local	569 954	152 397	3 740	0.166
Importancia de la industria	69 673	30 785	2 263	0.265
PIB per cápita	0.018	0.006	3 245	0.190

Tabla 1. Resultados

Fuente: Elaboración propia

## Results

The results obtained by the model presented in Table 1 reveal that the first three elements investigated show that there is no statistical significance. In addition, the financial autonomy variable was tested, and it was determined that it be excluded from the final model due to the lack of collinearity in the results.

The foregoing indicates that of the determinants analyzed to determine government action, taking into account four income indicators, government action is not favored by determinants such as local tax pressure, industry income and a lack of strategies to increase own income. There is a great dependence on participations and contributions from the federation.

# Discussion

The state of Nayarit is an entity with sufficient potential, but for this to materialize it is necessary for the ruler in turn to create the necessary conditions and opportunities to promote a quality of life for its citizens. The reason for this study was to show the performance of this actor through four income indicators. The first result shows an average of 1000 pesos collected by each inhabitant of the state of Nayarit during the study period, which represents a great confusion: if the slight increase that occurs is due to the improvement in the collection processes or due to the increases in fiscal policy each year.





The low collection of local revenues is a consequence of the national fiscal policy, as stated by Guillermo and Vargas (2017), who also point out that there is inefficiency when collecting by local governments and that the current federal policy has led to states do not worry about increasing their own revenues or improving collection processes, since they know that the resource will be supplied to them.

The second finding presents a worrying panorama, since it shows that the state of Nayarit has low growth despite the contributions and participations it received during the study period. The level of development is low. However, in the following indicator of this study, a lack of use and generation of industrial development is observed, which is why there is an opportunity to carry out the necessary steps by the ruler in turn to increase industrial development and thereby improve the conditions and quality of life for the entity.

Finally, it is worth bringing to the table the words of Mendoza (2019), who mentions that the level of development of each state is related to the fiscal effort, transparency and accountability, thanks to which a higher income for the states. However, in this case, a correct collection of income has not been implemented due to lack of actions in government operations, possibly due to fear of political issues, citizen anger or lack of capacity in government operations.

# Conclusions

The following is concluded from this research work. The performance of a ruler must aim to improve the quality of life of its citizens and seek the best strategies to guarantee the development of the entity, in this case the state of Nayarit.

These strategies imply the need to strengthen the processes of collecting own revenues, that is, to improve fiscal efforts, taking into account the human, technological and legal capacity of the state and the possible impact on the political cost.

The strategy on industrial income would have a double benefit: development in the entity due to the generation of jobs and a favorable increase in collection.

Finally, as long as the federal fiscal policy does not encourage the generation of own income or the implementation of coordinated efforts that manage to increase the fiscal pressure, there will continue to be economic dependence on the federation.





#### **Future lines of research**

Different strategies have been carried out to improve the income capacity of an entity, but it still depends largely on federal contributions and participations, which is why this paper analyzed government performance through the analysis of income indicators of the Government of the state of Nayarit from the period 2015 to 2019.

In this regard, the main future lines of research derived from the results are the following: keeping the regulatory framework updated to prevent the evasion and avoidance of income of a federal entity; implement strategies that increase the income of the Government of the state of Nayarit and that the citizen is benefited in their well-being, and analyze and implement an agreement where the federation helps to exert fiscal pressure in conjunction with the state of Nayarit.

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