Efficient budget allocation in Mexico

Allocation efficient orçamentária in Mexico

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Resumen

Esta investigación aborda la relación entre la eficiencia del presupuesto y la participación del Estado en la economía mexicana. Para ello, se ofrece una visión histórica y su evolución a lo largo del tiempo, con un enfoque en el actual gobierno, conocido como la “cuarta transformación” (4T). En concreto, se revisan los argumentos a favor y en contra de la intervención estatal en la economía y se analiza la importancia de la participación del Estado en la asignación del presupuesto público, para lo cual se hace hincapié en su impacto en el crecimiento económico y la reducción de las desigualdades. El estudio se centra en evaluar cómo el gasto público del actual sexenio gubernamental afecta al crecimiento económico del país. En tal sentido, se demuestra que el adecuado uso del presupuesto público es crucial para el crecimiento de la economía mexicana,
mediante acciones como la creación de infraestructura, la protección de los derechos laborales, el impulso a sectores estratégicos, así como la promoción de igualdad de oportunidades. El actual gobierno presenta resultados reveladores en torno al emprendimiento de acciones para generar un desarrollo económico y social mediante un mejor uso de los recursos públicos; asimismo, señala que la opacidad en el manejo de recursos en varios proyectos dificulta la obtención de positivos resultados y genera cuestionamientos sobre el uso eficiente de los recursos en el país. Por eso, resulta crucial contar con instrumentos que garanticen transparencia, rendición de cuentas y estabilidad económica que permitan prevenir la corrupción. Asimismo, se destaca la importancia de encontrar un equilibrio para que el Estado cumpla su función reguladora sin obstaculizar la innovación y el crecimiento económico.

**Palabras clave:** crecimiento económico, economía mexicana, participación del Estado en la economía, presupuesto público.

**Abstract**

This research addresses the relationship between budget efficiency and State participation in the Mexican economy, offering a historical vision and its evolution over time, with a focus on the current government known as the "Cuarto Transformación" (4T). The arguments for and against state intervention in the economy are reviewed and the importance of State participation in the allocation of the public budget is analyzed, emphasizing its impact on economic growth and the reduction of inequalities.

The study focuses on evaluating how public spending affects the country's economic growth, using the current six-year term as an example. It is shown that the proper use of the public budget is crucial for the growth of the Mexican economy, through actions such as the creation of infrastructure, the protection of labor rights, the promotion of strategic sectors and the promotion of equal opportunities.

Regarding the current government, the results reveal that, although actions have been undertaken to generate economic and social development through better use of public resources, the opacity in the management of resources in several projects makes it difficult to obtain good results, which raises questions about the efficient use of resources in the country. In this sense, it is crucial to have instruments that guarantee transparency, accountability and economic stability, preventing corruption. Likewise, the importance of finding a balance is highlighted so that the State fulfills its regulatory function without hindering innovation and economic growth.
Keywords: Economic growth, Mexican economy, State participation in the economy, Public Budget.

Resumo
Esta pesquisa aborda a relação entre eficiência orçamentária e participação do Estado na economia mexicana. Para isso, é oferecida uma visão histórica e sua evolução ao longo do tempo, com foco no atual governo, conhecido como a “quarta transformação” (4T). Especificamente, são revistos os argumentos a favor e contra a intervenção do Estado na economia e analisada a importância da participação do Estado na alocação do orçamento público, para o que é dada ênfase ao seu impacto no crescimento econômico e na redução das desigualdades. O estudo centra-se na avaliação de como os gastos públicos durante o actual governo de seis anos afectam o crescimento econômico do país. Neste sentido, demonstra-se que o uso adequado do orçamento público é crucial para o crescimento da economia mexicana, através de ações como a criação de infraestruturas, a proteção dos direitos laborais, a promoção de setores estratégicos, bem como a promoção da igualdade, das oportunidades. O atual governo apresenta resultados reveladores no que diz respeito à realização de ações para gerar desenvolvimento econômico e social através de melhor utilização dos recursos públicos; Da mesma forma, aponta que a opacidade na gestão de recursos em diversos projetos dificulta a obtenção de resultados positivos e levanta questões sobre o uso eficiente dos recursos no país. Portanto, é crucial ter instrumentos que garantam a transparência, a responsabilização e a estabilidade econômica que permitam prevenir a corrupção. Da mesma forma, destaca-se a importância de encontrar um equilíbrio para que o Estado cumpra a sua função reguladora sem prejudicar a inovação e o crescimento econômico.

Palavras-chave: crescimento econômico, economia mexicana, participação do Estado na economia, orçamento público.

Fecha Recepção: Julio 2023
Fecha Aceptación: Diciembre 2023
**Introduction**

The role of the State within the economy has been the subject of intense debate and controversy. The question of to what extent the government should intervene in the economic affairs of a nation has generated different conflicting positions that have given rise to divergent economic theories and policies. For this reason, this study starts from the historical evolution of the State's participation in the economy to analyze the arguments and theoretical perspectives of various authors on this topic and the impacts on the efficient allocation of the budget.

**Methodology**

The methodological basis of this study is based on the application of the public sector economics method, since it sought to guarantee a consistent approach based on verifiable evidence. The main objective of the research was to thoroughly explore the relationship between the efficiency of the public budget and the participation of the State in the Mexican economy. To carry out the research project, a series of fundamental stages were developed. First, an exhaustive search for secondary data from reliable government sources was carried out, since the data used, such as public budget values, could not be obtained through primary collection methods, such as questionnaires or surveys, but rather were where available in publications or public records. These data were meticulously selected and validated in order to guarantee their integrity and consistency with the objective of the work.

Once the pertinent data was collected, an analysis was carried out that involved the calculation of growth rates and the analysis of graphic models to evaluate the relationship between the State's participation in the economy and the efficient allocation of the public budget in Mexico. This approach allowed us to delve deeper into underlying patterns and emerging trends, shedding light on how state intervention directly impacts economic growth and the reduction of inequalities in Mexico.

It is important to note that, in this study, the inclusion of tangential topics or topics not directly related to the main research was avoided. Instead, they focused on rigorous analysis of the interaction between state participation in the economy and budget efficiency to ensure that work remained focused and coherent at all times.
Evolution of State participation in the economy

The participation of the State in the economy has been a topic of constant debate in the political, economic and social spheres. Historically, governments have intervened in the economy in different ways. In the 19th century, many countries began to show democratic attributes, which coincided with the growth of markets and their move away from government control (Afonso et al., 2020). This caused the behavior of individuals to be reconsidered in the face of the establishment of rules that protected their rights, so that two schools of economic thought emerged that established different positions regarding the participation of the State in the economy and its relationship with the impact on economic growth.

One of the schools of economic thought of the time, known as the *laissez-faire* approach, advocated for it to be adopted as standard practice in all market economies (Kahan, 2022). This perspective, which originated from the pioneering ideas of Adam Smith in 1776, was deeply influenced in later stages by Social Darwinism, along with other leading economists of the time.

Within this current of thought, the idea was held that the government should have a limited role and avoid any interference in the natural development of societies. The free market was considered the most appropriate philosophy to achieve optimal development, which would gradually extend to the entire population. Furthermore, the importance of guaranteeing the right to private property and the right of citizens to participate in economic activities without the need for government approval was emphasized (Chandra, 2021; Kahan, 2022).

In this paradigm, it was postulated that those individuals who held property inevitably enjoyed superior political and economic power compared to dispossessed workers. As economies became increasingly sophisticated, additional concerns arose about the need to regulate and ensure social security. This process promoted, in certain countries, the creation of unions, the enactment of labor legislation and the implementation of government regulations aimed at safeguarding workers’ rights and consumer protection (Chandra, 2021).

Apart from the above, the socialist school of thought emerges. This school of thought put the distribution of income and the situation of workers at the center of attention, seeking greater state intervention in the economy and greater public spending to satisfy the basic needs of the population. Some versions of socialism even sought the expropriation of private property and the creation of governments that, through a planned economy, directed the production and distribution of resources towards the general well-being of the population (Toro, 2019).

Toro (2019) points out that, throughout the 20th century, socialist and liberal ideas continued to evolve and adapt to new economic and political realities. While socialism continued
to promote greater state intervention in the economy to ensure the well-being of the population, liberalism came under criticism for its inherent problems, such as monopolies. For this reason, some economists began to look for solutions to these problems, some of the labor rights of workers began to be recognized, and safety measures improved.

During the Great Depression of the 1930s, state intervention in the economy expanded further with the implementation of Keynesian policies aimed at stimulating demand and employment. These policies included public investment in infrastructure, the regulation of financial markets, and the implementation of monetary and fiscal policies. Furthermore, it is established that the role of the State in the economy continued to grow in the decades after World War II due to a growing distrust about the supposed efficiency of an unregulated market, as well as a displeasure about the distribution of resources that was generated within the free market. After the 1960s, an increase in public spending and tax collection was observed in developed countries, along with greater regulation of markets, with the aim of ensuring a state of well-being for the population (Afonso et al., 2020).

In recent decades, many countries have followed a trend towards economic liberalization and privatization. However, the 2008 financial crisis and the Covid-19 pandemic caused greater state intervention in the economy in order to protect citizens and stimulate economic recovery, which has revived the debate about the role that the State should play, to play in the economy.

**State intervention in the economy**

One of the main arguments in favor of state participation in the economy is that it can provide long-term stability and security. This is achieved through public policies that regulate economic activity, create incentives for private investment and establish social protection networks for those who are in vulnerable situations. For example, a government can implement fiscal and monetary policies that encourage economic growth and job creation, as well as social assistance programs to support citizens facing economic difficulties (Toro, 2019).

One of the most common forms of State intervention in the economy is through the implementation of these social programs, such as social security, public health and free education. These programs seek to provide citizens with a safety net that allows them to access basic services regardless of their socioeconomic level, which in turn can reduce the gap between rich and poor.

Furthermore, as mentioned by Toro (2019), the participation of the State in the economy can help correct market failures because, in some cases, they are not able to efficiently allocate resources due to lack of competition, asymmetric information, or negative externalities. In such
situations, it is noted that State intervention may be necessary to ensure that the desired results occur, and correct inequities present in society. For example, the government can regulate the prices of public services to ensure that they are accessible to all citizens or impose taxes and regulations to reduce environmental pollution and allocate resources to address priority needs of the population.

On the other hand, there are positions against state intervention in the economy. One of the main arguments is highlighted by Tello (2019), who points out that government participation can limit economic freedom, as well as reduce innovation and creativity. Furthermore, it suggests that the presence of the State can generate inefficiencies and corruption, since public officials may not have the same incentives as private actors to maximize efficiency and minimize costs. In addition to the above, it is proposed how some critics argue that state intervention in the economy can result in the formation of monopolies controlled by the State, which could have fewer incentives to improve the quality and reduce the prices of the goods and services they provide. they offer.

Despite the arguments to the contrary, it is important to note that in most of the world's economies there is some degree of government participation. For example, in Asia, governments have played a key role in intervening in infrastructure development and promoting strategic industries such as technology and renewable energy. On the other hand, in the European Union, governments have collaborated to establish policies and regulations that promote financial stability and social well-being in the region.

From the above, it can be seen that the active participation of the State in the economy is essential to guarantee the well-being of the population and economic growth. In this sense, Mazzucato (2021) mentions that it is the responsibility of governments to ensure social well-being for their citizens. Regarding the above, it considers that a strong and capable State is necessary to ensure that the economy functions efficiently and equitably. This implies that the State must have the capacity to regulate markets, supervise companies and avoid monopolistic practices. Likewise, it is considered that the State has the responsibility of promoting investment in strategic sectors such as infrastructure and technology with the aim of generating employment and promoting an increase in productivity. It is also crucial that it ensures the provision of quality public services that are fundamental for the development of society.

In this context, it is relevant to consider that public resources must be used efficiently and effectively to achieve the stated objectives. To do this, good planning, supervision and evaluation of the programs and projects that are carried out are required. The efficiency of public spending is important for several reasons: it allows maximizing the impact of public resources and achieving
greater benefit for the population, and it helps prevent corruption and misuse of public resources, which in turn strengthens the trust of citizens in public institutions and provides improvements in governance (ENAID, 2019; Flores et al., 2020).

Taken together, the ideas above suggest that public spending is a key issue for any government. The efficient and effective administration of public resources is essential to guarantee the population's satisfaction with the services offered and to maintain citizen confidence in public institutions. Thus, maximizing the impact of public resources serves to improve the quality of life of citizens.

In this sense, to achieve efficient management of public spending, governments must develop action plans and programs that contemplate adequate planning and evaluation of the projects and programs to be carried out. Therefore, it is important to establish control and monitoring mechanisms that make it possible to detect any deviation of resources and correct management deficiencies in a timely manner. Likewise, the implementation of transparency and accountability mechanisms is essential to prevent corruption and misuse of public resources, and to improve their efficiency.

Taking into account the above, it is important to consider that civil society has a key role in the correct allocation and execution of the public budget, since citizens have a unique perspective on the needs of their community and can provide valuable information on how they should be allocate public resources to meet those needs. In a democratic system, citizens have the right and responsibility to actively participate in the decision-making process and in overseeing the management of public resources. Therefore, civil society can and should participate in the preparation of the budget, expressing its needs and demands, and monitor its execution to ensure that resources are being used efficiently and effectively.

In short, transparency and accountability are essential to guarantee the effective use of resources and improve the quality of public services. To achieve this, it is necessary for the internal and external control bodies to function fully and to implement policies that promote transparency in the use of public resources. The implementation of these policies requires the firm commitment of the State and civil society, the collaboration of internal and external control bodies, and the active participation of citizens. Only in this way will efficient and effective management of public resources be achieved for the benefit of society as a whole.

For this reason, the right of civil society to demand this information and to actively participate in the supervision and control of the contracting and awarding processes of public works and services is highlighted. Consequently, it is important that civil society is trained and informed
to play a critical and constructive role in monitoring the management of public resources and reporting any irregularities that arise.

In relation to this, it is vital to take into account the statistics that exist on transparency in the management of public resources, since they allow us to better understand the current situation and propose strategies to improve it. However, in the Mexican context, according to the National Survey on Access to Public Information and Protection of Personal Data (ENAID) 2019, carried out by the National Institute of Statistics and Geography (INEGI), it has been shown that 56.6% of the Mexican population is unaware of the authorities' transparency obligations. Furthermore, only 3.6% of the population has requested information from a government institution, which indicates a decrease compared to 2015, when this figure was 5.6%. Furthermore, it is relevant to highlight that the number of people who requested information from a public institution and received it decreased slightly, going from 73.1% in 2015 to 72.4% in 2019.

These figures reveal that there is still a long way to go to promote the culture of transparency and access to public information in Mexico. It is necessary to work on promoting transparency and improving processes for the management of public information in order to strengthen trust and citizen participation in government decision-making.

The role of the state in the Mexican economy

Since 1982, the average growth of the gross domestic product (GDP) per capita in Mexico has been 2% per year, which is below the recorded average of 3% per year during the period between 1934 and 1982, as can be seen in the Figure 1.

**Figure 1.** Annual percentage GDP variation in Mexico from 1982 to 2022

![Figure 1. Annual percentage GDP variation in Mexico from 1982 to 2022](source: Own elaboration with data from the National Institute of Statistics and Geography (INEGI))
In the 1980s, a series of economic reforms were carried out with the objective of changing the course of development in Mexico, which promoted the participation of the free market and competition with the outside world, while reducing government intervention. State in the economy. As a result, the economic and social program of the Mexican governments focused on three central axes: a) the redefinition of the role of the State in the economy, b) the opening of the national economy to foreign competition and c) financial liberalization (Tello, 2019).

However, this situation, instead of accelerating the pace of growth of the country's economy, caused it to stagnate, which resulted in a reduction in public spending, privatization of state companies and deregulation of production processes. The reduction of public spending and the State's abandonment of market regulation activities caused an increase in social inequality and the reduced economic growth currently found in Mexico, which has had the consequences of high levels of unemployment, reduced investment, increased in levels of poverty and inequality (Jiménez, 2010).

To more precisely analyze inequality in Mexico, it is important to examine some figures regarding this topic, such as those found within the 2020 National Survey of Household Income and Expenses, carried out by the INEGI as can be seen in the Table 1.

<table>
<thead>
<tr>
<th>Home Deciles</th>
<th>ENIGH 2020</th>
</tr>
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<tbody>
<tr>
<td>National average</td>
<td>50 309</td>
</tr>
<tr>
<td>Yo</td>
<td>9 938</td>
</tr>
<tr>
<td>II</td>
<td>16 862</td>
</tr>
<tr>
<td>III</td>
<td>22 274</td>
</tr>
<tr>
<td>IV</td>
<td>27 558</td>
</tr>
<tr>
<td>V</td>
<td>33 367</td>
</tr>
<tr>
<td>SAW</td>
<td>40 108</td>
</tr>
<tr>
<td>VII</td>
<td>48 670</td>
</tr>
<tr>
<td>VIII</td>
<td>60 598</td>
</tr>
<tr>
<td>IX</td>
<td>80 437</td>
</tr>
<tr>
<td>x</td>
<td>163 282</td>
</tr>
</tbody>
</table>

Source: Own elaboration with data from the National Institute of Statistics and Geography (INEGI)

The table above reveals a marked inequality in the distribution of income in Mexico. The data show that almost 50% of national current income is concentrated in decile X and IX, which
represent only 20% of households. This indicates a high concentration of income in the highest deciles of the population.

On the other hand, deciles I to V, which represent the remaining 50% of households, have limited access to income as their values are significantly lower compared to decile significant between the income of the richest households and low-income households in the country. Moreover, it constitutes an important challenge for Mexico, since it has implications in terms of social well-being, economic mobility and opportunities for economic and social development. In fact, this gap generates disparities in access to basic services, education, health and quality of life.

Given the current situation, it is imperative that governments focus their efforts on guaranteeing efficiency and rigor in the management of the public budget. To achieve this, it is necessary to eliminate unnecessary expenses and allocate resources to priority areas that contribute to social and economic development. These areas include the fight against poverty, education, science and technology, infrastructure and health (Salgado and Lauchy, 2019).

Likewise, the State must once again assume its role in the regulation of markets with the objective of promoting greater economic participation and achieving sustained growth that allows reducing social and economic inequalities. To achieve a more equitable distribution of wealth and income, it is necessary to implement policies and programs that address existing inequality (Salgado and Lauchy, 2019).

A fundamental measure in this sense is the implementation of progressive fiscal policies that contribute to reducing the income gap between different social strata. Likewise, it is crucial to strengthen the educational system and guarantee equal access to economic opportunities, so that all people have the opportunity to develop their potential and improve their quality of life. Additionally, social protection systems need to be improved, ensuring that they are effective and reach those who need it most. These programs must be designed in an inclusive manner to provide support to the most vulnerable sectors and promote equity in society.

**Public budget relationship and State participation in the economy**

The public budget plays a fundamental role in the administration and direction of the economy by the State, and its relationship with the government's participation in it. Through this instrument, the State can carry out various strategies and policies to achieve its economic and social objectives.
Public spending, as mentioned, is the main tool that the State uses to intervene in the economy. Through public spending, the government can finance a wide range of public goods and services that are essential to the well-being of society. Investment in areas such as education and health contribute to human development and increased workforce productivity, which in turn can boost long-term economic growth. Investment in infrastructure, on the other hand, improves the conditions for economic activity and the country's competitiveness (Pinilla et al., 2013; Tacuba, 2016).

In addition to providing essential public services, public spending can also be used strategically to stimulate economic growth and innovation. Investment in research, as well as in technology, development of skills, boosting the competitiveness of a nation in the global economy. These government funds can support the creation of an enabling environment for private investment and job creation (Pinilla et al., 2013; Tacuba, 2016).

Understanding this close relationship between the public budget and the State's participation in the economy is essential for effective management of government resources in achieving economic and social objectives. The public budget is not only a resource allocation tool, but also a reflection of the government's economic and social policies. Adequate allocation of funds in key areas can boost economic growth, improve competitiveness and raise the standard of living of the population. On the other hand, an incorrectly designed or executed budget can have negative effects on the economy, such as fiscal imbalance or inefficiency in public spending. Ultimately, the relationship between the public budget and the State's participation in the economy requires a strategic approach, as well as a deep understanding of how budget decisions affect society as a whole, which underlines the importance of public management. competent with responsibility.

**Instruments to analyze budget efficiency**

Efficiency in the use of the public budget is a fundamental objective of public policies. Governments have a responsibility to use resources responsibly and effectively to ensure that stated social and economic objectives are achieved (Organization for Economic Co-operation and Development [OECD], 2022).

To analyze the efficiency of public spending, a variety of instruments are used and can be classified into two main categories (International Monetary Fund, 2021):

- Diagnostic instruments: These allow efficiency problems in public spending to be identified. For example, cost-benefit studies, impact analyzes, and performance evaluations can help identify areas where resources can be used most effectively.
Management instruments: These help improve the efficiency of public spending. For example, institutional reforms, the training of public officials, the application of quality management systems can contribute to a more efficient use of public resources.

Some of the most common instruments to analyze efficiency in the use of the public budget are the following (International Monetary Fund, 2021; World Bank, 2020):

- **Performance indicators**: These are objective measures used to evaluate progress toward established objectives. Performance indicators can be used to evaluate the efficiency of public spending in terms of, for example, the quality of public services, the coverage of social policies and the economic impact of public spending.
- **Cost-benefit analysis**: It is a tool used to compare the costs and benefits of a given public intervention, so it can help identify interventions that are most cost-effective.
- **Impact analysis**: It is a tool that is used to measure the effects of a specific public intervention and can help identify the social and economic benefits of a public intervention.
- **Performance evaluations**: These are studies that are carried out to evaluate the effectiveness of a specific public intervention and can help identify areas where public interventions can be improved.

The selection of instruments to analyze the efficiency in the use of the public budget depends on a series of factors, such as the objectives of the evaluation, the available resources and the availability of data. It is important that the instruments used are appropriate for the purpose of the evaluation and that they are used consistently (World Bank, 2020).

In recent years, there has been growing interest in the use of efficiency instruments to analyze public spending, which is due to growing concern about fiscal sustainability and the need to improve the quality of public spending (Organization for the Economic Cooperation and Development [OECD], 2022).

**Budget and economic and social context**

Budget allocation in public administration is closely related to indicators such as population, percentage of contribution to GDP and average current income (ICP). The budget is based on the estimate of the government's financial needs to cover its expenses and commitments, as well as the political and social priorities established by the government. These priorities may be related to attention to the basic needs of the population, such as health, education and security, as well as the promotion of economic growth (Rodríguez et al., 2020).
Budget allocation is influenced by the size and specific needs of the population, as well as government policies to address social and economic problems (Salgado and Lauchy, 2019; Rocha and Delgado, 2021). For example, a government may allocate more resources to education if it has a young and growing population.

The average current income of the population can also influence the allocation of the state budget. If the average income is low, the government may have to allocate more resources to support the most vulnerable sectors of the population, such as social assistance programs and public education. On the other hand, if the average income is high, the government may have more resources to invest in areas such as infrastructure and research and development (Salgado and Lauchy, 2019; Rocha and Delgado, 2021).

On the other hand, the percentage of contribution to GDP is also a crucial factor in budget allocation (Salgado and Lauchy, 2019). States that have a greater contribution can receive more investments and transfers, while those that have a lower contribution can have fewer resources from the federal government. In this sense, it is important that the federal government guarantees a fair and equitable distribution of resources to promote sustainable development throughout the country. In view of the above, it is relevant to carry out a review of the effect that the budget has on certain indicators, as shown in table 2. This considered the four entities that contribute the most to the GDP and the two entities that contribute the least. They do so in order to make a comparison of the impact that different variables have on budget allocation.
Table 2. Comparison between the average current income, population, contribution to GDP and budget of some federal entities

<table>
<thead>
<tr>
<th>State</th>
<th>Percentage (%) of contribution to national GDP 2021</th>
<th>Average current income (ICP) 2022</th>
<th>Population 2020</th>
<th>Assigned budget 2023</th>
<th>Participatory budget</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mexico City</td>
<td>15.30%</td>
<td>$89,310.00</td>
<td>9 209 944</td>
<td>$248,415,083,383.00</td>
<td>Yeah</td>
</tr>
<tr>
<td>Mexico state</td>
<td>9.10%</td>
<td>$57,233.00</td>
<td>16 992 418</td>
<td>$356,817,000,000.00</td>
<td>No</td>
</tr>
<tr>
<td>New Lion</td>
<td>8.30%</td>
<td>$86,018.00</td>
<td>5 784 442</td>
<td>$140,037,000,000.00</td>
<td>No</td>
</tr>
<tr>
<td>Jalisco</td>
<td>7.30%</td>
<td>$71,744.00</td>
<td>8 348 151</td>
<td>$158,630,000,000.00</td>
<td>No</td>
</tr>
<tr>
<td>Colima</td>
<td>0.60%</td>
<td>$69,321.00</td>
<td>731 391</td>
<td>$20,555,300,000.00</td>
<td>No</td>
</tr>
<tr>
<td>Tlaxcala</td>
<td>0.60%</td>
<td>$46,295.00</td>
<td>1 342 977</td>
<td>$25,571,563,376.00</td>
<td>No</td>
</tr>
</tbody>
</table>

Source: Own elaboration with data from the National Institute of Statistics and Geography (INEGI), Congress of the state of Nuevo León, government of Mexico City, government of Colima, government of Tlaxcala, congress of the State of Mexico and the government of Jalisco.

Table 2 shows that states with a larger population, such as the State of Mexico, receive a larger budget compared to states with a smaller population, such as Colima and Tlaxcala. Likewise, it is important to highlight that states with lower ICP receive a significantly smaller budget compared to states with larger populations and a higher ICP, such as Nuevo León and the State of Mexico.

Budget allocation in Mexico is a complex process that involves a series of factors and considerations. The process begins with the preparation of the Income Law and the Expenditure Budget of the Federation, which are proposed by the Federal Executive Branch and subsequently approved by the Congress of the Union. These documents detail how resources will be allocated at the national level and establish the amounts allocated to each federal entity.
To equitably distribute resources, formulas are used that consider multiple variables, including population size, percentage contribution to GDP, and average current income. A significant part of the budget assigned to the federal entities comes from federal participations, which are transfers of resources from the federal government to the states and municipalities, which are based on a formula that takes into account factors such as population size.

However, budget allocation is not limited to technical criteria, since political negotiation plays a fundamental role. Legislators and officials of each federal entity usually enter into negotiations with the federal government to obtain additional resources or achieve adjustments in the allocation.

Throughout the year, budget execution is constantly monitored, allowing adjustments to be made when necessary. Federal entities are obliged to be accountable for how they use allocated resources to ensure transparent and efficient management of public funds.

**Quality in public spending**

The importance of quality in public spending lies in the fact that it allows us to determine whether the investments made by governments are meeting the objectives established within public policies and, consequently, generating improvements in the living conditions of the population. Furthermore, evaluating the quality of public spending is essential to guarantee the efficiency, effectiveness and impact of public policies and control of municipal administrations.

In this sense, Patiño (2017) mentions that the quality of public spending can be measured through efficiency, efficacy and effectiveness indicators. These indicators serve to measure and evaluate the performance and results of public policies and government management, which serves to determine whether the established objectives and goals are being met and to identify the strengths and weaknesses of public management.

On the other hand, the quality of public spending also has an impact on public finances, since its efficient and effective management leads to a better allocation of resources and, therefore, a reduction in unnecessary costs. This implies greater efficiency in the use of public resources and an improvement in the quality of the services and goods offered to the population (Patiño, 2017; Moncayo and Salinas, 2019).

Efficiency in public spending is of great importance in a context of resource scarcity by allowing administrators to use the smallest amount of resources to obtain the best possible results. Likewise, the efficient and equitable allocation of public resources is essential to guarantee that
public services reach all citizens in a fair and equitable manner, so that social well-being is promoted (Moncayo and Salinas, 2019).

Moncayo and Salinas (2019) mention that to achieve quality in public spending, it is necessary to optimize the quality-price relationship in the provision of public services, which implies efficient and effective management of public resources. In addition, work must be done on the regulation and control of recurring practices in public administration, such as spending near the end of each fiscal year what was not executed during the period itself or sub-exercises, as well as promoting actions that allow a transparent exercise of resources.

For his part, Patiño (2017), citing the Economic Commission for Latin America and the Caribbean (ECLAC) and the Inter-American Development Bank (IDB), comments that to achieve quality in public spending it is necessary to carry out a process which consists of the planning, execution, control, monitoring and evaluation of the public budget in a coherent and articulated manner to guarantee transparency and accountability, so that corruption can be avoided and promote trust among citizens. Furthermore, it points out that this process must be supported by the use of indicators that allow obtaining relevant information on public programs and policies in order to facilitate the evaluation of the quality of spending and determine its impacts on economic, political and social development, social, as well as serving as a support tool for decision making.

Both works agree on the importance of efficient and effective management of the public budget in order to achieve quality in the provision of public services and ensure accountability and transparency. To achieve this, it is important to use indicators that allow measuring and evaluating the results obtained in order to improve or change public policies.

**Cost of corruption**

Corruption is a global phenomenon, but in Mexico it has a particularly deep-rooted presence. According to the Transparency International organization, during 2021 Mexico ranked 124th among 180 nations in the Corruption Perception Index, which placed it as one of the most corrupt in Latin America.

In this sense, the costs of corruption in Mexico become evident from various perspectives. From an economic perspective, one of the most visible is the financial one. The National Survey of Government Quality and Impact (ENCIG) 2021, carried out by INEGI, estimates that corruption costs an average of 3,044 pesos per capita, which adds up to a total of almost 9,500 million pesos or around 475 million dollars. This figure illustrates the financial burden to which the population
is subject due to this situation and demonstrates how corruption not only affects at an institutional level, but also has a direct impact on the quality of life of citizens.

Corruption not only undermines the economy and the well-being of the population, but also has a direct impact on the efficiency in the use of the public budget. When resources are diverted toward corrupt activities or misallocated, funds that could be used more efficiently to address social problems and improve infrastructure are wasted (Mariani, 2023).

Likewise, the economic impact of corruption transcends direct costs, as it creates an environment of uncertainty and mistrust that negatively affects investment, growth and productivity, which discourages national and foreign investors from participating in the Mexican economy. According to Noveck et al. (2018), for the Inter-American Development Bank (IDB), corruption could reduce Mexican GDP by up to 10%. This is because corruption undermines investor confidence and distorts competition. In addition, it encourages tax evasion and drives away responsible investors, which further limits economic growth and the government's ability to finance quality essential public services (Nieto and Samuano, 2022).

On the other hand, from a social perspective, corruption carries a significant cost. According to the results of the National Survey of Victimization and Perception of Public Security 2022, carried out by INEGI, it is revealed that 38.9% of the Mexican population experienced some type of act of corruption. This problem has a transversal impact on all strata of society, but those who are most affected are the most vulnerable groups. This is because corruption hinders their access to public services, education and justice, which, in turn, worsens inequality and poverty in the country (Nieto and Samuano, 2022).

In line with what was stated above, it can be seen how corruption is a serious problem that affects all aspects of life in Mexico and whose costs are manifested in economic, social and political spheres. Therefore, addressing this problem requires a joint effort from society as a whole.

To combat corruption in Mexico, it is imperative to implement public policies that strengthen transparency, accountability and citizen participation. This can be done through actions such as the following:

- Strengthen access to public information.
- Promote accountability on the part of public servants.
- Strengthen justice institutions to combat impunity.
- Promote citizen participation in the supervision of acts of corruption.

Corruption is a multifaceted problem that requires a comprehensive solution that involves all sectors of society in their fight to achieve real change.
Efficient budget allocation in Mexico during the Q4 period

Efficient budget allocation represents a primary objective for any government, since its purpose is to ensure that public resources are used effectively to achieve the objectives of public administration (Mesías-Tamayo et al., 2020). In the case of Mexico, budget allocation has been a recurring topic of debate. During the period of the so-called Fourth Transformation (Q4), the federal government has implemented a series of initiatives aimed at improving efficiency in the distribution of resources, such as reducing spending on bureaucracy, which has led to the elimination of dependencies, and unnecessary positions, which has meant significant savings in resources (Martínez, 2023).

An equally important aspect is the decentralization of spending through which the government has transferred resources to states and municipalities, allowing them to make decisions about their use according to specific local needs (Martínez, 2023).

In addition, an austerity system has been implemented with the aim of reducing superfluous spending and promoting more efficient use of public resources. Despite the so-called “republican austerity” in recent years, it is relevant to note that public spending has continued to increase constantly both in absolute terms and in relation to the gross domestic product (GDP), as evidenced in the figure 2. However, this increase has not always translated into a palpable improvement in spending efficiency.

**Figure 2.** Public spending as a percentage of GDP vs. GDP variation

Source: Own elaboration with data from the National Institute of Statistics and Geography and the World Bank
In the data in Figure 2 it can be seen that GDP growth in Mexico has been variable in recent years. In 2021, a notable growth of 4.70% was highlighted, while in 2020 there was a contraction of -8%, mainly due to the Covid-19 pandemic. This variability is related to economic events and exceptional situations.

In turn, public spending as a percentage of GDP has been increasing. From 2018 to 2022, it went from 25.66% to 30.23%. This increase can be explained by government policies designed to stimulate the economy, which is related, in part, to the development of projects such as the Mayan Train (Rosas et al., 2023).

However, despite these increases, it is important to note that public spending in Mexico is still below the OECD average, which is 41.5% (OECD, 2022). On the other hand, it is interesting to observe a possible correlation between GDP growth and public spending. In 2020, when GDP fell significantly, public spending as a percentage of GDP remained high, suggesting increased spending to address the economic crisis. However, in 2021, with GDP growth, public spending also increased, in this case possibly to maintain the economic recovery.

These data highlight the urgent need to take measures aimed at improving public spending management in Mexico, demonstrating the fundamental relationship between GDP growth and efficient public spending. However, in comparison with recent data, it is evident that, despite the increase in public spending, this has not been reflected in a proportional growth of GDP, which could be an indicator of some deficiencies in management and allocation of these resources. Strategic and well-managed public spending can play a critical role as an engine of economic growth, driving investment in infrastructure, education, health and other vital sectors.

When used effectively, this public spending can generate jobs, increase productivity and foster innovation that contributes to sustainable GDP growth. In Mexico’s current economic context, characterized by significant fluctuations, it is essential to optimize the allocation of public resources to maximize their impact on economic development and ensure long-term economic and social stability.

In this sense, it is relevant to highlight that the efficient allocation of the budget is not only limited to the quantitative dimension of spending, but it is essential to guarantee that resources are used effectively to achieve the objectives of public administration in an optimal way.

Over the course of the current six-year term, the Mexican government has allocated a substantial part of the public budget to megaprojects such as the Mayan Train, the Felipe Ángeles international airport and the Dos Bocas refinery. These investments have raised criticism due to
their high cost, environmental impact and questions about their efficiency, since it is argued that they could have been carried out with less expense and in a shorter period of time.

A concrete example that illustrates this situation is the Mayan Train. According to De La Rosa (2023), based on data provided by the National Tourism Promotion Fund (Fonatur) and the Chamber of Deputies, it is estimated that, by the end of 2023, the federal government will have disbursed 362,020 million pesos, which which represents 132% more than the figure established in 2020, an increase that has not been made transparent or adequately justified by the authorities.

This lack of transparency and justification in the use of public funds raises significant concerns about efficiency in public administration. Opacity in the management of government resources is often linked to corrupt and ineffective practices that make public oversight and scrutiny difficult. In the case of the Mayan Train, the government's attempt to keep information about costs confidential under the pretext of national security is problematic, since information related to public spending must be public knowledge (Astorga, 2023; Secretariat of the Interior, 2023).

This lack of accountability and transparency in public administration can foster corruption, as those involved can take advantage of the lack of oversight to make decisions that benefit private interests rather than the public welfare. In this sense, it is essential that government institutions are transparent in the management of public resources and accountable to society to prevent corrupt practices and guarantee effectiveness and efficiency in the investment of public funds.

In contrast to spending on the current government's flagship projects, in sectors such as education, health and security, there has been a reduction or stagnation in the budget, raising doubts about the government's ability to meet its objectives. in these areas. This phenomenon manifests itself more pronouncedly in the field of health, where the results in recent years have been unsatisfactory, which is related to the reduced resources assigned to this sector in recent years, as can be seen in the figure. 3.

**Figure 3. Public health spending as a percentage of GDP**

![Public health spending as a percentage of GDP](image-url)
From Figure 3, it can be seen that during the period from 2018 to 2022, health spending as a percentage of GDP experienced a gradual decrease, going from 3.29% in 2020 to 2.91% in 2022. This trend raises concerns about the allocation of resources related to medical care and its possible impact on the quality and accessibility of health services.

**INSABI Case**

A case study that allows us to raise the inefficient allocation of public resources is the Health Institute for Wellbeing (INSABI), created in 2020, whose objective was to provide free health services and medicines for the population that lacked access to social security. However, this institute could not fulfill its purpose and three years after it was extinguished, it transferred its functions to the IMSS-Bienestar. This failure may be an example of the consequences of public policies without a defined strategy and a sufficient budget. A study carried out by the Center for Economic and Budgetary Research (CIEP), cited by Vega (2022), shows that the budget allocated to serve the population without social security went from 31.8% of total health spending during 2017 to 28.6% during 2021, this being the lowest amount dedicated to this area since 2016.

Another figure that allows us to better visualize this situation is that during the year 2019 the per capita expenditure destined to serve this population was 3,656 pesos and for the year 2021 this expenditure was reduced by 20.3% to 2,911 pesos (Méndez and Llanos, 2021). The above is explained because INSABI did achieve the objective of expanding health coverage to a larger population, going from 54.5 million people in 2017 with Seguro Popular to 68.1 million people affiliated with INSABI during 2021. However, as Méndez and Llanos (2021) mention, when this increase occurs without increasing the economic resources allocated to their care, an effect opposite to that expected is produced, which makes it even more difficult to care for the population at risk.

The previous situation is aggravated by observing that not only has the budget for this item not only decreased, but there have also been large under-exercises. According to data from México Evalúa (2023), during the year 2022 the budget assigned to INSABI was 6.6 billion pesos. However, there was almost complete underuse of resources. This situation can be evidenced by comparing this year's expense figures with those of previous years. During the month of January 2022, INSABI's total expenditure reached 34 million pesos, which represents only 6% of the expenditure recorded in January 2021 (544 million pesos), and less than 1% of the expenditure in 2019, which amounted to 3,486 million pesos (México Evalúa, 2023).

The aforementioned is related to the fact that medical consultations during January 2022 had a decrease of 30% compared to the same month in 2021 or a reduction of 83% compared to
the same month in 2019 (México Evalúa, 2023 cited by Vega, 2022). This situation highlights how the lack of a clear strategy in the application of public policies and quality public spending prevents obtaining good results, which compromises the well-being of citizens by making it difficult for the population at risk to access public health services. quality to meet their basic needs and improve their quality of life (Campos and Cano, 2022).

In this case there does not seem to be any indication that the situation will change in the near future, since the absorption of the functions of INSABI by the IMSS-Wellbeing only transfers its problems to another institution, without addressing issues such as opacity in the management of public resources. public resources, reduced budgets and lack of focus on results make it difficult to obtain significant improvements.

Discussion of results

This study has explored the historical implications of the State's participation in the Mexican economy, for which the context of the Fourth Transformation (4T) government was also considered. The findings obtained allow a more complete understanding of the effects and challenges of state intervention at this stage in the country's history.

Firstly, it has been confirmed that state intervention has played a fundamental role in Mexico's economic growth. This aligns with previous research, such as those by Pinilla et al. (2013) and Tacuba (2016), which highlight the capacity of the State to reduce inequalities and promote more equitable development in both the economic and social spheres. In this context, the current government has sought to implement measures to correct market imperfections and promote better income redistribution with the aim of contributing significantly to economic development for the benefit of society.

However, it is essential to recognize that the impact of the State on economic growth is influenced by several factors, such as institutional quality, government expenditure management, and the specific context of the country. These variables can lead to varied results, highlighting the need for constant evaluation of the effectiveness and efficiency of implemented policies and programs.

In line with the perspectives of the 4T government, it has been emphasized that the State must play a fundamental role in promoting social equity in Mexico, addressing significant challenges in the development of society. The implementation of policies that attack poverty and promote transparency and accountability in the use of public resources, as mentioned by Salgado
and Lauchy (2019), is considered essential to achieve governability and stability in both the social and economic spheres.

Added to this, it is found that efficiency in the use of public resources stands out as an essential element for economic and social development, which coincides with what was stated by Pinilla et al. (2013) and Tacuba (2016). This is reflected in the efforts of the 4T to seek efficiency in public spending. However, significant challenges have been identified in the State's participation in the Mexican economy during this period, particularly the lack of transparency, which threatens to undermine efforts to achieve equitable development in Mexican society. In this sense, it is essential that the State plays an active role in preventing these problems through the implementation of appropriate regulations and effective control policies.

In relation to the 4T government, initiatives have been presented aimed at improving efficiency in the distribution of resources, such as reducing spending on bureaucracy and decentralizing spending. However, it is important to note that these austerity measures have been accompanied by a constant increase in public spending and by the lack of transparency in the use of public resources in various government projects, as De La Rosa (2023) points out, which raises questions about the effectiveness of public spending management.

The present work aims to contribute to the deepening of the historical exploration and the connection with previous research that supports the importance of state intervention in economic growth and social equity in Mexico. Also, it highlights the relevance of highlighting the need for a constant evaluation of government policies and the importance of efficiency in the use of public resources for economic and social development.

Additionally, this study could benefit from a more extensive evaluation of the specific policies implemented by the Q4 government and their impact on the Mexican economy. It would be useful to critically address the challenges and criticisms raised by authors such as Campos and Cano (2022) or Mariani (2023), as well as other sources, in relation to public spending management and transparency.

An additional important limitation is the lack of a more comprehensive focus on the cultural and sociopolitical aspects that can also influence the relationship between the State and the Mexican economy. Until now, the analysis has focused mainly on general economic and political factors. Thus, deeper research into how culture, history, and social dynamics interact with state participation could further enrich our understanding of this complex relationship.

Furthermore, it would be fruitful to investigate and compare the Mexican experience with other countries that have also experienced state intervention in their economy. By making
international comparisons, similarities and differences can be identified in the economic policies implemented by different nations and their effects on economic and social development. This would give us a broader and contextualized view of how state intervention can impact the economy in various contexts and political systems.

Conclusions

This work on the efficient allocation of the public budget and the participation of the State in the Mexican economy during the period of the Fourth Transformation (4T) has shed light on the complex dynamics surrounding the management of public resources at the government level. In this sense, the role of the State in the economy has been highlighted as an agent that seeks to promote social well-being, encourage investment in strategic sectors and regulate economic activity in search of equity. Public spending, as a primary tool for state intervention, can drive growth and equity, but only if managed efficiently.

However, persistent challenges in public spending management, such as a lack of transparency in high-cost projects, raise significant concerns. In fact, the allocation of public resources also directly impacts vital sectors such as health, education, budget decisions must carefully consider their effect on the quality of life of society.

Therefore, the challenge for the current government is to find the balance between state participation in the economy, efficiency in the allocation of resources and satisfaction of the needs of society. This requires careful planning, constant accountability, and absolute transparency in the use of public funds.

Finally, this work presents a vision of the complexity of government budget management. The results of this study are relevant not only for the period of the Fourth Transformation, but also for future governments that seek to balance state participation in the economy with the optimization of resources for the benefit of Mexican society. Ultimately, the efficient allocation of the public budget is essential for the country's economic and social progress and must be approached with responsibility and a long-term vision.


Future lines of research

The historical comparative analysis of state participation in the Mexican economy suggests carrying out a detailed study of the different historical moments in which the State has intervened in the national economy. This study will allow us to examine the different moments in which the State has intervened in the country's economy to evaluate its short- and long-term effects. Thus, it will be possible to understand more precisely the factors that have led to changes in economic policies and their implications for national development.

In line with this, it is essential to investigate the impact of state participation in strategic sectors of the Mexican economy. A specific focus on key sectors such as the oil industry, energy, agriculture, manufacturing, among others, can help identify successful practices and challenges. This information can be valuable for designing future strategies in the quest to optimize state participation in these sectors.

Likewise, it is pertinent to address in future research the problem of corruption and abuse of power in state management in depth. To this end, emphasis should be placed on analyzing and measuring the effectiveness of the policies and regulations implemented to prevent corruption in the management of public resources, as well as identifying ways to improve control, audit and transparency mechanisms to guarantee a more efficient administration. efficient and responsible.
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