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Article

Public debt, voter turnout, and political affiliation as determinants of state competitiveness in Mexico [2022–2024]

Deuda pública, participación electoral y signo político como determinantes de la competitividad estatal en México [2022–2024]

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Abstract

The objective of this research is to analyze, using the ordinal logistic regression method, the influence of the variables of public debt, citizen participation and political sign, with respect to regional competitiveness in Mexico. The results show that citizen participation and the adequate management of indebtedness are significant in modeling the performance of state competitiveness, in addition, there are differentiated results according to the political sign that governs the states, which suggests that the political sign can modulate the quality of spending and its effect on regional economic development. This work contributes to the understanding of the conditions under which governance and sustainable public finances can be a tool for boosting state competitiveness.

Public debt, voter turnout, and political affiliation as determinants of state competitiveness in Mexico [2022–2024]		
Objective	Metodology	Contribution
The objective of this research is to analyze, using the ordinal logistic regression method, the influence of the variables of public debt, citizen participation and political sign, with respect to regional competitiveness in Mexico	Ordinal logistic regression analysis	This work contributes to the understanding of the conditions under which governance and sustainable public finances can be a tool for boosting state competitiveness.

State competitiveness; Public debt; Political affiliation.

Resumen

El objetivo de esta investigación es analizar mediante el método de regresión logística ordinal, la influencia que tienen las variables de deuda pública, participación ciudadana y signo político del partido gobernante, respecto a la competitividad estatal en México. Fue usado el análisis de regresión logística ordinal. Los resultados muestran que la participación ciudadana, el adecuado manejo del endeudamiento son significativos para modelar el desempeño de la competitividad estatal, además hay resultados diferenciados en función del signo político que gobierna en las entidades federativas, lo que sugiere que el signo político puede modular la calidad del gasto y su efecto en el desarrollo económico regional. Este trabajo contribuye al entendimiento de las condiciones bajo las cuales la gobernanza y las finanzas públicas sostenibles puede ser una herramienta para el impulso competitivo de los estados.

Public debt, voter turnout, and political affiliation as determinants of state competitiveness in Mexico [2022–2024]		
Objetivo	Metodologia	Contribución
Analizar mediante el método de regresión logística ordinal, la influencia que tienen las variables de deuda pública, participación ciudadana y signo político del partido gobernante, respecto a la competitividad estatal en México	Regresión logistica ordinal	Contribuye al entendimiento de las condiciones bajo las cuales la gobernanza y las finanzas públicas sostenibles puede ser una herramienta para el impulso competitivo de los estados. .

Competitividad estatal; Deuda pública; signo político
.

Area: Advocacy and attention to national problems

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Introduction

The concept of economic competitiveness is crucial to understanding why some states attract greater investment, generate more employment, and have better living conditions than others. In the case of Mexico, the State Competitiveness Index [ICE] is published periodically, allowing for comparisons between highly competitive regions and those that are not. This raises an important question: what impact do factors such as public debt, citizen participation, and political affiliation have in explaining these gaps?

This research is based on the premise that competitiveness does not depend solely on structural or geographical conditions, but also on other variables such as the level of debt, citizen participation, and the ruling political party. These variables could be directly influencing the quality of public spending.

In Mexico, when we study the last three years [2022 to 2024], we find that not all states evolve in the same way. For example, those governed by the National Action Party [PAN] are more likely to achieve high ICE levels, while those led by the National Regeneration Movement [MORENA] or by coalitions with this party tend to rank at the lowest levels.

Based on a review of the literature, it is possible to state that there is still a knowledge gap, considering that few studies analyse the combined impact of the PARTY, state DEBT and CITIZEN PARTICIPATION on economic competitiveness. This leads to a problem rooted in a lack of knowledge about the impact of the variables under study on competitiveness, which prevents the contribution of these variables to a possible public action strategy that would favour less competitive states from being assessed. That is why this article, using ordinal logistic regression, quantifies how DEBT, CITIZEN PARTICIPATION and the state government's PARTY are related to competitiveness in the time window from 2022 to 2024.

The results are significant because they allow us to elucidate differentiated results based on political affiliation, level of indebtedness, and citizen participation. This contributes both to the theoretical corpus for understanding the dynamics of these variables and to possible political and public action strategies.

The structure of the article is as follows: it begins with a theoretical overview. Next, the state of the art is presented, focusing on the Mexican context. Then, the methodological aspects, the variables analysed and the model used are detailed. In the results section, the main findings are discussed and, finally, the conclusions, some limitations of the study and possible future lines of research are presented.

Regional competitiveness

Numerous studies have explored the factors that explain competitiveness, considering its importance for both the economy and development [Squalli et al., 2008; Rusu and Roman, 2018; Simionescu, 2021] as well as its evolution in some contexts [Zhang et al., 2020; Borsekova et al., 2022; Bardey et al., 2022 Amato et al., 2023; Gutiérrez-Hita, 2025].

According to Aramayo et al. [2012], regional competitiveness is the ability of regions to trigger economic growth relative to other regions while maintaining social cohesion and sustainability. At a theoretical level, economic crises have sparked interest in regional economic studies, although little attention has been paid to the Latin American context [Delgado et al., 2023].

The determining factors of regional competitiveness are varied and go beyond economic growth alone; to mention a few, the environment, social aspects and infrastructure are decisive factors [Qi et al., 2024]. Furthermore, according to Villalobos et al. [2024], Ríos [2023] and Guedes et al. [2023], there is a relationship between competitiveness and innovation. For Latin America, according to Catalán [2021], social welfare is associated with the competitive capacities of different regions.

Aramayo and Vokoun [2012] argue that economic aspects such as GDP, foreign direct investment, social aspects such as migration and technology, as well as institutional aspects, are determinants of regional competitiveness. They conclude that high levels of corruption, low investment in R&D, poor institutions and high migration are inversely correlated with competitiveness.

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Brown et al. [2020] analyse competitiveness from a neo-institutional approach, considering the institutional framework from the perspective of laws, norms, and formal and informal rules. The authors refer to competitiveness as a capacity that enables sustainable growth in countries.

According to the World Economic Forum, six pillars are identified in relation to the institutional framework: institutions, infrastructure, macroeconomic environment, goods market efficiency, labour market efficiency, and financial market. In this vein, Amann and Figuereido [2024] mention that some of the factors explaining the competitiveness of Latin American countries include education, innovation, high institutional quality, and the attraction of investment, as well as social stability.

These authors conclude that regional competitiveness improves the well-being of the population thanks to increased productivity.
Governance and electoral participation

From Acharya's work [2024], it can be said that governance is a very broad concept that goes beyond simply government; it is the way of governing, how power and public resources are managed. In the literature, governance refers to the way in which formal and informal institutions are organised. It also refers to a cycle in which policies are formulated, and governance is related to interests that influence institutional design [Muñoz et al., 2024; Córdova, 2024; Aguilar, 2024; Quintero et al., 2023].

With regard to electoral participation, Arum [2024] mentions that electoral participation is not only the act of voting, but is also related to active and civic participation in the monitoring, prevention and supervision of electoral processes. Additionally, voting processes must be accessible to persons with disabilities and religious organisations. In this regard, some authors have studied the factors that explain the level of voting in certain population groups [Gonzalez et al., 2020; Arriagada, 2021; Cuesta, 2023; Pérez et al., 2024; Buquet et al., 2024; Hernández and Recuero, 2024] as well as the relationship with other components of citizenship [Díaz and Moreno, 2024].

Based on the above, voting is the basic form of participation, which is a necessary component of democratic governance. We can therefore say that there is a relationship between electoral participation and governance.

Subnational public debt

Some studies have focused on the effect of fiscal rules on subnational debt growth [Gregori, 2018; Astudillo et al., 2017]. In the case of Mexico, Del Castillo and Cabral [2024] found significant reductions in debt levels and per capita debt following the introduction of the fiscal alert system. Ávila [2024] reports improvements in budget balances and debt costs, although there has been no change in the total volume of obligations. Both studies agree that the Financial Discipline Law has strengthened fiscal discipline in states and municipalities. In this regard, Astudillo et al. [2019] share the idea of the importance of accountability in Mexican subnational debt.

For their part, Ruelas and Izquierdo [2021] found that Mexican states have reduced fiscal space for debt, which is even necessary in some cases. Mendoza et al. [2023] argue that there is a direct relationship between certain levels and types of subnational debt and regional economic growth. Vera et al. [2023] found a direct relationship between subnational debt and investment. Cabral et al. [2022] analysed the level of debt and its relationship with certain political factors, identifying that vertical political affinity is not a determining factor in the approval of debt.

Sánchez and García [2016] argue that there is a positive relationship between public debt and public investment, while investment correlates with economic growth, but the marginal effect is small. A 1% increase in the interaction of the investment-debt variables generates an increase of only 0.0005% of GDP. For their part, Galván et al. [2023] mention that although public debt is useful for financing public investment, this is only the case if it is managed correctly.

Simionescu and Cifuentes-Faura [2023] mention that public debt in Mexican states shows a significant spatial correlation, with poverty being the main determinant of debt. According to García and Sánchez [2024], there is a relationship between state public debt and economic growth in Mexico.

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These authors emphasised that, in the context of the post-2008 crisis, high levels of debt in certain states can have a negative impact on their competitiveness. For their part, Martínez et al. [2021] identified that public debt in Mexico, when driven by social spending and financial bailouts, has negative implications for competitiveness, leading to low investment and unemployment.

Based on the above studies, it can be proposed that public debt in Mexico has implications for state economic competitiveness. Although the functional relationships between public debt and economic growth depend on multiple factors, it is possible to say that public debt can facilitate investment, but if not managed correctly, it can also limit growth and competitiveness.

Political orientation and state performance

Starting from an international context, Facchini and Melki [2012] state that, from an ideological perspective, left-wing governments in France have promoted redistributive policies, while right-wing parties favour economic performance. Brumm and Hörisch [2025] identified that Christian Democratic governments prioritised universities, while left-wing and Free Democrat governments prioritised the expansion of public nurseries. Kolios [2019] mentions that left-wing parties typically favour fiscal expansion, prioritising social programmes over inflation.
For his part, Camyar [2014] argues, based on his study of 21 advanced industrialised countries from 1989 to 2008, that the interventionist strategies of left-wing parties are more beneficial to business results than the market-oriented strategies of right-wing parties.

State of the art

The Mexican Institute for Competitiveness [IMCO] has defined state competitiveness as the ability of a state to generate, attract, and retain talent and investment. Thus, a competitive state is one where people have the opportunity to work and be entrepreneurial because they find opportunities, security, and quality of life. This definition considers not only economic growth, although this is very important, but also aspects such as education, health, innovation, the rule of law and the environment.

The idea is that economic growth alone is not enough: it is about ensuring that this growth translates into well-being for citizens.

With regard to citizen participation and its effect on competitiveness, some authors limit it to legal frameworks, social dynamics and the role of youth participation.

With regard to the influence of the political affiliation of the ruling party at the state level on competitiveness, although studies have been identified that report a strategic use of public spending to favour political alignment [Gámez & Ibarra, 2007; Ibarra, 2013; Sánchez, 2017; Simpser et al., 2016; Timmons & Broid, 2013], no studies have been identified that directly link political affiliation to state economic competitiveness performance.

Table 1 shows studies that reflect the influence of public debt, citizen participation, and the ruling party on state competitiveness. Some studies state that the influence of public debt on Mexico's competitiveness is multifaceted and reflects both positive and negative implications for economic growth and investment. Research indicates that while public debt can facilitate public investment, excessive levels can hinder economic performance.

Despite finding positive correlations between debt, investment, and GDP per capita, debt grows faster than the effects of investment, putting the sustainability of public finances at risk. Meanwhile, the governance variable requires active citizen participation in issues that are not exclusively electoral, while there is a largely clientelistic risk of citizen participation.

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Box 1

Table 1
Literature review

Author	Target	Method	Results
García [2019].	To analyse whether subnational public debt in Mexico is effectively allocated to productive public investment, as well as to examine how debt, public investment, impacts economic growth in Mexican states during the period 2003-2016.	Panel data with random effects.	Public debt has a significant negative effect on public investment.
Sánchez y García [2016].	Determine whether the increase in state public debt has boosted public investment.	Dynamic panel data models.	There is a positive relationship between public debt and public investment. That is, when states borrow, part of these resources are channelled to investment. Public investment is also positively related to economic growth, but the effect is very small. Despite the positive correlations, debt grows faster than investment and GDP per capita, which raises doubts about its sustainability.
Estrella [2005].	To analyse how in Mexico's Federal District political citizenship - translated as participation - does not conform to an ideal definition of the concept, but operates through clientelistic and corporative structures.	Qualitative historical, political and normative analysis.	In Mexico City, participation has historically been limited by a centralist and presidentialist political regime, and mediated by clientelistic and corporative practices.
Cleary [2007].	Analyse whether the performance of municipal governments in Mexico is improved more by electoral competition or by non-electoral citizen participation.	OLS regression models with log-odds transformation and random effects models [GLS] for analysing local incomes	The article downplays the importance of purely electoral participation as a driver of good local governance and highlights the value of active and daily citizen participation in achieving better municipal results.

Source: own elaboration

Methodology

The data used in this research were obtained from the Mexican Institute for Competitiveness [IMCO], in particular the State Competitiveness Index, ICE, corresponding to the year 2024.

From the index, the ordinal position of each of the states and Mexico City was taken as the explained variable. The performance indicators of State debt and state bodies, Debt, Ruling party in the state, Party, Citizen participation in elections and Citizen participation were considered as explanatory variables [see Table 2].

Box 2

Table 2
Definition of variables

Variable	Tipe	Definition	Expected sign	Categories	Source
Shop assistant					
ICE	Categorical	This is the ordinal position obtained by each state during the year 2024 with respect to the State Competitiveness Index.	NA	The variable takes the ordinal categories 1,2,3,4,5,6 corresponding to the levels, Very high, High, Medium high, Medium low, Low, Very low.	IMCO.
Independent					
Deuda	Categorical	This is the indicator for Government and government agency debt [Percentage of total revenue], belonging to the Political system and governments dimension.	Mexican states with higher debt have lower competitiveness indices if investment spending is low.	The original state debt level variable consisted of six categories. For ease of analysis they were recoded into a four-level ordinal scale, grouping categories with similar characteristics. 1: Very high/high debt 2: Medium high debt 3: Medium-low debt 4: Low/very low debt	IMCO.
PARTY	Categorical	This variable identifies the political party in power in each state..	The ideology of the ruling party influences state competitiveness. Parties with a technocratic or pro-market orientation favour conditions that boost competitiveness. In particular, right-wing or centre-right parties might prioritise investment, infrastructure and a	The variable identifying the ruling party in the state was coded as an ordinal variable with four categories: 1: MORENA 2: PAN 3: Coalition with the ruling party 4: Other parties	IMCO.

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Box 2

Table 2
Definition of variables

Variable	Tipe	Definition	Expected sign	Categories	Source
			business-friendly environment; left-wing parties might focus on social spending or redistribution.		
CITIZEN PARTICIPATION	Categorical	This variable measures the number of votes cast as a percentage of the nominal list..	States with higher citizen participation in elections would be expected to have higher participation in all spheres, including the economic sphere, which would be related to higher competitiveness.	The original citizen participation variable, comprised of six categories, was recoded into three levels: 1 High: Includes the categories Very High Participation and High Participation. 2 Medium: Groups together the categories Medium High Participation and Medium Low Participation. 3 Low: Groups together the categories Low Participation and Very Low Participation.	IMCO.

Source: Own elaboration

Dependent variable

The dependent variable [ICE] represents the ordinal position obtained by Mexico's federal entities in terms of competitiveness. In the IMCO ICE 2024 report, this variable is presented in six levels of competitiveness: very high, high, medium-high, medium-low, low, and very low.

For the purposes of this study, the variable has been reconfigured by grouping the first three levels into a single category, High, and the lower three levels into Low. It has thus been coded as High Competitiveness and Low Competitiveness.

Independent variables

The independent variables taken into account are debt, political party, and citizen participation.

The Debt variable represents the debt of the state and public bodies [percentage of total revenue], belonging to the Political System and Governments dimension. The variable takes the ordinal categories 1 equal to Very High/High Debt, 2 equal to Medium High Debt, 3 equal to Medium Low Debt, 4 equal to Low/Very Low Debt.

The Party variable identifies the political party in power in each federal entity. The variable takes the ordinal categories 1, 2, 3, 4 corresponding respectively to the MORENA, PAN, COALICION, and OTROS parties. Given that the study focuses on the year 2024, the official MORENA party, which obtained the largest number of deputies in the LXVe legislature, was ranked number 1. The PAN was the second political force, it has [Agresti, 2007 ; Hosmer et al., 2013 ; Espinoza et al., 2023].

The choice of this statistical algorithm was supplemented by a literature review in which articles in the fields of social sciences, administration, and economics that used generalized models were identified. [Swearinggen & Jatkowski, 2011 ; Coffé & van den Berg, 2017 ; Olejnik, 2019 ; Ibáñez, 2020 ; Ibáñez, 2022 ; Thürk & Krauss, 2024 ; Cifuentes et Disi, 2024 ; Cuenca et Pérez, 2025 ; Pacheco et Zaldumbide, 2025]. In statistical modeling, several models were tested, varying the configuration of scales and the interaction of variables. The AIC, BIC, log-likelihood, and deviance criteria were used to evaluate model fit. In the second stage, debt, citizen participation, and party affiliation were modeled, in accordance with the models from stage 1, in order to explain the level of competitiveness of states, ICE. Rstudio software version 2024.12.1+563 was used to perform the modeling.

Results

In order to identify the most appropriate model, different configurations of the explanatory variables were tested, and a statistically significant and theoretically consistent model was identified that explains ICE as a function of DEBT and CITIZEN PARTICIPATION. In addition, it was identified that PARTY individually models ICE. The coefficients of these models are presented in Table 3. They indicate how the cumulative probability of belonging to a category greater than or equal to the ordinal variable varies.

ISSN: 2524-2040
RENIECYT: 1702902

Box 3

Table 3
Significant models

	Model 1	Model 2
Determining factors		
PARTY		
PAN	-1.90*** [0.55]	
COALITION	0.79 [0.98]	
Others	-0.46 [0.48]	
Debt		
HIGH MEDIUM		-0.46 [0.57]
MEDIUM LOW		0.20 [0.56]
LOW AND VERY LOW		-1.38* [0.68]
CITIZEN PARTICIPATION		
AVERAGE PARTICIPATION		-1.03 [0.55]
LOW TURNOUT		0.17 [0.72]
Adjustment factors		
AIC	263.54	269.99
BIC	278.92	290.51
Log Likelihood	-125.77	-127.00
Deviance	251.54	253.99

Source: Own elaboration

Model 1, which explains state competitiveness in terms of the PARTY, was significant considering an alpha of less than 0.05. in the case of the multiple model, which explains ICE based on CITIZEN PARTICIPATION and state DEBT, it was significant for the first variable with an alpha less than 0.05 [p value < 0.05] and marginally significant for debt with an alpha close to 0.5 [p value < 0.055]. The individual significance of these variables was evaluated using the Wald test, using the p-values associated with each estimated coefficient.

The model coefficients represent cumulative log-odds, so that a negative coefficient means that the probability of remaining at low ICE levels increases, while a positive coefficient indicates a higher probability of being at high levels.

The probabilities of belonging to the different levels of the state competitiveness index [ICE] corresponding to models 1 and 2 are shown in Tables 4, 5 and 6.

Box 4

Table 4
Probabilities by category Match

ICE	MORENA	PAN	COALITION	OTHERS
HIGH LEVEL	0.1696	0.5762	0.0847	0.2437
HIGH AVERAGE LEVEL	0.2406	0.2461	0.1549	0.2795
LOW AVERAGE LEVEL	0.2838	0.1155	0.2673	0.2584
LOW LEVEL	0.3058	0.062	0.4930	0.2182

Source: Own elaboration

Table 4 shows the probabilities of belonging to each of the ECI levels as a function of the ruling parties in each of the 32 states. A stacked bar representation is shown in Figure 1.

Box 5

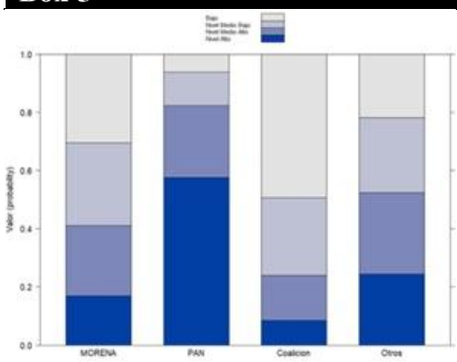

Figure 1
comparison of probabilities of probabilities per match.

Source: Own elaboration.

The results show that states governed by the PAN have a high probability [57.62%] of being at the highest ICE level and a very low probability [6.20%] of being at the lowest level. This suggests a positive association with state competitiveness.

On the other hand, states governed by MORENA are more likely to be at the lowest ICE level [30.58%] and less likely to be at the high level [only 16.96%].

This suggests a negative association between MORENA governments and high state competitiveness. Coalition governments have a high probability [49.3%] of being in the low ICE level.

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RENIECYT: 1702902

This is even lower than MORENA in this estimate, indicating a predominantly negative association [in the time window analysed, the Social Encounter Party, PES, was in coalition with MORENA and won the governorship of Morelos, although the Labour Party [PT] was also in coalition but did not win any states, therefore this coalition category represents the Social Encounter Party [PES].

In Figure 2, the probabilities obtained from the ordinal logistic model are presented in a heat map, in which the states in green represent the highest probabilities of belonging to the highest level of the state competitiveness index. These states are Coahuila, Aguascalientes, Guanajuato, Querétaro, and Yucatán. On the other hand, the region in red, Morelos, has the lowest probability of belonging to the highest level of the index.

Box 6

Figure 2
regional comparison of match probabilities.
Source: Own elaboration

The results may reflect the party's ideology and its influence on spending geared towards investment or social spending, while in the case of the alliance and its likelihood of low competitiveness, this may be due to the difficulty of reaching agreement between parties in the coalition and a lack of alignment between common objectives.

With regard to government debt, Table 5 shows the probabilities of belonging to each of the ICE levels based on government debt.

Box 8

Table 5
Probabilities by category Debt

Debt	Very high/high	High average	Low average	Low/very low
HIGH LEVEL ICE	0.1851	0.2647	0.1573	0.4754
MEDIUM-HIGH LEVEL ICE	0.2450	0.2799	0.2255	0.2753
MEDIUM-LOW LEVEL ICE	0.2790	0.2497	0.2842	0.1560
LOW LEVEL ICE	0.2907	0.2055	0.3328	0.0931

Source: own elaboration

A stacked bar chart representation is shown in Figure 3. The model showed that states with low/very low debt have the highest probability [47.5%] of belonging to the highest level of competitiveness. On the other hand, states with very high/high debt have only an 18.5% probability of being in this group.

Box 9

Probabilities by category Debt

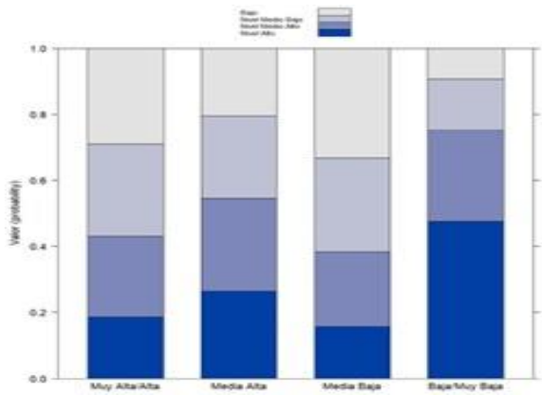

Figure 3
Comparison of probabilities of probabilities by category.
Source: Own elaboration.

With regard to Citizen Participation, Table 6 shows the probabilities of belonging to each of the ECI levels. A graphical representation is shown in Figure 4.

ISSN: 2524-2040
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Box 10

Table 6

Probabilities by category Citizen participation

DEBT	High	Media	Low
HIGH LEVEL ICE	0.1336	0.3013	0.1148
MEDIUM-HIGH LEVEL ICE	0.2052	0.2877	0.1864
MEDIUM-LOW LEVEL ICE	0.2846	0.2333	0.2808
LOW LEVEL ICE	0.3765	0.1775	0.4177

Source: Own elaboration

According to the statistical model, medium citizen participation has the highest probability [30.1%] of being in the high ECI. High participation is associated with lower probability [13.4%], and low participation with even less [11.5%].

Box 11

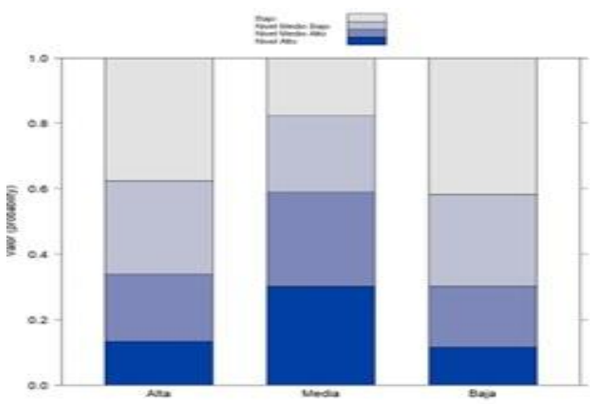

Figure 4

comparison of probabilities of probabilities by category of participation.

Source: Own elaboration.

A representation of the joint probabilities of the multiple model considering Debt and Citizen Participation is shown in Figure 5. The states in green have the highest probabilities of being in the highest level, while the states in red have the lowest probabilities of being in the top positions of the index.

Box 12

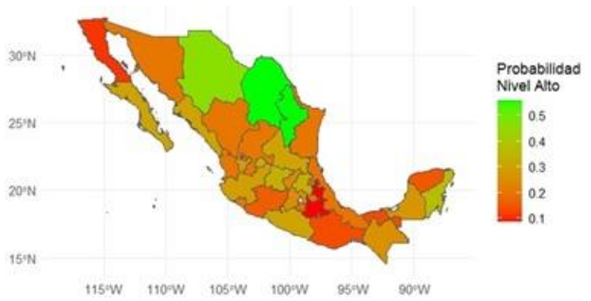

Figure 5

Regional comparison of probability probabilities by citizenship and debt.

Source: Own elaboration.

One possible interpretation of the results of the multiple model could be that average citizen participation seems to coincide more with high state competitiveness. One possible explanation could be found in balanced participation without political polarisation.

Conclusions

This article studied the influence of state debt and state agencies [percentage of total revenue], DEBT, CITIZEN PARTICIPATION, understood as votes cast as a percentage of the nominal list, as well as the PARTY variable that identifies the political party governing each federal entity, with respect to the ordinal position obtained by each federal entity in the State Competitiveness Index [ICE].

The methodological design provides originality to the research, given that a three-year time window was considered, corresponding to the ICE results for 2022, 2023, and 2024. which were observed in each of the country's 32 states, allowing us to observe the differentiated effect of being governed by MORENA, PAN, parties in COALITION with the official party, and OTHERS.

Using ordinal logistic regression analysis, it was possible to answer the question: what impact do PARTY factors, state DEBT, and CITIZEN PARTICIPATION have in explaining these gaps? The explanatory model of the ICE based on party identified that states governed by the PAN have a high probability [57.62%] of being at the highest level of the State Competitiveness Index [ICE] and a very low probability [6.20%] of being at the lowest level.

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This suggests that, at least in the period analysed, PAN governments tend to be associated with more competitive states. In contrast, MORENA governments are more likely to be at the lowest level of the ICE [30.58%] and only 16.96% likely to reach the highest level, indicating a negative relationship between the party and state competitiveness. In states governed by coalitions, notably the case of the PES allied with MORENA in Morelos, the probability of being at the low ICE level is even higher [49.3%], which also reflects an unfavourable association.

This result is complementary at the country level and runs counter to the study by Camyar [2014], who studied 21 industrialised nations at the country level and found that left-wing governments produced better results for businesses. We have found that, at the regional level in Mexico, the best performances in the ICE state competitiveness index are found in PAN party governments.

In this study, we identified that the DEBT variable was significant, which is consistent with the study by García [2019], where this author correlated it with public investment, and we have identified its significance in relation to economic competitiveness.

Likewise, our finding would seem to contradict Sánchez and García [2016], who found that debt correlates positively with economic growth. States with low or very low debt are more likely [47.5%] to be at the high level of competitiveness, while those with very high or high debt barely reach 18.5%. This reinforces the idea that lower debt may be linked to better competitive performance, while controlling public finances and their sustainability.

Our study complements the results of Clearly [2007], who concluded that electoral participation was not significant as a determinant of good governance. We have identified the significance of citizen electoral participation with regard to competitiveness. In the model, it is noteworthy that average levels of participation have the highest probability [30.1%] of being associated with a high ICE, surpassing even high or low levels of participation. This could be interpreted as meaning that non-polarised participation is linked to more stable and competitive contexts, perhaps due to less political polarisation.

Although the analysis considers the years 2022, 2023 and 2024, it is limited to a short period, which prevents the establishment of historical causal relationships between the parties in power and the level of state competitiveness. However, it represents a momentous period in human history, marked by the Covid-19 health crisis. Additionally, the observed phenomenon could be influenced by specific economic and social dynamics during this three-year period.

Finally, based on the findings of this study, two future lines of research are proposed. The first is to conduct a longitudinal analysis with a longer time frame. It would be useful to extend the analysis period to a broader range of years [for example, from 2012 to 2024, so that the results could be compared across different presidential terms] to identify whether the relationships observed between the ruling party, debt, citizen participation, and state competitiveness are maintained over time or whether they respond to recent dynamics.

Likewise, it is considered that a promising line of research could be to analyse the internal dimensions of the State Competitiveness Index [ICE] separately, in order to determine in which specific areas state governments have the greatest impact, and whether certain parties tend to perform better in particular dimensions of state development.

Conflict of interest

The authors declare that they have no conflict of interest. They have no known competing financial interests or personal relationships that could have appeared to influence the article reported in this paper.

Availability of data and materials

The data will be available upon request to the authors.

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