

State Public Debt Laws and Fiscal Performance the Case of Mexico

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Abstract

Institutions play a fundamental role on the fiscal performance of governments. In the literature of federalism, fiscal institutions are one possible way to control subnational debt that may cause problems in the financial sector and affect a country's macroeconomic stability. This is particular relevant in developing countries where problems of soft-budget constraints at the regional and local level are more common and reliance on market discipline is harder. This paper studies the impact of state public debt laws on state fiscal performance in the case of Mexico. Using data from a panel of the 31 Mexican states for the period 1993-2002 the analysis finds that there is a positive impact of the existence of debt laws, but once we take care of potential problems of endogeneity, the effect disappears.

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I. INTRODUCTION

Over the last decades, decentralization has become a very popular policy in developed as well as in developing countries. A key argument in favor of decentralization is that it makes the delivery of public goods and services more efficient by producing them with better knowledge of the preferences of smaller and more homogeneous economic agents. In addition, decentralization may also serve to legitimize government policies by closing gaps between the action of public officials and their constituencies, thus helping to restore democratic governments. In fact, in Latin America, decentralization has accompanied many of the transitions to more democratic regimes. However, decentralization may fail to produce positive outcomes due to a lack of local human, financial and technological capabilities. Other problems of decentralization surge in terms of externalities and economies of scale.

In addition to these latter critiques, a characteristic of the decentralization process in several countries is that it has been implemented mainly on the expenditure side and rarely on the revenue side. This has created huge vertical imbalances that have caused among other things, a problem of soft budget constraints at the regional and local level and in general a bad fiscal performance of these levels of government. This situation may jeopardize the macroeconomic fiscal stability and the possible gains of the

decentralization process. For example, in Brazil early in 1999, the federal government had to devalue its currency a few days after the Brazilian state of Minas-Gerais defaulted on its debt. This event provoked financial turmoil not only in Brazil but in many parts of Latin America.¹

In order to control regional and local borrowing, different approaches are used around the world ranging from the sole reliance on market discipline to strong and direct controls by the central government on the borrowing capacity of local and regional governments. Ter-Minassian (1996) mentioned four broad approaches: 1) reliance on market discipline; 2) cooperation by different levels of government in the design and implementation of debt controls; 3) Direct control of the central government, and 4) rules based approach like debt limits or balance budget requirements.

Rules-based approaches have the virtue of transparency and, ex-ante at least, avoid political bargaining between the central and the subnational levels of government. However, in many occasions the lack of flexibility produced by the rules provokes that local governments develop ways to circumvent the rules, thus making them useless.

Formal legal constraints have been fairly analyzed in the context of the impact of fiscal institutions on fiscal performance. The literature has analyzed basically the case of the United States

¹ It is also well known that the extremely bad fiscal performance of the Provinces greatly influenced the Argentinian economic crisis of 2003.

at the state level and the newly formed European Monetary Union. See for example Poterba (1994, 1996), von Hagen (1991), Kiewiet and Szakaly (1996). However, there is little work on other countries, in particular on developing nations where many of the problems described above are more common and where reliance on market discipline is harder to achieve.

The goal of this paper is to empirically analyze the impact of public debt laws at the state level in Mexico. This paper thus serves in the discussion on fiscal federalism and decentralization as well as in the discussion on institutions and fiscal performance in general. In terms of the Mexican case, the literature on fiscal federalism has analyzed the system of fiscal coordination among the different levels of government and the determinants of the different transfers that state and municipal governments receive but there is very little work that has investigated on the fiscal behavior of the states themselves.

The paper uses a data base compiled by the author consisting on information regarding the enactment of the debt laws and their characteristics. We use data for each individual state from 1993 to 2002. The paper exploits the fact that many states enacted state public debt laws during the period of analysis. Thus, by using fixed effects we control for possible omitted variables like ideology, a common problem that is present in this type of studies. However, as most debt laws were enacted as a result of fiscal problems of the states in the decade of 1990, it is possible that other elements like a self-imposed change in behavior of state public officials also influenced the fiscal balances besides the enactment of the laws. Because of the notoriety of the case and because states were looking for the federal government to bail them out, it is possible that many governors acted fiscally conservative in the years following the crisis. Thus, I also include in the analysis year dummies to control for these possible factors.

The results without year dummies show that states in years with no public debt laws have

larger deficits than states in years with public debt laws. But once the model includes the year dummy variables, the effect of the debt laws disappears. The results are similar if it is considered how tough the laws are against acquiring debt and not just the existence of the law and when political variables are included. The results then suggest that the laws are not serving in reducing or eliminating fiscal deficits at the state level.

The organization of the paper is as follows. In the next section I present how fiscal institutions may affect state fiscal behavior. In the third section, I briefly describe the situation of the Mexican States. In the fourth section, I present the empirical model and results. The conclusions and policy implications are at the end.

II. FISCAL INSTITUTIONS AND FISCAL PERFORMANCE

Fiscal institutions play a very important role as determinants of fiscal behavior. Among the fiscal institutions that clearly affect fiscal outcomes are the existence of legal formal constraints that regulate the contracting of public debt and/or those that regulate the fiscal deficits.² Poterba (1994, 1996), Alt and Lowry (1994), Von Hagen (1991) as well as Kiewiet and Szakaly (1996) are examples of these studies.

Formal legal constraints to control borrowing have the advantage of being transparent, clear and rigid and because of this, more prone to avoid any type of political bargaining (between the executive power and the legislative one or between the central and local governments) that many times is guided more by the political context than by financial or technical matters. Also, in many occasions a supermajority is needed to change the formal constraint, thus making it more complicated to the politician (governor, President, etc.) to change it.

In terms of fiscal federalism, rules-based approaches to control subnational government debt

² Other fiscal institutions commonly studied are the power of the executive relative to the power of the Congress, and the political system (presidential or parliamentary). See the volume edited by Poterba and von Hagen (1999) for a more comprehensive view on the role of fiscal institutions.

become more relevant in developing countries since commonly it is harder to use other control mechanisms like reliance on market discipline or direct control of central governments, than in developed nations. It is difficult to rely solely on market discipline since the financial markets are not well developed. Also, in countries that have observed a huge decentralization process and where this change was part of democratization (like in many countries of Latin America) it is almost impossible in political terms to argue in favor of direct control of the central government on subnational borrowing.

However, it is not clear that legal rules may work since governments can develop ways to circumvent them and because the institutional and political context make easy to do it. It is also possible that the limits imposed in the laws are far to be binding. Ter-Minassian (1996) gives some examples of ways governments elude the laws. Governments may:

- Reclassify expenditures from current to capital in order to escape current budget balance requirements.
- Create entities whose operations are kept off-budget, and thus not limited by the rules.
- Use state and local government owned enterprises to borrow for purposes which should be funded through the government budget
- Use of debt instruments not regulated by the law.

Thus, it is not clear that formal legal constraints always affect public debt in ways the lawmakers originally wanted. The literature provides ambiguous evidence as cited by Kiewiet and Szakaly (1996) however it is clear that some specific type of restrictions do affect fiscal performance.

Von Hagen (1991) found for the US states that fiscal restraints do not seem to significantly affect average fiscal performance other than the choice of nonguaranteed or guaranteed debt. However, with nonparametric tests, he found that

legal constraints have significant effects on the likelihood of per capita debt, debt-income ratios and the choice of debt instrument. That is, states with a formal debt limit or with a very stringent balance budget requirement are more likely to choose relatively low levels of per capita debt and debt-income ratios than otherwise.³

Other authors as Kiewiet and Sakaly (1996) have also found for the American states that the choice of nonguaranteed or guaranteed debt changes with legal constraints. This is just evidence that governments find ways to escape regulations. Poterba (1996) cited examples found by a study of the General Accounting Office of this type of situations. However, a survey of the agency also shows that cosmetic changes are quantitative less important than tax increases and spending cuts for meeting state balanced-budget requirements.⁴

Kiewiet and Szakaly (1996) argue that the effectiveness of legal constraints depend upon the strength of the restriction in place. He distinguishes limitations that are effective and those that are not. The authors found that states that, either prohibit guaranteed debt or require referendum approval (harder rules) to issue it, had less guaranteed debt than those that require a supermajority of the legislature to issue debt or those with revenue-based limitations (softer rules).

Poterba (1994) studied how US states respond to deficit shocks. He found that states with weak antideficit rules adjust spending less in response to deficit shocks than states with strict antideficit rules. A \$100 deficit overrun leads to only \$17 expenditure cut in a state with weak antideficit institution and a \$44 cut in a state with strong antideficit rules. There is no evidence that antideficit rules affect tax changes after a fiscal shock.

III. STATE PUBLIC DEBT LAWS IN MEXICO

Public Debt Laws at the state level in Mexico

³ Von Hagen says that the different results obtained with non parametric tests and those obtained with the test for equal means is because (p. 208): “*the frequency distribution become more skewed in the groups with debt limits and highly stringent BBRs; yet since the means do not change, the standard deviation is generally larger in these groups.*”

⁴ Cited in Poterba (1996).

surged mainly in the mid 1990s during or shortly after the financial crisis the states suffered in the 1995 Mexican economic crisis. Subnational government debt was not, as in Brasil or Argentina, a problem of macroeconomic magnitude however it represented a major fiscal problem for almost all states due to the lack of state resources to comply with their debt. In this context and with commercial banks experiencing liquidity and capitalization problems, the federal government got under pressure and rescued almost all states.⁵

In order to avoid similar situations in the future, some changes were made in the institutional design that regulated the financial relationships between the federal and the state and local governments. In addition, although never explicitly, many states started to enact specific laws to regulate state public debt. In Table 1 we can observe that most of the state public debt laws appeared in the second part of the 1990 decade,

that is, after the crisis. However there are some exceptions like the states of Baja California, Guerrero, Estado de Mexico and Queretaro that enacted their laws well before.

Table 1 also presents an index of stringency that reflects how strong against acquiring debt the different laws are. This index was developed by the author and goes from 0 to 70. The state of Aguascalientes has the higher stringent index (65) and the state of Tlaxcala (15) the lowest. The mean is 43.2 and the standard deviation is 12.88.⁶

Although state debt may not be dangerous in macroeconomic terms at this point in time, for several of the states its debt is a huge burden since it represents a large percentage of federal transfers, the main source of state income as Table 1 column (3) shows. Thus, if there is any type of crisis or a surge in the interest rates, as in 1994 for example, it is perfectly possible that states will not have enough disposable income to serve their debt and at the same time to continue operating

⁵ See Hernandez et al. (2002) for a more comprehensive view of the bail-out of state governments in Mexico after the 1995 crisis and the problem of the soft-budget constraint in Mexico.

⁶ The index consist of the analysis of 7 common variables that were considered of importance regarding the acquisition of debt. In each variable a value of 10 or 5, or 10, 5, or 0 was given to each state.

Table 1
State Public Debt Laws

State	Public Debt Laws		Debt/Federal Transfers
	Date of Enactment	Index of Stringency	%
	(1)	(2)	(3)
Aguascalientes	26/09/97	65	13.7
Baja California	10/02/88	25	33.1
Baja California Sur	31/01/97	45	48.5
Campeche	27/06/95	50	0.9
Coahuila de Zaragoza	06/12/96	40	11.8
Colima	22/04/01	40	21
Chiapas	23/12/99	45	10.8
Chihuahua	31/12/94	45	24.3
Durango	03/08/80	25	44.6
Guanajuato	30/08/96	50	7.9
Guerrero	28/12/88	30	32.9
Hidalgo	10/12/01	55	17.7
Jalisco	16/01/97	50	44.6
México	12/07/80	35	126.7
Michoacán de Ocampo	17/01/03	35	2.3
Morelos	01/02/95	25	15
Nayarit	07/08/96	60	4.5
Nuevo León	18/11/94	45	87.2
Oaxaca	31/08/96	35	6
Puebla	03/11/77	30	11.9
Querétaro de Arteaga	09/12/87	35	41
Quintana Roo	18/12/98	60	58.2
San Luis Potosí	17/03/99	60	35.2
Sinaloa	24/07/03	60	63.8
Sonora	06/07/95	40	76.5
Tabasco	27/04/94	35	5.5
Tamaulipas	30/12/95	60	6.5
Tlaxcala	04/02/92	15	0
Veracruz	11/06/97	45	21.4
Yucatán	09/03/95	40	17.1
Zacatecas	31/12/97	60	7.5
National Mean			28.97

Note: Own elaboration with data for each state. See footnote 6 for more on the index of stringency. Data for column (3) is for 2002.

normally (current expenditures on average represents around 70% of expenditures).

IV. DATA AND EMPIRICAL MODEL

The goal of this section is to provide an empirical analysis of the impact of the state public debt laws in the fiscal performance of the states. The empirical analysis is done with state level data from 1993 to 2002.⁷

Before presenting the model and results Table 2 presents the average fiscal performance in states and years with and without the existence of public debt laws. For this preliminary simple test we observe that fiscal deficits are smaller after the introduction of public debt laws than before. It is also interesting to observe that the standard deviation and the maximum deficit observed are also smaller.

The model follows the literature of regional and local public finance. Assume state i in each period t chooses how much to spend, E_{it} , how much revenue to collect, R_{it} , and how much to borrow, B_{it} , in order to satisfy an income constraint:

$$E_{it} = R_{it} + FT + B_{it} \quad (1)$$

where FT are federal transfers. A decision maker maximizes an objective function written as

$$U = U(E_{it}; R_{it}; FT; B_{it}; X_{it}; Y_{it}; \Omega_{it}) \quad (2)$$

where X and Y are vectors representing exogenous variables affecting expenditures and revenues, respectively, and W captures institutional and political variables. This framework is flexible. In this case, it is assumed the decision maker is a self-interested politician who balances his/her goals with the needs and demands of the electorate. In each period, the decision maker maximizes U

subject to the income constraint in equation (1). The optimization process yields reduced-form functions for $E_{it}^*(R_{it}, X_{it}, FT, W_{it})$ and $R_{it}^*(E_{it}, Y_{it}, FT, W_{it})$. Borrowing is determined once spending and revenues are chosen.⁸

Borrowing is in fact the fiscal balance of the state, if a state acquires debt in a certain fiscal year, this is represented in a fiscal deficit for the same year. If the state reduces its net accumulated debt, this is represented by a fiscal superavit. The empirical model is done with the fiscal balance of the state. The model is the following:

$$Def_{it} = \alpha_0 + \varpi_{(i)} + \alpha_1 DD_{it} + \alpha_2 Y_{it} + FT_{it} + \alpha_3 Marg_{it} + \alpha_4 UN_{it} + Debt_{it} + v_{it} \quad (3)$$

where i refers to the different states and t refers to the different periods of the sample.

Def is state fiscal deficit in per capita terms.
 DD is a dummy variable that indicates the existence of a state public debt law.
 Y is income per capita measured by state GDP.
 FT are per capita federal transfers
 $Margina$ is a development index.
 $Unem$ is the rate of unemployment.
 $Debt$ is accumulated debt per capita
 v_{it} is a vector of state dummies

We are mainly interested in the coefficient of the variable DD . If the laws are really doing their job

Table 2. Fiscal Deficit

	Before Law	After Law
Mean	0.030	-0.007
SD	0.193	0.096
Min	-0.868	-0.491
Max	1.032	0.474
Obs	124	186

Note: Own elaboration with data from INEGI. Data are expressed in 1994 per capita pesos. A negative sign means a budget surplus.

⁷ Mexico City, the capital of the country is not included in the analysis since it is not formally a state.

⁸ See Alt and Lowry(1994), Zhuravskaya (2000), and Swaroop et al (2000) for explicit formal models of this approach.

this coefficient should be negative and statistically significant.

Table 3 shows summary statistics of the main variables. All monetary variables are expressed in 1994 pesos.⁹ As seen, the control variables are per capita state GDP, a development index, per capita federal transfers, per capita accumulated debt, and state unemployment.

A high income per capita means a larger tax base for state governments. However, it is also true that rich states have better opportunities to acquire debt. The index of development intends to control for the needs of the state specially in infrastructure that may provoke larger expenditures. Unemployment rates try to capture the economic cycle at the state. In addition, one of the few taxes states collect in Mexico are taxes on labor. Thus, unemployment may have a significant role in state revenues. As common in the literature, federal transfers plays an important role in state public finances. Finally, accumulated debt is introduced

to capture the resources needed to serve it that obviously restrict fiscal decisions.

In these models it is important to acknowledge the possibility that the variable representing the formal legal constraint is not exogenous. The problem comes from the possibility that interstate differences in legal constraints may reflect differences in voter tastes for budget deficits. That is, states with a dislike for deficits may also produce laws that severely restrict deficits. Thus, the results may be driven by an omitted variable: ideology. Usually, the literature has attacked this problem by introducing a proxy for ideology or by using instrumental variables, but it is very difficult to find accurate and proper variables to do this job.¹⁰

This paper deals with this problem by exploiting the fact that states experienced a change with respect the existence of debt laws during the period of study as mentioned before. Thus, this change in the variable that represents the formal

Table 3. Summary statistics

Variable	Mean	Std. Dev	Min	Max
GDP	0.143	0.069	0.057	0.41
Fiscal Deficit	0.008	0.144	-0.868	1.032
Development Index	0.042	0.855	-1.472	2.36
Unemployment	2.57	1.454	0.2	8
Federal Transfers	1.045	0.518	0.2708	2.549

Note: Monetary variables are in 1994 pesos per capita. A negative sign in the fiscal deficit variable means a budget surplus. The index of development differentiates states according to the global impact of the deficiencies that the population suffers from not having access to basic infrastructure. A larger index means more access to infrastructure. Unemployment is in percentage terms.

⁹This tax is called “impuesto a la nomina.” It is charged to firms based on the number of employees. All the main taxes in Mexico are federal taxes.

¹⁰ See Poterba (1996) for more on this problem.

rule allows to use fixed effects to capture all possible omitted variables like ideology.

The basic results are in table 4 column (1). The coefficient of the dummy variable representing the existence of a debt law is negative, according to expected, and is statistically different from zero. That is, the existence of debt laws, according to this result, does impact the fiscal performance of the states.

It is important to consider political variables since they also influence the fiscal performance of the states. The variables used are the political party which is in power in the state, the level of political competition, if there is an election year, and if the same party controls the executive and the legislative power. Numerous articles have shown that voters do respond to state budgets, a variable that governors may control. See for example Poterba (1994) and Besley and Case (1993) who found that spending cuts and tax increases are smaller when governments are about to stand for elections or Baber and Sen, 1986; Clingmayer, 1991 that showed that when governments face high political competition the composition of state budgets tends to show more fiscal deficits than when there is no high political competition or Alt and Lowry (1994, 2000) who analyzed the effect of divided governments. With respect to partisanship, we expect lower fiscal deficits for states governed by the Partido Accion Nacional (PAN) and higher deficits for the states governed by the Partido de la Revolucion Democratica (PRD) than in the states governed by the Partido Revolucionario Institucional (PRI).¹¹

The results are in column (2) of table 4. With respect to the coefficient of our main variable of interest, we have the same result as before, the coefficient is negative and statistically significant. With respect to the political variables, the coefficient of the PAN variable is negative and

statistically significant. This means that states governed by this party run lower deficits than those states governed by the PRI. This result is consistent with the popular belief that sees the PAN as a political party inclined to the right and that has more fiscal conservative positions. It is also interesting to observe that no other political variable is statistically different from zero.

It has been established that the model estimated solves the common problem of endogeneity observed in this type of studies. However, we can have other kind of endogeneity. Notice that most debt laws were enacted as a result of fiscal problems of the states in the decade of 1990. Thus, it is possible that other elements like changes in the National System of Fiscal Coordination or a self-imposed change in behavior of state public officials, were influencing the fiscal performance of the states. Because of the notoriety of the case and because states were looking for the federal government to bail them out, it is possible that many governors acted fiscally conservative in the years following the crisis. Thus, the negative coefficient we found in the previous regression may be a consequence of a change in the behavior of the governors and/or other factors, and not because of the existence of public debt laws.

In order to consider this potential problem, I also estimate the model including year dummies. The year dummies are a way to control for these other factors. The results (columns 3, and 4 of table 4) show that the coefficient of the dummy variable that represents the existence of debt laws is now positive (although not statistically significant) instead of negative as in the previous model. At the same time, the coefficient of the year dummies 1995, 1996, 1997, and 1998 are negative and statistically different from zero.¹² These results, thus suggest that the lower fiscal deficits observed after the enactment of debt laws is due

¹¹ Dummy variables are included for those states governed by the PAN and the PRD. The states governed by the PRI are used as base. Political competition is represented by the Taag index. The variable divided government is also a dummy variable.

¹² The coefficients were -0.232 , -0.214 , -0.174 , and -0.131 for the years 1995, 1996, 1997, and 1998 respectively.

Table 4. Results.

Dependent variable: Per capita fiscal deficit				
	(1)	(2)	(3)	(4)
GDP	0.903 (0.753)	1.033 (0.756)	0.702 (0.694)	0.792 (0.689)
Margination	-0.018 (0.021)	-0.014 (0.021)	-0.010 (0.019)	-0.013 (0.019)
Unemployment	-0.016* (0.008)	-0.018** (0.008)	0.022** (0.011)	0.017 (0.011)
Dummy debt	-0.069** (0.024)	-0.067** (0.024)	0.017 (0.026)	0.031 (0.025)
Federal Transfers	-0.377** (0.145)	-0.359** (0.147)	-0.598** (0.174)	-0.539** (0.171)
Debt	-0.137** (0.065)	-0.149** (0.065)	-0.156** (0.062)	-0.171** (0.061)
PAN	- -	-0.096 (0.035)	- -	-0.063** (0.032)
PRD	- -	0.035 (0.052)	- -	0.004 (0.047)
Political Competition	- -	0.022 (0.020)	- -	0.059** (0.019)
Divided Government	- -	-0.013 (0.026)	- -	0.008 (0.023)
Year of Election	- -	-0.003 (0.017)	- -	0.002 (0.015)
Year dummy	NO	NO	YES	YES
Number of obs.	310	310	310	310

Note: Standard errors are in parentheses.

** Significant at 5%

* Significant at 10%

However, it is possible that what matters are the characteristic of the Laws as noted in the literature. That is, it is not the same to have a very weak law against acquiring debt than to have a very tough one. In order to consider this possibility, the dummy variable that represented the existence or not of the law was replaced by a variable that is the product of the dummy variable and the stringency index. The idea is to analyze the characteristics of

the laws and not only the mere existence of them. However, the results are the same as before: the coefficient of the variable representing the formal constraint presents a negative and statistically significant coefficient (but very small) with only fixed effects but not when we include year dummies (see Table 5). Again, the coefficients of the year dummies for 1995, 1996, 1997, and 1998 are negative and statistically different from zero.

Table 5. Results.

Dependent variable: Per capita fiscal deficit				
	(1)	(2)	(3)	(4)
GDP	0.984 (0.755)	1.105 (0.758)	0.683 (0.694)	0.758 (0.691)
Margination	-0.018 (0.021)	-0.013 (0.021)	-0.011 (0.019)	-0.013 (0.019)
Unemployment	-0.016* (0.008)	-0.001** (0.008)	0.0002 (0.011)	0.0004 (0.011)
Dummy debt*stringency index	-0.001** (0.000)	-0.067** (0.000)	0.017 (0.001)	0.031 (0.001)
Federal Transfers	-0.391** (0.145)	-0.373** (0.146)	-0.598** (0.174)	-0.538** (0.171)
Debt	-0.136** (0.065)	-0.148** (0.065)	-0.158** (0.062)	-0.172** (0.062)
PAN	- -	-0.094** (0.035)	- -	-0.064** (0.032)
PRD	- -	0.038 (0.052)	- -	0.003** (0.047)
Political Competition	- -	0.022 (0.020)	- -	0.058 (0.019)
Divided Government	- -	-0.016 (0.026)	- -	0.009 (0.023)
Year of Election	- -	-0.003 (0.017)	- -	0.002 (0.015)
Year dummy	NO	NO	YES	YES
Number of obs.	310	310	310	310

Note: Standard errors are in parentheses.

** Significant at 5%

* Significant at 10%

not because of them but because other factors more probably a self-imposed change in the governors behavior.

Instead of considering the index of stringency, I also estimate the model considering those states that their state public debt law present

specific limits to the debt and those that do not. It is possible that the most important characteristic of the laws is this. But again, the results (see Table 6) arrive to the same conclusion as before: there is no effect of the existence of specific debt limits on fiscal performance. In this case even in the model

without year dummies the coefficient of debt limits is not statistically different from zero.

With respect to other independent variables, the coefficient of GDP is positive but not statistically different from zero. The coefficient of the development index is negative however it is not

statistically significant. The sign of the coefficients are consistent with the ones found in Hernandez et al (2002). Unemployment is negative but not statistically significant without year dummies and positive and different from zero with year dummies. The positive coefficient is congruent with the fact that more unemployment produces

Table 6. Results.

Dependent variable: Per capita fiscal deficit				
	(1)	(2)	(3)	(4)
GDP	0.861 (0.765)	0,967 (0.766)	0.710 (0.694)	0.805 (0.690)
Margination	-0.013 (0.021)	-0.008 (0.022)	-0.009 (0.019)	-0.011 (0.019)
Unemployment	-0.013 (0.008)	-0.016* (0.008)	0.021** (0.011)	0.015 (0.011)
Debt Limits	-0.016 (0.033)	-0.014 (0.033)	0.026 (0.030)	0.037 (0.030)
Federal Transfers	-0.456** (0.146)	-0.425** (0.148)	-0.599** (0.174)	-0.538** (0.171)
Debt	-0.115* (0.065)	-0.129* (0.066)	-0.155** (0.062)	-0.170** (0.062)
PAN	- -	-0.098** (0.036)	- -	-0.065** (0.032)
PRD	- -	0.034 (0.053)	- -	-0.002 (0.047)
Political Competition	- -	0.018 (0.021)	- -	0.058** (0.019)
Divided Government	- -	-0.021 (0.026)	- -	0.010 (0.023)
Year of Election	- -	-0.002 (0.017)	- -	0.002 (0.015)
Year dummy	NO	NO	YES	YES
Number of obs.	310	310	310	310

Note: Standard errors are in parentheses.

** Significant at 5%

* Significant at 10%

less revenue to the states. The coefficients of federal transfers and debt are negative and statistically significant.

V. POLICY IMPLICATIONS

The results just presented suggest that legal constraints in Mexico are not doing their job. We need then to analyze why this might be so. It seems that some elements are missing in order for the debt laws to work properly and more important, it is clear that other mechanisms have to be established to prevent large fiscal deficits at the state level.

Following the American literature we know that some, not all type of legal constraints have an impact on the reduction of fiscal deficits. In the case of Mexico, state public debt laws seems not to be strong enough to really change the behavior of public officials. Other important element is this analysis is how enforceable are the laws. Poterba (1996) cited that reports from the General Accounting Office (GAO) in the US show there have never been any law-suits to challenge state budget outcomes. If this happens in the US, the situation is worse in a country like Mexico where the strength of the Judiciary system is very low and where the maturity of our political system at the state level is clearly not that of the American one.

Other problem for the debt laws to do their job has to do with accounting practices. Statistics of the states and municipalities in Mexico are relative new and in many cases we only have very aggregate data. Thus, without detailed statistics it is extremely easy for the governors to circumvent the laws as Ter- Minassian (1996) acknowledged.

In this sense and in order to avoid the problem of soft-budget constraints at the state level, it is important to work on two fronts. On one side, it is necessary to have more tough laws against acquiring debt and to produce more detailed information about the finances of the states so to make harder to circumvent them.

On the other side, it is necessary to look at the institutions that regulate the fiscal intergovernmental relationships in order to create more market discipline and to reduce the incentives for the federal government to bail-out the states. In this respect, this paper offers another proof that validates the proposal to increase the taxing capacities of the states in Mexico and at the same time to reduce the federal transfers so to significantly reduce the large vertical fiscal imbalances that exist in Mexico. Rodden, and Eskeland (2003) mentions that problems of large subnational debt is more common in countries with large federal transfers to the states.

VI. CONCLUSIONS

This paper studies the impact of state public debt laws on the fiscal performance of the states in Mexico. This type of institutions and their impact on fiscal performance have been fairly analyzed in the context of developed nations but up to my knowledge, there is little work on developing nations where problems of soft budget constraints at the regional and local level are more common and where reliance on market discipline is harder to achieve.

The paper exploits the fact that many states enacted state public debt laws during the period of analysis and that their characteristics are not equal. A panel data model with fixed effects was first estimated. In this case there is a positive impact of the Laws on the fiscal performance of the states. However, as most debt laws were enacted as a result of fiscal problems of the states in the 1990s, it is possible that many other elements, including a change in behavior of state public officials, were influencing the fiscal performance of the states. Thus, I also estimated the model including year dummies to control for these possible factors. In this case, the effect of the laws disappears. The results then suggest that the Laws are not serving in reducing or eliminating fiscal deficits at the state level.

VII. REFERENCES

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