



# Now for Public Debt in Mexico: Policy Lessons for the Effective Oversight of State and Municipal Government Finances

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While Mexico has a very low debt-to-GDP ratio that is slightly above forty percent, its state and municipal portion hovers around 2.5% (IMF, *World Economic Outlook Databases, 2012.*)<sup>2</sup>. Subnational governments have consistently been accused of taking on too much debt, allowing irresponsible repayment plans and consenting to outright political corruption. Especially since 2001, the first full year since the country revised its laws governing subnational borrowing rights, Mexico has experienced a significant rise in the indebtedness of its states and municipalities. During the past decade, total subnational debt went from \$990 pesos per capita in 2001 to \$3,450 pesos per capita in 2011 (ASF 2011). Although Mexico's overall subnational debt is still at reasonable levels compared to other countries, this nation's high vertical fiscal imbalances and de facto soft subnational budget constraints could continue to fuel observed trends unless national legislation governing the rights and responsibilities of subnational governments are made. One can argue that the pace of increasing debt has been constant, but it accelerated during the 2009 economic crisis when National GDP decreased substantially (around -6%). Actual proposals to harmonizing accounting standards among state and local governments, increase transparency and improve reporting requirements by the Mexican Ministry of Finance (*Secretaría de Hacienda y Crédito Público, SHCP*) are only a few steps towards improving fiscal policy at the local level. Reviewing policies to understand debt sources and improving bankruptcy laws to cope with moral hazard issues will help to maintain strong sustainable fiscal balances into the future.

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<sup>2</sup> For example, debt levels in Chile in 2009 were around 13% of GDP, while in Brazil it was around 48% of GDP (Carranza, Daude Melguizo 2011).

## I. INTRODUCTION

Mexican local governments have increasingly accessed both private capital markets as well as public sector lenders since reforms were made to Article 9 of the National Fiscal Coordination Law beginning in 1997. Mexico has 31 states, its Federal District, and 2,444+ municipalities that have the ability to contract debt from public and private sources.<sup>3</sup> Mexican states and municipalities enjoy soft budget constraints and thus access local capital markets fairly freely. This has resulted not only in an increase in state and municipal public debt loads, but also in growing quantities assumed. As a result, debt portfolios have increased exponentially in recent years. *This increase of the subnational debt is related to administrative, legal changes and partisan politics. The question remains as to what types of policies could help manage the local financial environment to create a more sustainable future.* While this growth in debt is substantial, it is not overwhelming, as some newspapers, academics and party officials often suggest. *Yet, managing national authorities' bankruptcy plans and improving funding sources will secure and improve the local funding environment for years to come.*

What's more, Mexican subnational governments now have four options to obtain debt: the commercial banks, the development bank, using trust funds, or bonds on the Mexican securities exchange. Because of the plethora of options, there has been a significant increase in subnational debt. The United States has developed certain controls and fiscal rules for its municipal debt market that Mexico could use as benchmarks to prevent or even decrease debt levels and increase the quality of its subnational loans.

This policy paper argues that alternative revenue sources are necessary for economic growth at the local level, but continued soft budget constraints and lax regulatory environments may also put Mexico's future into jeopardy. Lessons learned from the United States' state and municipal financing could provide valuable policy options for Mexico. This paper is organized as follows: First it presents data on the increase of subnational debt in Mexico, then it describes the Mexican system of local finances and explains the types of

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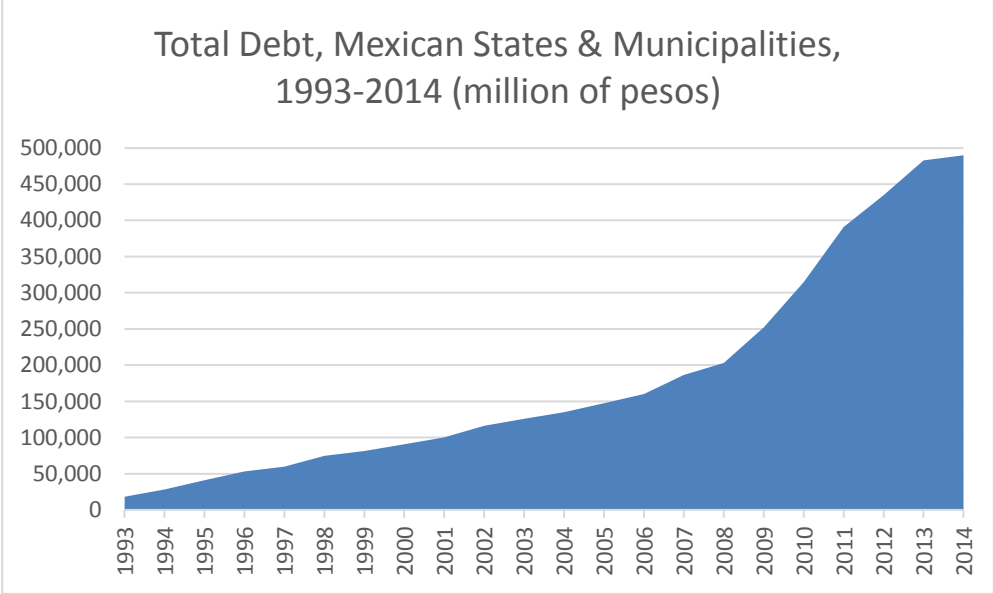
<sup>3</sup> The official count of municipalities may change annually because states have sovereign rights to determine their own districts and municipal governments.

municipal bond options available to local governments. In particular, the paper shows how the legal, administrative and political atmosphere has encouraged gross overspending at the subnational level. The next section describes the history of fiscal rules in the United States as a benchmark for Mexico. The final section provides lessons learned and policy recommendations for future public financial management considerations.

*The Increase of Municipal Debt in Mexico*

Figure 1 presents this explosion in subnational debt financing; Figure 2 presents its real growth in comparison to state level GDP. Whereas these figures are relatively reasonable for a developing country without improved state level fiscal rules, an enhanced regulatory environment or debt restrictions clauses such as Brazil’s Fiscal Responsibility Law, subnational debt could threaten macroeconomic growth and be detrimental to the intergovernmental fiscal relations of the country. This is particularly important for a country like Mexico which tax raising capacities, predominantly at the subnational level, are strikingly low.<sup>4</sup>

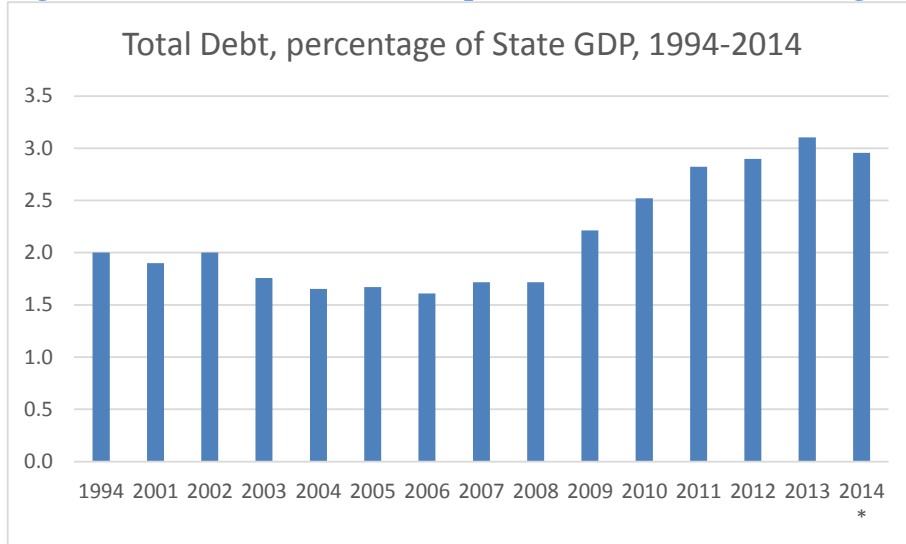
**Figure 1: Total Subnational Debt in Mexico (in Mexican pesos)**



Source: SHCP

<sup>4</sup> Notably, there are very large discrepancies in tax burdens across countries and within states (at the sub-national level). They range from the low burdens of countries endowed with non-renewable resources like Mexico and Venezuela (about 10 percent of GDP), to high levels in countries like Brazil (36 percent of GDP) (IDB 2013).

**Figure 2: Total State and Municipal Level Debt as a Percentage of State GDP**



Source: SHCP

### ***Soft Budget Constraint Problem***

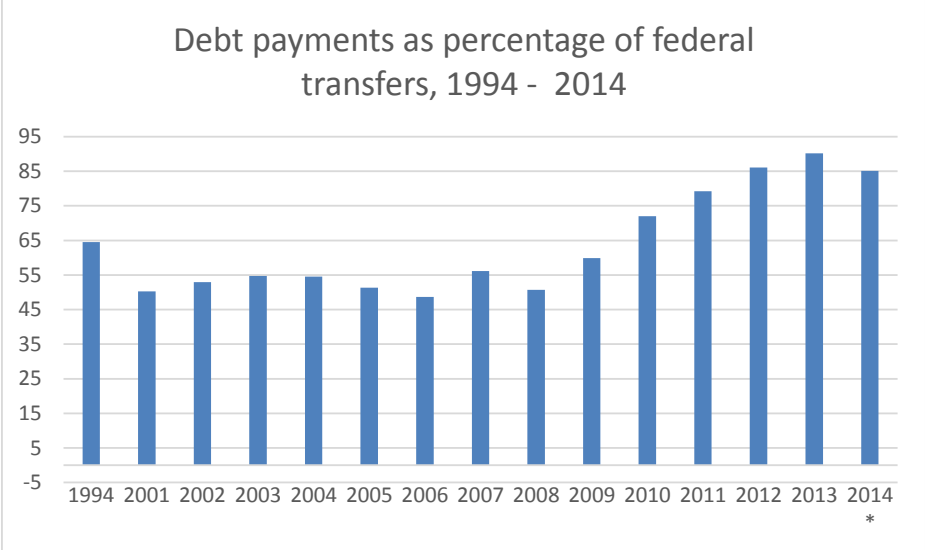
The reason for Mexico’s debt explosion is that state and municipal governments rely on intergovernmental transfers as their main income source. Fiscal relations are highly vertically imbalanced, where states and municipalities only collect a small portion of their revenues and depend on the federal government for the rest. The National Fiscal Coordination Law (*Ley de Coordinación Fiscal* or LCF) comes from the late 1990s when the federal government centralized tax rights and allowed subnational governments the right to collect only small fees and other minor taxes (*derechos, productos y aprovechamientos*). In general terms, states collect 7 percent of their own revenues, while 85 percent come from federal transfers, and 2 percent from “financing” (a euphemism for deficits). Similarly, municipal governments rely heavily on transfers with 69 percent, 22 percent collected locally and 6 percent as “financing,” and the remaining 3 percent from “other” sources (INFDM 2011; Benton and Smith 2013).<sup>5</sup> Scholars regularly note that state and municipal governments’ heavy reliance on federal fiscal transfers leads them to avoid

<sup>5</sup> See data from Mexico’s National Institute for Geographic and Informational Statistics (Instituto Nacional de Estadística Geografía e Informática (INEGI)).

collecting their own taxes (Cabrero and Carrera 2002; Giugale, Hernández Trillo, and Oliveira 2000; Sour 2008).

Figure 3 presents the debt payments as a percentage of transfers. The figure illustrates that there has been a substantial increase of reliance on transfers to pay for the local debt. Also it becomes clear that economic crises do have an effect on the internal debt market. Both in 1994 and 2009 were years of crisis for Mexico and as a result the debt increased the subsequent year.

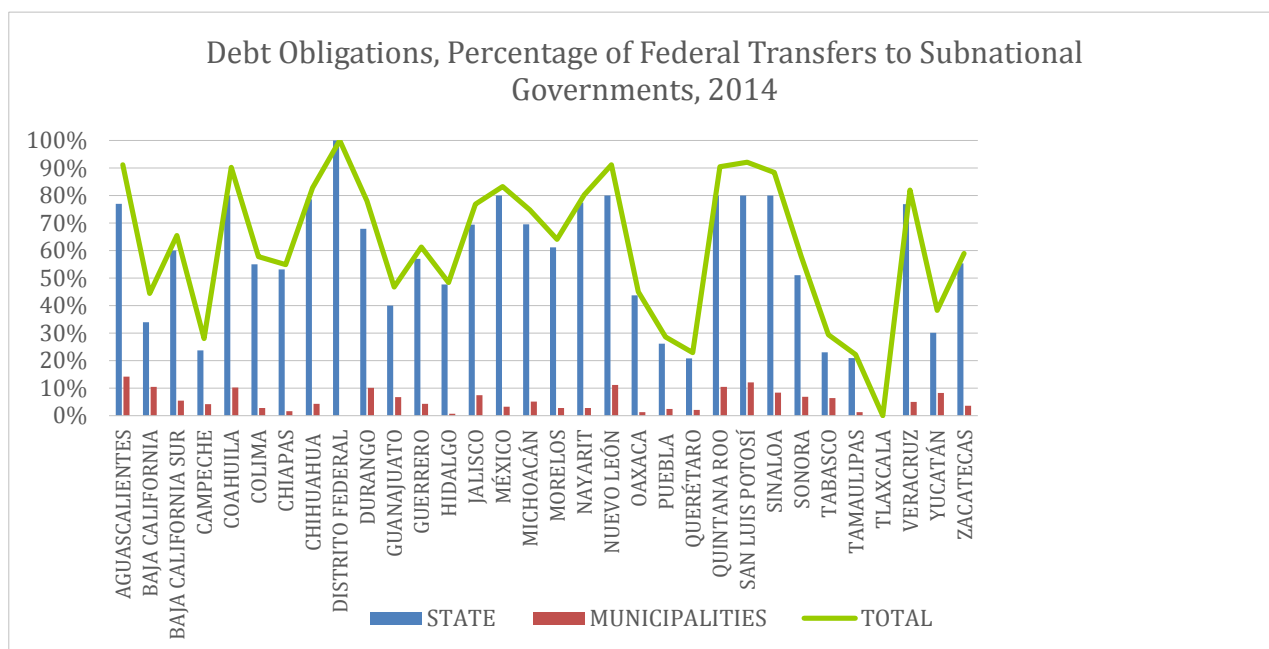
**Figure 3: Debt payment as percentage of federal transfers (1994-2014)**



Source: SHCP

Figure 4 shows the difference of debt payment as percentage of federal transfers between state and municipal governments in 2014. Notable is the variation between states for the amount of debt contracted. Each state has its own “political economy of debt” and not all states are fiscally irresponsible. Overall, states collect fewer local taxes than municipalities but are the main source of debt and fiscal risk for the federal government. This is because of the lack of fiscal rules at the state level to constrain the types and amounts of the loans local governments take out.

**Figure 4: Debt payment as percentage of federal transfers by State in 2014**



Source: SHCP

## II. SUBNATIONAL CAPITAL MARKETS ARCHETYPES

National governments can create subnational capital markets based on three management options: (a) financial market discipline; (b) strict case-by-case control by the federal government; and (c) explicit rules to manage subnational loans (Canuto and Liu 2010). While Mexico has used the classic market-based model to create its bond market, the Ministry of Finance (MOF), also known as the *Secretaría de Hacienda y Crédito Público*, *SHCP*, has managed the market by increasingly requiring more explicit rules.

Many scholars have stressed that relying on market forces is the best management model for subnational capital markets (Cernuschi and Platz 2006; Martell and Guess 2006; Leigland 1997). Such systems rely on financial markets to manage subnational access to capital, with creditworthiness of borrowers (subnational entities) and both private and public investors (which seek to invest in institutional funds) appetites for risk determining access to and total amounts of subnational debt assumed.<sup>6</sup> Under this system, rating

<sup>6</sup> An important tool for central government official to manage fiscal policy at the local governments is by using a rating system. Bond rating tools are used in market-based capital markets to determine the risk premium for repayment, evaluating the financial capacity of the local government based on such criteria as

agencies serve as a type of independent auditing system because they provide ex ante oversight and thus control over debt policy choices (the Bertelsmann Foundation 2012; Smith 2013). Both Canada and the United States use the market-based system.

The second model, direct administrative control, is based on the national treasury supervising all access of the capital markets by subnational governments. Typically, they act as the direct conduit to the international capital markets by incorporating subnational debt into a larger lump sum for the country to access. Then the national treasury distributes smaller sums to predetermined subnational governments to receive financing. This control model may use a loan council at the central level, as in the case of Australia, to determine which city or state may have access to loans. This is useful for enforcing the golden rule of financing, which states that loans must be used for productive measures. It also provides better terms for the loans for smaller countries.

The final model used by national governments to access the credit market is a rule-based system. The national treasury generally determines who can access the credit market by limiting the maximum borrow to debt service ratios, setting the maximum of total indebtedness by creating ceilings, or allowing a restricted bank's portfolio exposure to the public sector and enforcing reserve requirements, while passing and regulating bankruptcy laws at the national level. Brazil and Argentina, after their financial crises in the 1990s, have moved towards a rules-based approach in order to avoid subnational governments' taking out too much debt.

Mexico has developed a subnational debt framework that is a hybrid of the first and third options, and is one of the first countries to create such a system. Specifically, the current legislation in Mexico encourages private rating agencies to appraise local government budgets by evaluating their financial systems, operational activities, economic profiles and performance using criteria such as liquidity, debt, systems support, etc. Although not all municipal governments have a rating or can afford them, the four major rating entities in Mexico are Standard & Poor's, Moody's, Fitch, and HR Ratings, a local agency.

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economic, liquidity, debt, finances, systems support, etc.



The national treasury is also increasingly requiring local governments to report their debt loads to states or the federal government as a way to oversee the amounts of loans subnational are taking out and manage their debt limits and sub-national borrowing capacities. Yet, Mexico is also considering creating debt instruments that need to be managed by direct control, as in a rule-based system. While SHCP is beginning to create these rules, they are slow to be developed and enforced.

### **III. FOUR CATEGORIES OF LOANS IN MEXICO**

The Mexican debt system provides states and cities with several ways to take out public loans. Public officials can select higher or lower interest rates and longer or shorter terms for the services by using either public or private sector packages. All subnational public loans in Mexico are sub-sovereign subordinated debt, managed in local currency. The four categories municipal government can use to finance long-term credit include: the private commercial banks, national development bank, loans guaranteed by own-source revenues or based on future transfers, and bonds placed on the Mexican securities market. Often private commercial banks offer short-term credit at higher interest rates and shorter tenors. Short term is considered less than six months and long term is over a year. Therefore these short-term loans are generally incurred and paid in full within the same fiscal year. These loans are normally used for cash management or to pay for contingent liabilities such as for pensions (Revilla 2013).

While the private sector option is still relatively new, traditional public sector loans were historically issued by the National Bank of Public Works and Services (*Banco Nacional de Obras y Servicios Públicos, Banobras*). The national development bank was established in 1933 to finance public works and municipal governments. Banobras managed a loan portfolio of more than \$17 billion dollars in 2014 (Foreign Affairs, 2014). In general, Banobras provides loans to the lower income and less financially soluble municipalities. Like other investment opportunities, the type of loans a state selects is based more on its economic development and its appetite for risk. Banobras uses the national reserve to guarantee state and local government financing. Legally, municipalities may use loans to finance public works and other forms of economic development activities, thus allowing

the national government to implement more social programs for poverty reduction. States are prohibited from taking loans to fund re-occurring expenses, such as employee wages. These public sector loans are typically used to finance a wide variety of public services such as groundwater removal and sanitation, as well as municipal waste disposal, roads and traffic lights. Municipalities need independent audits and feasibility studies to evaluate the costs of economic development programs. With the best allocation of resources and increased local taxes, communities can make better decisions about how to use their municipal budgets.

The third and the most market-based option are Mexican securities, public debt placed on the national stock exchange. The bond market, like the trust fund model, encourages support and leverages institutional investors to finance necessary infrastructure in state and local government. Beginning in 1997, the Mexican Ministry of Finance reformed its financial markets to open its global access to buy and sell government securities. These reforms included improving regulatory bodies within financial systems through the creation of the National Banking and Securities Commission (CNBV), the National Financial Services (CNSF) and the National Savings System for Retirement (CONSAR), through the umbrella agency, the Federal Regulatory Improvement Commission (COFEMER). These regulatory bodies helped to create a solid foundation for Mexico's internal municipal bond market, which became operational in 2001. These structural considerations encouraged the use of credit ratings and structured finance to leverage retirement accounts (also known as *Administradoras de Fondos para el Retiro*, AFORES), which served as investors for financing infrastructure within states and municipalities. All state and local debt in Mexico is *sub sovereign*, meaning that the federal government is the payer of last resort (Torres and Zelter 1998). All loans must be made in local currency and be used for economic development projects. While there are only a handful of state and municipal bond issuers in Mexico City, there is now a system called CETES Direct that gives small investors the opportunity to buy government securities without intermediaries.

The CETES (Treasury Certificates) are government securities first issued in 1978 by the federal government (Heyman 1999). The certificate is generally sold through brokerage

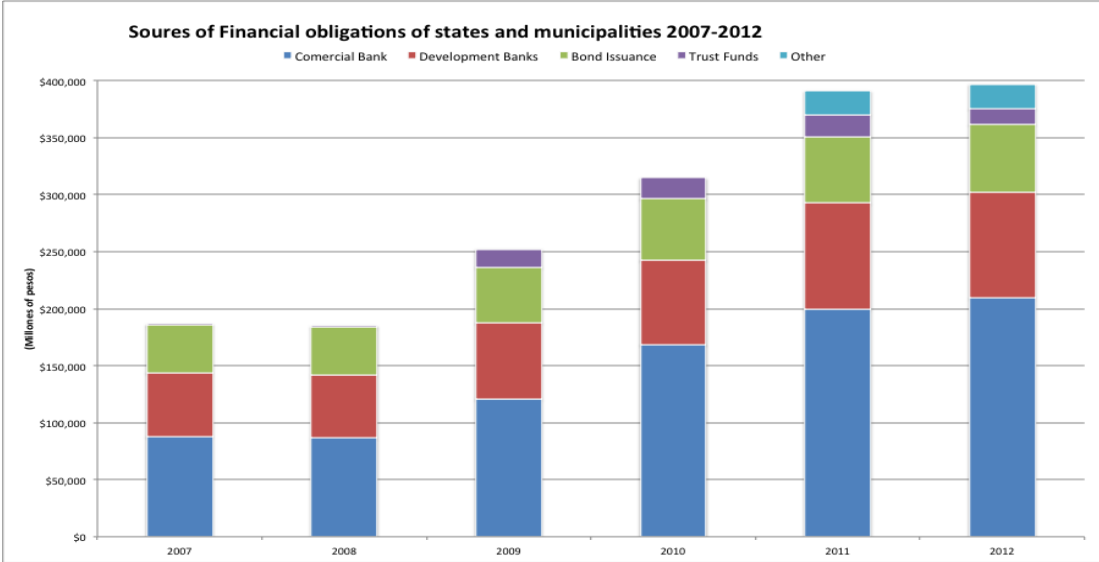
firms at a discount rate with the backing of the Bank of Mexico and the federal government serving as the final grantor. This instrument was issued in order to influence the regulation of the money supply, finance productive investment and promote the healthy development of the securities market. These financial mechanisms also helped develop the subnational bond market because it allowed individuals and corporations to invest in fixed assets, such as AFORES accounts and other institutional investments with government guarantees. These funds generally have steady but low rates of return. This instrument created, in effect, a trading mechanism for investors to buy and sell municipal bonds hosted on the Mexican securities market.

The Mexican hybrid model allowed for the fourth and final form of financing municipal markets, through trust funds (*fideicomisos*). These are special purpose vehicles (SPVs) that pay debtors directly, while leaving the remaining funds put in the national reserve. This is important because of the potential influx of foreign exchange, inflation or other macroeconomic factors that devalue the national accounts are left untouched and thus lowering the risk for international investors (Thau 2011). The trust allows loans to be guaranteed from various revenue sources: self-sourced from the locality, typically through user fees or pay-for-services, or from dedicated future transfers from the national government. Furthermore, these trusts can be placed and sold like Mexican securities on the national stock exchange.

Lastly, the trust fund model is the most contentious as it provides for the highest amount of centralization around the management and control of its usage, which is increasingly used by state level governments. Trust fund instruments dedicated funding streams from inter-governmental transfers. The majority of federal transfers made to state governments are earmarked (called “ramo 33”, making up about 85% of total state revenues), while another 7% fall into “ramo 28” which is entirely discretionary funding for state governments. Trust funds designate that future earmarked and unearmarked transfers be channeled directly into these accounts, from which debt service payments are made directly (INFDM 2011). This is attractive for private lenders considering loans to subnational entities because repayments are guaranteed. Trust funds can also be set up using future subnational own-source

revenues such as user fees for utilities or specific tax assignments for general obligation bonds. In this case, separate financial accounts are established through the trust and then payments are made directly to creditors. Figure 5 shows the types of debt used by state and municipalities.

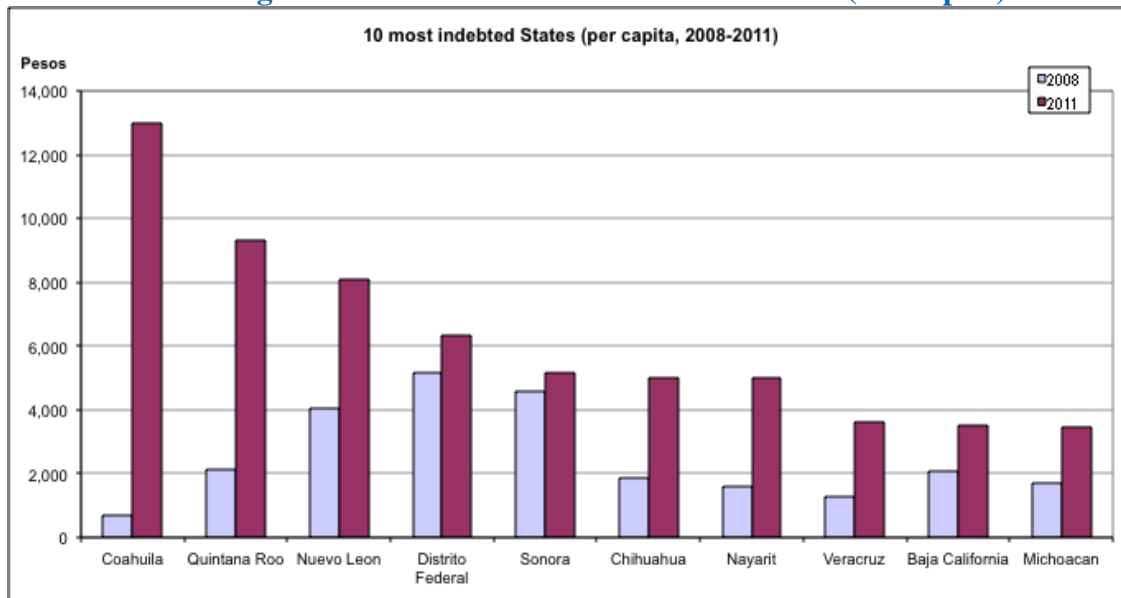
**Figure 5: Sources of Financial Obligations of States and Municipalities 2007-2012**



Source: SHCP

Among subnational entities, states are primarily responsible for large investment projects, so these governments tend to take out greater debt than municipalities. Capital investment is larger at the state than the local level, and therefore, often is used to determine the fiscal equations of each state. Even so, there is variation among states. Figure 6 shows the most indebted states in 2008-2011 (per capita) with Coahuila and Quintana Roo at outstandingly high levels of \$13,000 and \$9,000 pesos per person respectively (approximately \$850 and \$600 US dollars). Coahuila is known for taking out a series of short-term loans from several commercial banks to pay for political campaigns in 2011, thus later needing to refinance those loans into long-term debt with SHCP. Interestingly, states that were among those that defaulted in the 1990s and were bailed out by the national government in 1994—Nuevo León, Veracruz, Michoacán—are also some of the wealthier states and have recently accessed new loans.

**Figure 6: 10 Most Indebted States 2008-2011 (Per capita)**



Source: SHCP

Since public funds are mandated for investment projects and subnational governments need constant capital injection, the amount of debt contracted by the federal entity will always increase. Yet the question remains: who will pay for the remaining contingent liabilities that exist among state and local governments; will it become a problem for inter-generational equity, or making future generations pay for today's expenditures? Since states have nearly exceeded the total amount of transfers used for these trust funds, new regulations should be considered to ensure that these funds are used for productive measures.

Furthermore, many of these private sector loans have an accumulating effect, and frequently need to be restructured into long-term debt. As in the case of Coahuila, many short-term loans bypass the central government's registration process and are not accountable. The implication of this process has created unjust use of its public finances, typically wage bill or political campaigns, while obligating further future national transfers. In 2013, the federal government reformed the country's public finances in order to homogenize its accounting codes of all public entities, thus assisting to organize and categorize the types of debt the state and local governments are assuming. This action alone

has yet to provide certainty for how to deal with reckless subnational spending for future years.

### *Do Politics Play a Role?*

About the same time that the national government was implementing changes to fiscal and debt rules, the nation was undergoing democratization. During the 20<sup>th</sup> century, Mexican politics was dominated by the hegemonic Institutional Revolutionary Party (PRI). In 1997, however, the PRI lost its majority control in the national congress. In 2000, it was defeated by its longtime opposition and right-leaning National Action Party (PAN) in the presidential race. The PAN defeated the left-leaning PRI and the left-leaning Democratic Revolution Party (PRD), a PRI splinter party, in 2006. In 2012, the centrist PRI defeated both the PAN and the PRD in competitive presidential elections.

Several researchers are now investigating the effects of changing parties and partisanship ideology on the economy, public finances, and government as a whole. For example, Ibarra (2009) found that when political party alignment changes between state government and a municipal president during an election, spending and debt increase at the local and state levels. Benton and Smith (2013) argue that the nation's left-leaning subnational governments that are inclined toward greater spending assume not just greater public debt loads but also construct debt portfolios characterized by less cost-effective terms. In contrast, right-leaning subnational governments should do the reverse. Using a statistical analysis of the recent data on Mexican municipal debt, these authors find that no one party takes out more debt overall, but the results reveal the presence of expected partisan ideological effects on a particular kind of debt (development bank loans, commercial banks, trust funds or using the Mexican security market explained above).

## **IV. MEXICO IN A COMPARATIVE PERSPECTIVE**

In contrast to Mexico, the exceptional situation of the United States is that autonomous states create their own budget and fiscal rules that meet voter preferences. The defragmented institutional arrangement of the central government—without a central budget authority—allows states and local government managers to create independent rules

unique to each state's situation and tie them to different revenue sources. This robust system allows credit systems and market mechanisms to work independently from budget authorities. The success of the United States shows a limited federal control over state and local borrowing, debt, and finances (Chapter 9 bankruptcy) managing to have virtually no federal bailouts (Laubach 2005; Kincaid 2012). Effectively all states have some sort of balanced budget rules, whether they are statutory and constitutional; related to tax and expenditure limits; or some sort of local bankruptcy/fiscal distress provisions (Spiotto, Acker and Appleby 2012). State variations reflect individual policy decisions and fiscal behavior in the absence of federal bailouts. This is what Rodden (2006) suggests imposes fiscal discipline to the subnational credit markets.

Notably, financial experts suggest that fiscal rules are not automatic for ensuring adequate sub-national fiscal discipline (Ter-Minassian 1997). Fiscal rules are only effective if they are created in democratic systems with sound designs, a robust legal system, based on implementation tools that include firm enforcement mechanisms. Yet meeting all these prerequisites is far from insignificant and flaws can lead to profligate subnational spending. Thus the most important element of fiscal rules is how to constrain public managers from over-consuming the common pool either through off-budget expenditures, investments not tied to assets, or capital enhancements based on expired future revenue streams from the national government. This may happen in the context of public private partnerships, which is currently impending in the Mexican situation.

Historically, empirical evidence in the US for constraining the common pool resource problem of overreaching municipal debt was managed in the intergovernmental system by political constraints of voters. This has been done through balanced budget requirements, tax and expenditure restrictions (TELS) and debt limitations. Von Hagen's (1991) classic piece explained that the principal-agent of the voter-politician relationship resembles an "incomplete contract" allowing voters and citizens to constrain the electorate would lead to stronger institutions. Von Hagen (1991) found that the effectiveness of fiscal rules is limited at best, because politicians are likely to find ways to circumvent them, such as governor's veto powers.

International comparative research has evaluated the effectiveness of fiscal rules for federalist or unitary countries and found they work better in the former not the latter (Ter-Minassian, 1997). Also empirical evidence tests the validity of some theoretical considerations developed through economic modeling. For example, Poterba (1994) and Alt and Lowry (1994) find that states with harder balanced-budget rules react more promptly to revenue or spending shocks. Poterba (1994) and von Hagen (1991) find that state budget rules affect the level and composition of state debts. But Bails and Tieslau (2000) suggest there is a conflict in the political science literature between “public choice” and “institutional irrelevance” view for the relevance of state budget institutions. Furthermore, *endogeneity* issues are tussled throughout this body of empirical literature. The chicken and the egg is whether rules need to be created before institutions or whether strong institutions are needed to create better rules. Finally, other researchers test data to ensure that adequate sub-national fiscal discipline can help prevent sub-national debt crisis. In effect all research seeks to find the appropriate rules to ensure that core design of inter-governmental fiscal arrangements is sustainable and collaborative.

### *Capital Markets and Bankruptcy in the United States*

Capital markets in the United States have grown by exponential rates that are based not on fiscal rules, but on their market mechanisms (ACIR 1987). There is considerable theoretical interest in describing how rational lenders may respond to imperfect information by rationing credit to borrowers (Bayoum, Goldstein and Woglom 1995). Much of this literature identifies credit constraints with a market failure or describes how credit ratings happen outside of formal governmental-institutions.

Recently, however, it has been argued that default credit constraints can play a more positive role in disciplining irresponsible, sovereign borrowers (Bayoumi, Goldstein and Woglom 1995). This more optimistic view, called the market discipline hypothesis, has helped define the debate on the most effective way to restrain subnational governments. An important aspect of the market discipline hypothesis is an assumed nonlinear relationship between yields and debt variables. Advocates of market discipline assume that yields will rise smoothly at an increasing rate with the level of borrowing, thereby providing the



borrower with an incentive to restrain excessive borrowing. If these incentives, however, prove ineffective, the credit markets will eventually respond by denying the irresponsible borrower further access to credit, and the irresponsible borrower will be constrained through bankruptcy proceedings.

Yet, bankruptcy is not a solution to every debt problem. Levitin (2012) argues that states' fiscal problems are generally a structural-political problem that bankruptcy cannot be expected to fix. Accordingly, bankruptcy makes sense only as a political tool, rather than a financial-legal restructuring tool. Bankruptcy is equipped to accomplish political restructuring. However, it is not a forum in which fiscal federalism can be renegotiated. On the contrary, this is the fiscal space that is most consumed and harmful to the overall economy where the common pool of intergovernmental relations is problematic if not managed effectively.

As a result, very few cities in the United States have declared bankruptcy within and around the time of a financial crisis. Also, this is why the federal government has almost never bailed out local or state governments. While Chapter 9 has been around for many years, some cities (Detroit, New York and now Atlantic City) have had to be bailed out by state governments. Still others have filed for bankruptcy not for taking out too many loans, but as a way to re-negotiate their financial contract with the city public employees and payments to their pension systems (for example Vallejo and San Jose in California). These actions were rational and had little to do with the inter-governmental fiscal balance of the federal government but were more likely to be based on market mechanism.

Finally, the most recent empirical efforts describe how clarity within the rule-making process helps eliminate information asymmetries and allows for market mechanisms to operate at the subnational level (Kelemen and Teo 2014). These authors cite literature that judiciary enforcement mechanisms (i.e. bankruptcy) in the United States and European Union have not meant strong more robust capital markets. Instead, they argue that clarity in fiscal rules is a more effective way of strengthening capital markets. These authors cite Goldstein and Woglom (1992), Bayoumi, Goldstein and Woglom (1995), Poterba and

Ruben (1997) and Lawry and Alt (2001) who suggest that bond markets, rather than courts, are more of a deterrent for violations to instill fiscal discipline and punish those who violate fiscal rules. For them, the clarity of rules includes a 1 to 5 measure if a state or local government has the following: 1) budget reported on the General Accepted Accounting Principles; 2) frequency of its budget annual cycle; 3) if the legislature is prohibited from passing open ended appropriations and 4) whether the budget is required to publish performance measures. These elements provide clarity in the budget and the budget process.

Therefore, for Levitin (2012) those authors that argue developing countries must have strong institutions and a robust rule of law with capacity for sanctions in order to have robust capital markets, may be wrong (Velasco 1999; von Hagen 1991). Punitive sanctions for illegal financial transactions by public managers that are difficult to identify, manage and enforce within ever-evolving penal codes may not be imperative. Within these emerging institutional environments, public managers should abide by the institutional rules such as standardized accounting measures, regular auditing procedures with internal/and external control that minimize political influences in order to obtain a high quality rating and cheaper credit. Furthermore, public managers must be knowledgeable about debt financing mechanisms and options within their local markets, like the four types described here for Mexico, when selecting the types of public loans best to serve the public. Finally, public managers need to understand that loans are based on better terms and solid tangible assets, or fees-based structure to be able to pay back their loans within a reasonable time period. Own-source revenues, for example local tax collection efforts or fee-based structures for services, made to payback local loans are fundamental for internal bond markets to be operational.

## **V. LESSONS LEARNED**

Mexico's nascent debt market provides valuable lessons for technical assistance programs for other countries. Mexico's hybrid public debt system creates an institutional structure that could be replicated in other parts of the world.

The first lesson relates to the structure of the debt market. Developing countries need not take a strictly market based approach to subnational debt. One of the most valuable lessons from Mexico is that the federal management of subnational finances is essential for the macroeconomic stability for the country. Educating sub-sovereigns on creditworthiness and strict market-based approaches is helpful, but should not be the only requirement to create good subnational financial systems. The trust fund model established in Mexico provides guarantees to strengthen the local market while also helping the national government manage subnational entitlements. Furthermore, the diversification of funding sources in the Mexican model ensures a robust package of credit options available to local governments.

But at the same time, the institutional framework that the central government established in Mexico must be managed with a strict regulatory framework and harder budget constraints. Mexico is a good case because the institutional framework allows subnational governments to take out loans using the trust funds and guaranteeing obligations by transfers but they also created a market-based approach with securities. However, the country still needs to develop subnational rules, such as debt limits from private sources, in a fiscal responsibility law. This will help manage issues of moral hazard.

However, the application of a similar model in other countries should bear in mind two negative effects seen in Mexico: 1) city governments do not develop their own capital investment plans, and 2) there are few incentives for local governments to generate own-source revenue to pay for local debt. In general, sectoral plans for water, sanitation, transit and energy production are managed at the state level via the federal ministries. State governments are the subnational unit with the highest amounts of debt. Cities and metropolitan regional areas depend on a large portion of their budgets from states and the federal government as local property tax collection has been minimal across Mexico. Even though there have been expenditure decentralization efforts underway for the past 30 years, the equivalent of local revenue collections have not followed suit. Therefore, the ability to manage local revenue has not been addressed at the city or metropolitan level, but rather by state and federal government officials.

The biggest problem for Mexican metropolitan areas is not only about learning how to take out public debt, but also to establish good urban planning and focusing on developing feasible projects. Cities need to take a regional/metropolitan city approach to determining set priorities. Furthermore, financial management and professionalization of the public administration in general need to be strengthened. Many advances have come from the strong city manager ruling over the council administrative units instead of the strong mayor type of government. But recent changes in electoral laws will now encourage the re-election of mayors. This may change the type of strong mayoral leadership, which in the past has led to higher dependencies on state and federal leaders for financial and administrative support. This, along with the governance approach of approvals of the loans with the city council and the mayor's relationship to the state and national government, are also important.

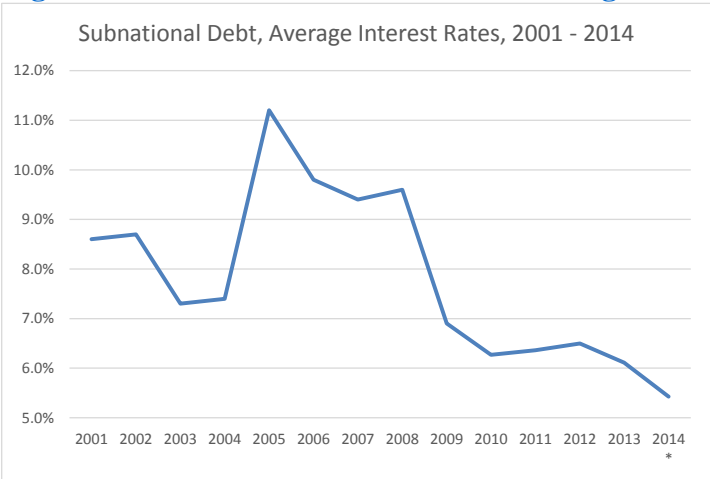
The final lesson is that markets do not reach poor or smaller cities so there are thresholds for the market-based approach. Not all projects are bankable to the private sector and therefore need development assistance or public sector support through development banks to help cities finance a project or provide the guarantees. Umbrella programs, which bring small communities debt needs under the discretion of the state government to take a larger loan in order to access better interest rates, may be used. For example, Michoacán's plan has used this model to reach capital markets and improve poorer communities. On the other hand, cities and metropolitan regions that are credit worthy should be encouraged to take private sector options, over using the development banks, with better rates in order to allow state grantees to reach lower income communities.

## **VI. POLICY RECOMMENDATIONS**

Mexico, unlike other countries in the region, does not have a “current subnational debt problem,” but the exponentially rising amounts of subnational debt is further confounded by the country's lack of proper revenue capacity and its highly oil dependent economy. Oil revenue affects states and municipalities since the oil rents provide a third of all federal government's revenues. Once the prices of oil are low, the Mexican federal government has fewer resources to allocate for local governments. They will not hedge resources to lower

level governments when the federal government must also accomplish policy goals. Rather at that time, interest rates become lower as shown in figure 7, which further increases the incentives for subnational governments to expand their levels of indebtedness to finance basic services. This escalation can fuel more debt obligations if it's not under control.

**Figure 7: Average Interest Rates of Subnational Debt obligations 2001-2014**



Source: SHCP

Therefore, there are **six areas** where government action stands out.

- **First**, secure payment structures and financing for current debt obligations. Calculate cash flow needs for the next few years as if expenditures were inaccessible. Also renegotiate loans with lower interest rates today, which is smart debt management in the long run. Making local government public financial management secure today will help the larger economy in the long run.
- **Second**, prioritize public investment plans and help subnational governments to decide which projects need more time, could be proposed or outright cancelled to meet current debt obligations.
- **Third**, evaluation of social programs and safety nets. Temporary suspension of programs may be an option for now. There are high political costs for ending safety net programs such as employment training, feeding children in schools, or paying direct cash transfers. By using baseline assessments and

balance scorecards, budget analysis can forecast future needs of low-income and disadvantaged populations.

- **Fourth**, encourage state governments to set up fiscal rules. These can be either built on optimistic projections of balanced budget requirements, limits to taxes and public spending, or pledges to make financial data public that is readable and easily downloaded for local consumption.
- **Fifth**, create incentives for local and state tax collection efforts. Own source revenues provide the most effective way for voter preferences to be met, especially by consumers evaluating how their money is spent in the public sphere.
- **Lastly**, set up and enforceable bankruptcy laws that provide contingency planning for over indebted state and local governments. Future risky loans by subnational actors are emanate, but manageable if the proper frameworks are in place that federal authority may use to re-negotiate debt packages in a timely fashion.

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