Fiscal Affairs Department

Ambrogio Lorenzetti; The Effects of Good Government on the City Life; Fresco; Palazzo Pubblico, Siena (Italy)

International Experience with Sub-national Fiscal Crises

Presentation by Teresa Ter-Minassian and
Carlos Mulas-Granados

At the II IMF-FGV International Seminar on Fiscal Policy

Rio de Janeiro, 28 April 2016

Plan of Presentation

I. Some stylized facts on the occurrence of sub-national (SN) fiscal crises

II. Possible causes of the crises

III. Costs of the crises

IV. Resolution mechanisms

V. Improving crisis prevention and resolution mechanisms

I. Some stylized facts

What are SN fiscal crises?

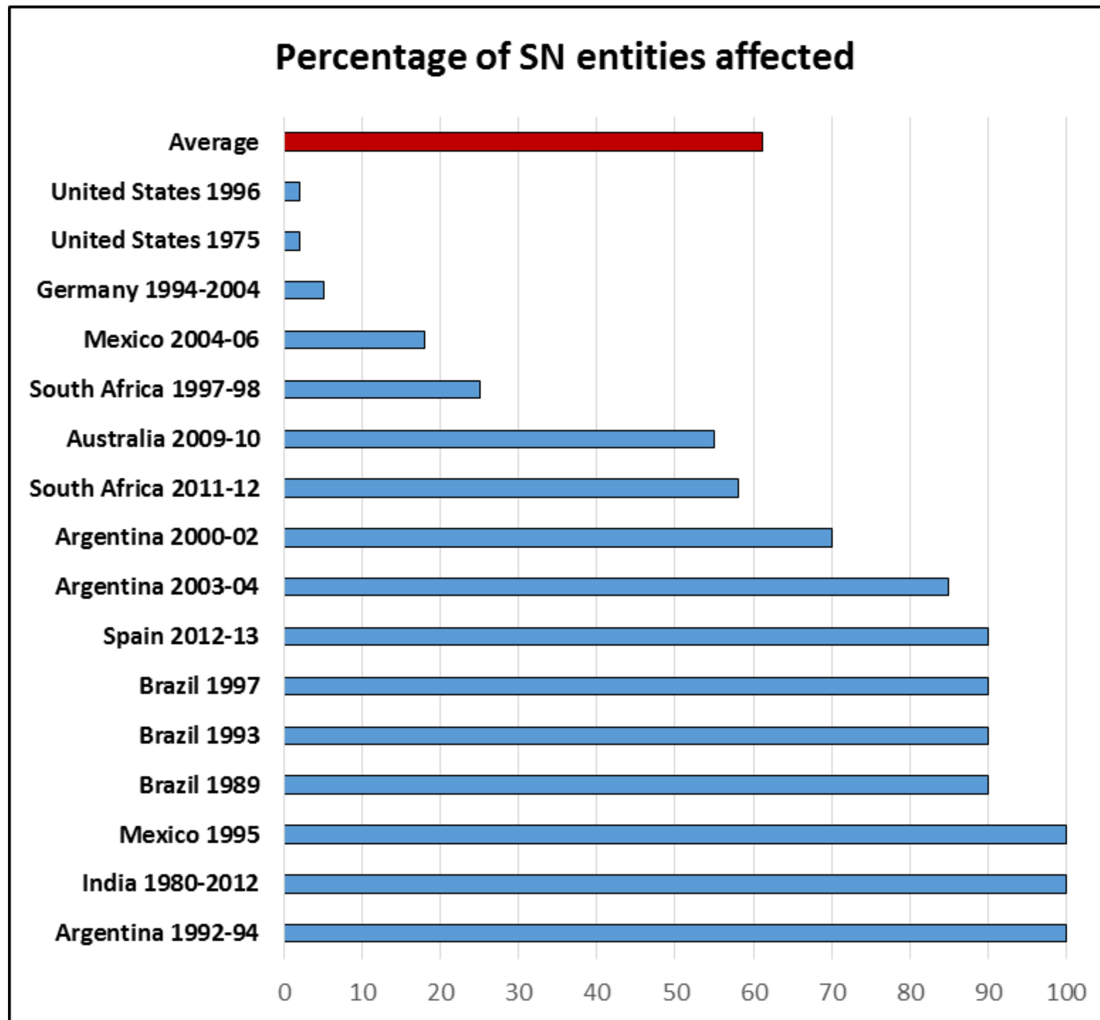
- SN fiscal crises are defined here as situations in which acute financing difficulties force one or more sub-national governments (SNGs) to default or be bailed out by the central government (CG)
- A recent FAD study has identified and analyzed 16 such crises in the last few decades
- This presentation utilizes the data base assembled for that study (summarized in tabular form in the Annex)

How common are SN fiscal crises?

- SN fiscal crises have been more common in emerging markets, but have occurred also in advanced economies
- The FAD study analyzed four waves of such crises in Argentina, three in Brazil, two in Mexico, two in South Africa, and various in India; but also some in the United States, Germany, Spain and Australia
- Other examples are fiscal crises of Russian states in 1998-99, and of Chinese provinces in more recent years. Moreover, many countries at different levels of development have experienced debt crises at the municipal level
- These crises varied significantly as regards their causes, the extent of their costs, and the nature and conditionality of the resolution mechanism adopted

How common are SN fiscal crises?

- **During SN fiscal crises, most subnational entities are affected**



Source: Cordes and others (2016)

How common are SN fiscal crises?

SN fiscal crises are typically correlated with realization of other Contingent Liabilities

	Financial	Private non-financial	SOE	Subnational	Legal	PPP
Financial	1					
Private non-financial	0.0032	1				
	(0.8843)					
SOE	0.0760*	-0.012	1			
	(0.0006)	(0.5903)				
Subnational	0.0634*	-0.0086	0.1117*	1		
	(0.0043)	(0.6989)	(0)			
Legal	0.0005	-0.0137	0.1796*	0.0527*	1	
	(0.9808)	(0.537)	(0)	(0.0177)		
PPP	0.1643*	-0.0068	0.1220*	0.2178*	-0.021	1
	(0)	(0.7584)	(0)	(0)	(0.3442)	

P-values in paranthesis. * indicates signficiance at 5 percent level.

Source: Bova and others (2016)

FAD

II. Potential Roots of SN Fiscal Crises

Exogenous shocks and spillovers from CG actions

- **Exogenous shocks:**

  - **Global or national recessions** (Australia, Spain)
  - **Terms of trade shocks**, especially for SNGs dependent on natural resource revenues
  - **Severe natural disasters** (earthquakes, hurricanes, floods, droughts, etc.) entailing large fiscal costs for one or more SNGs

- **Adverse spillovers from CG actions:**

  - **A prolonged accumulation of national fiscal or external imbalances**, ultimately leading to debt unsustainability and crises (examples of Argentina, Russia, Mexico)
  - **Pro-cyclical national fiscal policies** that aggravate recessionary or inflationary pressures, thereby putting pressure on SN finances
  - **Large uncompensated cuts in shared taxes**
  - Too generous **increases in civil servants' wages and benefits** that create demonstration effects for sub-national employees
  - **Certain changes in incomes (e.g. in the minimum wage), administered prices (e.g. energy or utility price caps), or regulatory policies**

SN soft budget constraints and their possible causes

- **Serious flaws of the inter-governmental fiscal system, leading to the emergence of sub-national soft budget constraints (SBCs):**

  - Unclear spending responsibilities
  - Unfunded spending mandates (Russia, China)
  - Lack of significant sub-national revenue autonomy (Spain, Argentina, Mexico, South Africa)
  - Heavy reliance on discretionary transfers (Argentina, India)
  - Serious weaknesses in SNGs' capacity to manage their budgets
  - Lack of transparency and homogeneity in SN fiscal accounting and reporting (most countries)
  - Ineffective systems of control of SN borrowing

Ineffective systems of control of SN borrowing (I)

- **Reliance on market discipline when pre-conditions for its effectiveness are lacking**
  - Prior history of CG bailouts of SNGs in financial difficulties
  - Privileged access of SNGs to banks or other sources of credit
  - Lack of transparency of SN accounts
  - SN politicians unresponsive to market signals
- **Discretionary mechanisms (negotiated agreements and administrative controls) that open scope for political bargains and moral hazard**
  - Likely expectations by SNGs and markets of a more accommodating CG's attitude towards jurisdictions politically aligned with the ruling party or coalition
  - Difficulty for a CG to refuse bailouts to a SNG experiencing debt servicing difficulties, if it (or a previous government) had authorized a significant portion of that debt

Ineffective systems of control of SN borrowing (II)

- **The demanding pre-conditions for effective reliance on market discipline and the weaknesses of negotiated arrangements explain the growing popularity of fiscal rules to constrain SN borrowing**

- **The vast majority of countries worldwide now have one or more SN fiscal rule. The most popular combination includes the budget balance and the gross debt, but SN expenditure rules also on the rise**

- **However, fiscal rules are no magic bullet for ensuring adequate SN fiscal discipline. Their effectiveness depends on:**
  - The extent of their political and social support
  - The robustness of their legal basis
  - The soundness of their design, including the inclusion of appropriate flexibility mechanisms over the cycle and under exceptional circumstances (escape clauses)
  - The state of the SN public financial management (PFM) systems; and
  - The firmness of their enforcement (sanctions and correction provisions)

Examples of SN fiscal rules

SNG	Budget balance rules	Borrowing constraints	Expenditure limits
Australia states	X	X	
Australia local		X	
Belgium states	X		
Belgium local	X	X	
Brazil states		X	X
Brazil local		X	X
Canada provinces	X		
Canada local	X	X	
Chile		X	
Czech Republic	X		
Denmark	X	X	X
Germany states	X	X	
Germany local	X	X	
Italy regions		X	X
Italy local	X	X	
Korea	X	X	X
Mexico states		X	
Mexico local		X	
New Zealand	X	X	X
Poland	X	X	
Spain states	X	X	X
Spain local	X	X	X
Sweden	X	X	
Switzerland cantons	X		
Switzerland local	X		
Turkey		X	X

Empirical evidence on the causes of SN SBCs and the effectiveness of SN rules

- Significant empirical evidence has been found in the literature that large vertical imbalances, resulting from limited tax autonomy and related transfer dependence, have negative effects on SN fiscal balances

- Some studies have also found empirical evidence that discretionary inter-governmental transfers soften the SN budget constraint

- Empirical evidence to date on the effectiveness of SN fiscal rules is relatively weak. Recent studies by the EC, the OECD and the IMF, using specifically-constructed composite indicators of the strength of sub-national fiscal rules, have yielded mixed results. Some have found debt-based rules to be more effective than balance-based ones

- Several studies have highlighted the fact that rules targeting the unadjusted fiscal balance can promote pro-cyclicality of the SN finances

II. The costs of SN fiscal crises

How costly can SN fiscal crises be?

- **SN fiscal crises typically entail serious consequences:**
  - **Social costs**, namely more or less severe disruptions of the provision of public goods and services for the population of the SNG in crisis
  - **Adverse financial spillovers** on other SNGs, and possibly the whole nation, as increased market perception of financing risks leads to rising borrowing costs, and in some cases, propagation of debt rollover difficulties
  - **Possible adverse political spillovers** for other SNGs (or even the CG) politically aligned with the jurisdiction in crisis
- **The threat of such consequences has frequently led to bailouts by higher-level governments**
- There is debate in the literature on **whether the size of the SNG in crisis matters in the resolution of the crisis** (too big to fail, or too small to fail?), but the empirical evidence is not conclusive on this issue

How costly can SN fiscal crises be?

FAD

Fiscal costs of subnational bailouts are large (around 4% of GDP)

Table 1. Average Fiscal Cost of Contingent Liability Realizations

Type of Contingent Liabilities	Number of Episodes	Number of Episodes with Identified Fiscal Costs	Avg. Fiscal Costs (% GDP)	Maximum Fiscal Costs (% of GDP)
Financial Sector	91	82	9.7	56.8
Legal	9	9	7.9	15.3
Subnational Government	13	9	3.7	12.0
SOEs	32	31	3.0	15.1
Natural Disaster(s)	65	29	1.6	6.0
Private Non-Financial Sector	7	6	1.7	4.5
PPPs	8	5	1.2	2.0
Other	5	3	1.4	2.5
Total	**230**	**174**	**6.1**	**56.8**

Source: Bova and others (2016)

IV. Crisis Resolution Mechanisms

Resolutions without bailouts

- Because of the above-mentioned political economy pressures**, there are relatively few cases of resolution of SN fiscal crises without intervention by the CG**
- **The main examples are crises in the US states (after the mid 1800's) and in the Canadian provinces**, which have been resolved through fiscal adjustment of the SNG in question
- **Also relatively rare are restructurings/defaults of state debts owed to the private sector (bail-ins) without CG support.** These have tended to occur mainly in cases when the CG was also facing acute financing constraints (e.g. in Mexico in the mid-1990s, and in Argentina in the early 2000's**)**
- **Debt restructurings have been more common at the local level**
- A number of countries (US, South Africa, Hungary, Mexico) have adopted **legal frameworks for an orderly resolution of SN debt crises, primarily local ones**. However, experience with their practical application is still quite limited

SN insolvency frameworks

- **Benefits**
  - Reduce disruption of provision of public services and attendant political pressures for bailouts
  - Facilitate orderly workouts, minimizing holdout problems
  - May help prevent both SNGs' and lenders' expectations of bailouts
- **Design of insolvency frameworks should**:
  - Balance the protection of creditor rights with that of core functions of SNG involved
  - Entail significant political costs for leaders of defaulting jurisdiction, to minimize moral hazard
- **Design of insolvency frameworks requires definition of many complex issues, including**:
  - Triggering procedures
  - Role of the judiciary
  - Creditors' majority required to bail-in holdouts
  - Conditionality
  - Order of priority of claims
- **Design must take into account, among other things:**
  - Relevant characteristics of a country's **legal system**
  - The state of the **judicial system**
  - The **size and capacity of the jurisdiction involved**

SN bailouts by the CG

- **CG bailouts of SNGs in crisis have historically taken a number of different forms**
  - **Federal guarantees of SN borrowing**, to facilitate retention of, or return to, market access by the SNG in crisis. In Australia, such guarantees were instrumental in allowing states to maintain market access, and were not called upon. In Argentina and India, they proved insufficient to provide lasting relief
  - **Indirect financing through the Central Bank and/or public banks.** Examples in India and Brazil
  - **CG loans at below-market interest rates.** Examples in the US (New York City, 1975, and the District of Columbia, 1996) and Spain (2012)
  - **Assumption or restructuring by the CG of SN debt** (Argentina, Brazil, India, and more recently Spain)
  - **Ad-hoc, gap filling CG transfers.** Many examples, including in Argentina, Mexico and Germany (to Saarland and Bremen)

Fiscal costs of the bailouts

- **Different types of bailout have different fiscal costs**
  - **Guarantees create potentially large contingent liabilities,** and therefore should be disclosed, and provision should be made in the budget for their expected cost
  - **Loans are in principle less costly than outright transfers,** but in practice may not be significantly so, if they are not fully repaid
  - In addition to the direct cost of the transfer or subsidized loan, there may be an **indirect cost, if the bailout causes an increase in the sovereign spread**
  - **The actual fiscal costs of bailouts have varied widely.** See Annex for details in individual country cases

Bailout conditionality (I)

- **Most bailouts have included some conditionality, but with different content, severity, and effectiveness**

- **Policy conditionality has included:**
  - **Short-term fiscal adjustment measures** aimed at reducing the SNG's fiscal deficit, e.g. expenditure ceilings, hiring freezes, limits on SN wage or pension increases, increases in sub-national taxes or user fees
  - **Strict limits on, or outright prohibition of, further borrowing**
  - **Sales of SN assets, privatization of SN enterprises or banks**
  - **Structural fiscal reforms**, including adoption of SN fiscal responsibility laws, improvements in fiscal management and transparency, reforms of pension systems for SN civil servants

- **In a few cases (**e.g. the bailouts of NYC and the DoC, and of some South African provinces**), the bailed-out governments have had to relinquish for a time fiscal autonomy to a CG-appointed control Board**

Bailout conditionality (II)

- **Sanctions for non-compliance have included:**
  - Financial penalties, such as increases in loan rates and withholding of CG transfers
  - Administrative penalties for non-complying sub-national officials
- **Both types of sanctions have not always been applied in a timely and non-discretionary manner**
- **The effectiveness of conditionality has depended crucially on:**
  - The appropriateness of the measures required up-front, in light of the roots and gravity of the SN crisis
  - The extent to which the bailout ensured the adoption of longer-lasting structural fiscal reforms
  - The CG's capacity to effectively monitor the evolution of the SNG's finances after the bailout, and to require further corrective measures when needed

V. Improving Prevention and Resolution Mechanisms

Improving crisis prevention mechanisms (I)

- There is no one-size-fits-all prescription to strengthen SN fiscal crisis prevention

- The strategy has to be designed taking into account the specific potential root causes of SN fiscal crises in each country

- Depending on the country's circumstances, the strategy may include a number of the following policies and reforms:

Improving crisis prevention mechanisms (II)

- **Steps to reduce the vulnerability of SN finances to exogenous shocks**, e.g. requiring the creation of SN stabilization or rainy day funds, or the purchase of insurance against natural disasters

- **Creating or strengthening intergovernmental cooperation fora,** to promote dialogue among and within levels of government, increasing awareness of adverse spillovers from unilateral actions by any of the participants

- **Strengthening SN public financial management systems, and increasing the transparency of SN fiscal accounts,** to facilitate timely monitoring, and corrective actions when needed

Improving crisis prevention mechanisms (III)

- Increasing clarity of and accountability for SN spending responsibilities and ensuring their adequate funding at an appropriate level of efficiency
- Reducing SNGs' dependence on CG transfers, by assigning them appropriate sources of own revenues
- Making most intergovernmental transfers formula-based
- Reducing the obstacles to effective market discipline mentioned above
- Improving the design of sub-national fiscal rules and enforcing them in a firm and non-discriminatory way
- Encouraging SNGs to adopt own FRLs, compatible with the national FRL, and to develop appropriate MT fiscal frameworks

Improving crisis resolution mechanisms

- Considering the adoption of well-designed standing frameworks for an orderly resolution of SN fiscal crises
- Conditioning bailouts to the adoption by the SNG in crisis of both appropriate short-term adjustment measures and necessary structural fiscal and governance reforms
- Penalizing, to the extent allowed by law, SN officials with a proven record of financial mismanagement responsible for the crisis
- Tranching bailout disbursements whenever possible
- Ensuring that compliance with the bailout conditions is monitored on a timely basis, and that sanctions for non compliance are automatically enforced

FAD

Thank you!

ANNEX – Case studies of SN fiscal crises (Cordes and others, 2014)

Country	*States involved*	*Year*	*Trigger*	*Financing Situation*	*Resolution*	*Fiscal Costs to the Center*	*Conditionality*
Argentina	Almost all	1992–1994	Convertibility plan leads to more stringent financing conditions	Median deficit to revenues of 10 percent, with a maximum of close to 60 percent.	Federal loans, direct transfers	Loans of close to US$750 million	Yes, but not enforced
Argentina	Buenos Aires, Chaco, Formosa, Mendoza, Misiones, Rio Negro, San Juan, Santiago del Estero, and also the city of Buenos Aires (65 percent of GDP)	2001–2002	End of convertibility regime	Average overall cash deficits of 2.5 percent of national GDP.	Debt restructuring		No
Argentina	Buenos Aires, Catamarca, Cordoba, Corrientes, Chaco, Chubut, Formosa, Jujuy, La Rioja, Mendoza, Misiones, Neuquén, Rio Negro, Salta, San Juan, Santa Cruz, Tucuman, and Tierra del Fuego (90 percent of GDP)	2003–2004	End of convertibility regime	Debt to national GDP of close to 3 percent with banks, plus bonds circulating as "quasi-money"	Federal loans	Federal government takes over US$9.7 billion of bank debt of the provinces, and a liability of US$2.4 billion with the Central Bank	No

ANNEX – Case studies of SN fiscal crises (*continued*) (Cordes and others, 2014)

Country	*States involved*	*Year*	*Trigger*	*Financing Situation*	*Resolution*	*Fiscal Costs to the Center*	*Conditionality*
Australia	Queensland, New South Wales (51 percent of GDP)	2009–2010	2008–09 global financial crisis and bank guarantee	Queensland: 17 % debt to GDP; New South Wales: 18% debt to GDP (2009); Abrupt increase in refinancing costs with spreads to Australian government bonds doubling in December 2008	Debt guarantees	Bonds of about 33 billion Australian dollars guaranteed	No, only a fee for the guarantee
Brazil	Almost all	1989	Fiscal mismanagement coupled with exchange constraints	Nominal overnight rate of 2,407 percent (1989)	Federal loans	R$10.5 billion refinanced	Yes, but not enforced
Brazil	Almost all	1993	Fiscal mismanagement	Nominal overnight rate of 3,059 percent (1993)	Federal loans (refinancing of subnational debt with federal public banks); central bank support (1994)	R$39.4 billion refinanced	Yes, but not enforced
Brazil	Almost all (25 out of 27 states)	1997	Fiscal mismanagement	Nominal overnight rate of 24.8 percent (1997)	Federal loans, public bank intervention (1995)	R$87 billion restructured (without resources used to reform the state banks)	Yes, enforced

ANNEX – Case studies of SN fiscal crises (*continued*) (Cordes and others, 2014)

Country	*States involved*	*Year*	*Trigger*	*Financing Situation*	*Resolution*	*Fiscal Costs to the Center*	*Conditionality*
Germany	Bremen, Saarland (2.3 percent of GDP)	1994–2004	Local economic decline resulted in steady erosion of revenue base	Debt in 1992: Bremen 44 percent of GDP; Saarland 39 percent of GDP; Unsustainable interest payments to revenue ratios in 1996: Bremen 26.3 percent; Saarland 19.8 percent	Extraordinary federal transfers	Bremen: EUR 8.5 billion from 1994–2004; Saarland: EUR 6.6 billion from 1994-2004; Total of about 0.7 percent of GDP	Yes, enforced
India	All states	1980–2012	Mismatch of revenues and expenditure responsibilities	High average interest rate on outstanding liabilities of 11.2 percent, subnational debt to GDP at 26.1 percent in 2000	Federal loans (and debt relief); central and public bank intervention	Federal loans and advances from central government 45 percent of subnational debt in 2000, debt relief of more than 6 percent of GDP since 1974	Yes
Mexico	Almost all	1995	Tequila crisis and devaluation of the peso	Median debt to subnational GDP ratios of 3 percent, up to a maximum of 9 percent of GDP; debt servicing costs close to 10 percent of total expenditure.	Debt restructurings with domestic banks; extraordinary federal transfers	Extraordinary cash transfers to states of about 0.5 percent of GDP between 1995 and 1998	Yes, but not enforced
Mexico	Estado de Mexico, Guerrero, Tabasco, Queretaro (16 percent of GDP)	2004–2006	Weak fiscal accounts	Debt to subnational GDP ranging from 1 to 5 percent.	Federal transfers	Up to 25 percent of government fund, which holds 1.4 percent of federal revenue sharing	Yes, enforced

ANNEX – Case studies of SN fiscal crises (*continued*) (Cordes and others, 2014)

Country	*States involved*	*Year*	*Trigger*	*Financing Situation*	*Resolution*	*Fiscal Costs to the Center*	*Conditionality*
Spain	Most provinces (86 percent of GDP)	2012	Weak fiscal accounts, European debt crisis	In 2011, subnational debt of 20 percent of GDP and aggregate subnational fiscal deficit at almost 3 percent of GDP; unable to access markets	Federal loans	Rescue fund with federal loans of EUR18bn (1.4 percent of GDP) for nine regions, loans for payment of outstanding commercial debt of EUR18bn (1.4 percent of GDP) for 14 regions	Yes, enforced
South Africa	Eastern Cape and KwaZulu-Natal (23 percent of GDP)	1997–98	Fiscal mismanagement	Funding deficit, banks refuse to extend overdraft facilities	Federal transfers	Transfers of 0.3 percent of GDP	Yes, enforced
South Africa	Limpopo, Gauteng, Free State, Eastern Cape (54 percent of GDP)	2011–2012	Fiscal mismanagement	Funding deficit of four provinces, banks refuse to extend overdraft facilities	Federal transfers	Transfers of about 1 percent of GDP	Yes, enforced
United States	New York City (0.009 percent of GDP)	1975	Fiscal mismanagement	New York City: $6 billion in short-term debt; operating deficit of at least $600 million, unable to access private credit markets or only at high interest rate of more than 10 percent	Federal loans	Credit line of $2.3 billion for New York City	Yes, enforced
United States	District of Columbia (0.003 percent of GDP)	1996	Fiscal mismanagement	District of Columbia: budgetary deficit of more than $500 million (1996), downgrade below investment grade	Federal loans	Direct borrowing from the Treasury	Yes, enforced