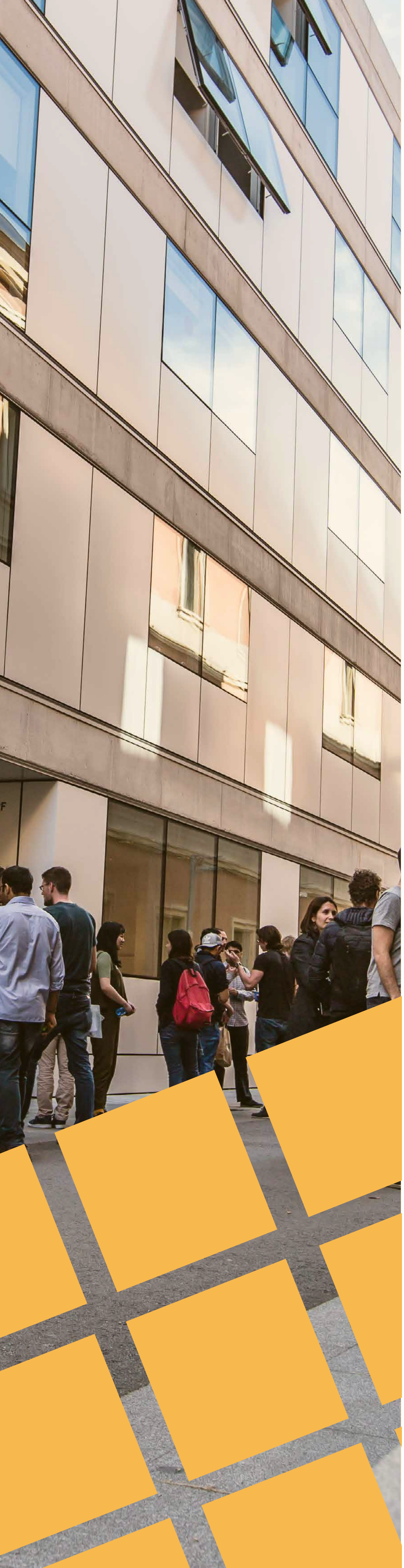

STUDENT PAPER SERIES 25

Fiscal Federalism and Insolvency: Contrasting Cases of the U.S.A. and Germany.

Case Study Analysis of Subnational Debt Frameworks and Insolvency Mechanisms

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I hereby certify that this dissertation contains no material which has been accepted for the award of any other degree or diploma in any university other tertiary institution and, to the best of my knowledge and belief, contains no material previously published or written by another person, except where due reference has been made in the text.

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I would like to thank my family for all of your support throughout my studies, my advisors, Dr. Bokros and Dr. Jordana, for your guidance and wisdom, and Ropika for always making me smile.

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List of Abbreviations:

Abbreviations German Länder	Name
BB	Brandenburg
BE	Berlin
BW	Baden-Wurttemberg
BY	Bavaria
HB	Bremen
HE	Hesse
HH	Hamburg
MV	Mecklenburg-Western Pomerania
NI	Lower Saxony
NW	North Rhine Westphalia
RP	Rhineland-Palatinate
SD	Saarland
SH	Schleswig-Holstein
SN	Saxony
ST	Saxony-Anhalt
TH	Thuringia
Abbreviations	**Name**
CG	Central Government
FCC	Federal Constitutional Court
SNG	Subnational Government
U.S.	United States of America

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Abstract:

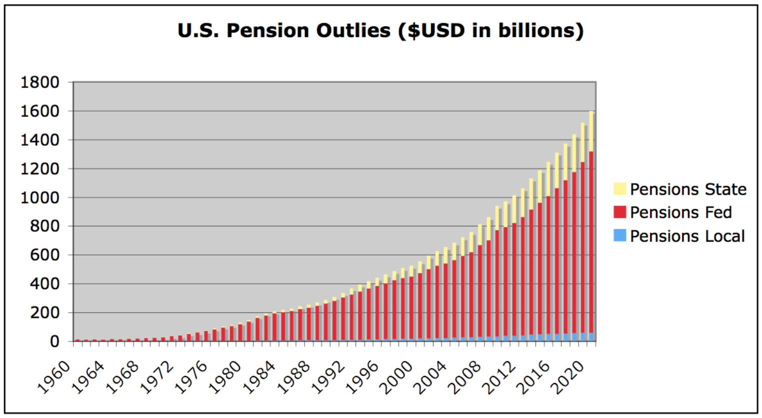
This MA thesis identifies decisive characteristics of subnational debt frameworks and fiscal regulation and their features under fiscal federalism in two contrasting federal states, the United States of America (U.S.) and the Federal Republic of Germany. These two cases are used to assess how differing fiscal federal structures, bailout expectations and insolvency frameworks can either mitigate or facilitate fiscal irresponsibility and moral hazard between borrowers and lenders. This research concludes that while the U.S. and Germany have similar controls on borrowing, their unique fiscal federal structures make them divergent in insolvency outcomes for SNGs. The U.S.'s fiscal framework leads to extensive autonomy at the subnational level with regard to fiscal decision-making, allowing for flexibility with fluctuations in both revenues and expenditures. Germany's strong observance of harmonization policies, evident in their fiscal equalization system, have burdened the federal government and made Länder exceptionally sensitive to fluctuations in intergovernmental transfers. This research further concludes that because of these differing fiscal federal systems and the lack of an insolvency framework in Germany, that the U.S. system is more conducive to preventing both lender and borrower moral hazard.

Introduction

The World Bank and IMF deem fiscal decentralization the foremost driving aspect in economic global development, however previous research indicates that frequently with fiscal decentralization comes subnational debt. “A commonly held belief asserts that defaults happen only where subnational entities and the central government are financially weak” (Liu 2008, 32). Subnational insolvency[1] has become a concern for decentralization among emerging economies and developed economies alike. This thesis attempts determine how differing fiscal federal structures, bailout expectations and insolvency frameworks can either mitigate or facilitate fiscal irresponsibility and moral hazard between borrowers and lenders. In most countries, if a company fails to pay its debts, or can no longer make interest payments on its debt, there is a legal system of corporate insolvency or bankruptcy proceedings that govern the relationship between the debtor and its creditors. What is rarely found is a legal system governing the relationship between subnational governments (SNGs) and their creditors. This is regrettable because issues facing corporate bankruptcy procedures are also relevant for SNG debtors. The import of insolvency frameworks and bankruptcy proceedings are increasingly acknowledged in today’s post financial crises world, as countries decentralize not only services but also tax power and borrowing. An increasing number of SNGs are unable to raise revenues due to economic constraints on the populations or the structure of their federal government. Conventional revenue for SNGs, such as property taxes, and real estate related tariffs and fees have diminished revenues. Simultaneously, growing pensions and health-care commitments are increasingly overburdening SNGs worldwide. U.S. SNGs currently face shortfalls in public pension funds anticipated at $1-4 trillion nationwide (Disalvo 2013). Graph 1 shows current pension spending. In the U.S., Detroit has become the prototype for testing the capacity of the Chapter 9 insolvency framework, which previously was considered insufficient for restructuring debt in large cities.

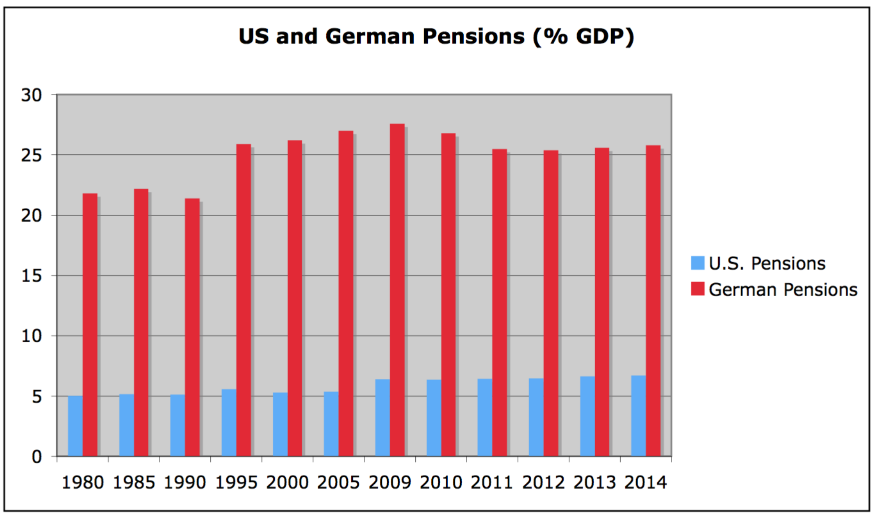
[1] For the purpose of this MA thesis insolvency will be defined as cash-flow insolvency or “(i) generally not paying debts as they become due unless such debts are the subject of a bona fide dispute or (ii) unable to pay debts as they come due” as defined under section 101(32)(C) of the U.S. Bankruptcy Code concerning municipal insolvency. As this definition of insolvency is the major prerequisite for filing for Chapter 9 Bankruptcy in the U.S., the terms ‘Bankruptcy’ and ‘Insolvency’ in the case of the U.S. will be used interchangeably and in the case of Germany to facilitate comparisons. The author acknowledges that from a strict legal point of view these two terms hold different meanings. However, for this analysis it is necessary for cross comparisons.

Graph 1: U.S. Pension Spending



Source: Author (Data:U.S. Census 1992-2011 and U.S. Census Bicentennial Edition)

Graph 2: U.S. German Pension Spending



Source: Author (Data Source: U.S. Census 1992-2011, U.S. Census Bicentennial Edition, OECD)

In Germany, recent legislation to reduce the pension age to 63 for some groups is expected to raise pension expenditures by more than thirty billion Euros by 2030. The dependency ratio, measuring inactive pensioners as a percentage of workers, is now 31% and expected to rise to more then 57% by 2050 (Zimmermann 2014). Graph 2 reveals German pensions spending triple that of the U.S. In 2006, Germany began a process of reevaluating its stance on bailouts by denying the Land of Berlin a bailout.

This MA thesis, will analyze frameworks of subnational debt insolvency mechanisms, bailout expectations and debt controls in federalist countries, using the U.S. and Germany as case studies to illuminate possibilities for enhancing frameworks in light of today's economic challenges. An in-depth qualitative comparative within-case study between the city of Detroit's bankruptcy in 2013-2014 and the insolvency cases of the Länder of Bremen in 1992 and Berlin's continuing financial distress will serve to illustrate both the effectiveness and shortcomings of these mechanisms.

This investigation is structured in five sections. Section one provides an overview of the literature on federalism, subnational insolvency frameworks, debt controls and bailout expectations, identifying a gap in existing literature. This section also surveys the use of Chapter 9 as an insolvency mechanism, placing it in the broader context of insolvency frameworks worldwide. This overview includes secondary literature, offering both theoretical and qualitative insights on the subject and their potential advantages and difficulties. Section two introduces theoretical approaches appropriate for analyzing and understanding subnational debt in federalist systems, and a description and comparison of the political and fiscal federal systems unique to the U.S. and Germany. Section three provides a qualitative within-case study of the city of Detroit's bankruptcy. Section four, examines the within-case studies of the German Länder of Bremen and Berlin. Section five, presents an assessment of the hypotheses, followed by conclusions and an assessment of the value of the research for the future of international policy-making and offers policy recommendations.

1. Fiscal Federalism

Alexis de Tocqueville (2003, 141) mused about the strengths of American democracy and the uniqueness of federalism, through its ability to realize the "advantages, which result from the magnitude and the littleness of nations." One of the most difficult tasks of federalism is assignment and the subsidiarity principle. Oates (2004, 14) states, "we need to understand which functions and instruments are best centralized and which are best placed in the sphere of decentralized levels of government." This thesis provides an in-depth examination of the intricacies of administrative and legal frameworks in two federalist nations.

Federalism, often falls prone to two central difficulties as described by Rodden (2006), (1) The government becomes too centralized causing it to fall prey to totalitarian tendencies or (2) The government becomes overly decentralized and extended, making the country as a whole, weak and susceptible to internal wars or external threats.

Central to discussing subnational debt and borrowing in the U.S. and Germany are the principles of federalism and decentralization. While federalism and decentralization are often used synonymously, they are conceptually different although interrelated. Fiscal decentralization concerns the devolving of revenue sources and expenditures to lower levels of government. Often this is interchangeably referred to as fiscal federalism, however this type of devolution can also occur in unitary and confederal governments. Rodden (2006) suggests a critical difference between federalism and decentralization, especially relevant in debt and borrowing, is the question of sovereignty. Under decentralization many critical responsibilities can be transferred to lower levels of government yet this does not make these lower levels sovereign. The issue of sovereignty is crucial in determining responsibilities and guarantees in relation to state and local government insolvency and intergovernmental interactions, as well as the circumstances under which SNGs believe in the center's resolve to provide bailouts. Federalism in contrast to decentralization, by definition, means that SNGs have a sense of sovereignty with constitutional rules or laws limiting the authority of the CG. Unfortunately, sovereignty is rarely clearly delineated and in practice responsibilities are often indistinct and overlapping.

1.1 Subnational Debt Frameworks: Controls on Borrowing

Subnational insolvency mechanisms can be divided into three major categories, judicial, administrative or a hybrid of the two. Subnational debt often arises from improperly designed intergovernmental fiscal relations stemming either from large vertical or horizontal imbalances (Ter-Minassian and Craig 1997). Controls on borrowing generally fall into one of four distinctive categories. On occasion governments combine qualities from each for a more cohesive system to fit their own distinct legal and historical context. Following Ter-Minassian (1997) and Singh and Plekhanov (2005), the four categories of controls on borrowing used here are; (1) market discipline, (2) cooperative approach, (3) rule-based borrowing (4) administrative control.

Market Discipline

Market discipline relies solely on market incentives and information to discipline and control borrowing. This system requires markets to be free and open, fostering a free flow of market information, enabling lenders and borrowers to make informed decisions. Lane (1993) shows that in order for a market-based system to be effective they must have unrestricted flows of information and that information on borrowers outstanding debt and repayment capacity be accessible. Furthermore, effective market-based control mechanisms require that there is no perceived chance of a bailout if default occurs (Bayoum, Goldenstein and Woglom 1995).

Cooperative Approach

The cooperative approach to borrowing controls, is not based on laws or direct administrative CG approval, but characterized by continuing intergovernmental negotiations between CG and SNGs. The cooperative approach typically integrates SNGs in the formulation of macroeconomic goals and key fiscal parameters. Agreements are usually negotiated between these groups concerning total federal deficit, key strategic growth items of revenues and expenditures as well as setting specific limits of debt for individual SNGs. This type of cooperation can raise the awareness of all parties to the policy decisions of SNG's and their macroeconomic consequences (Ter-Minassian and Craig 1997, 165).

Rule-Based Borrowing

Rule-based borrowing controls depend on standing rules either laid forth in individual laws or the constitution. These rules can provide a wide variety of mechanisms to control debt, including limits on absolute debt, outlining explicit functions for borrowing and defining new investments based on debt servicing ratios. "Rules that limit subnational government borrowing to investment purposes (the 'Golden Rule') are quite common in industrial countries" (Ibid, 166). Rules can also be established to regulate short versus long-term borrowing, these rules can be used to 'mimic' a market-based system. Rule-based systems are effective in providing transparency to creditors but often lack flexibility. Being instilled in the constitution or specific laws, restructuring as economic conditions evolve can be difficult. One hazard of this system is SNG's predisposition to circumvent the rules through accounting and legal loopholes.

Administrative Approach

The administrative approach follows the setting of limits on overall debt of individual SNGs or the components of borrowing, often involving the centralization of all government borrowing and bond sales, controlling both ex-ante authorization as well as ex-post monitoring. This approach is generally practiced in unitary rather than federal states. Administrative control can help to prevent endemic effects caused by a decline in credit ratings by one or more SNGs. Many lenders require a form of explicit CG guarantee for SNG borrowing if sufficient frameworks are not established, making these loans CG liabilities by de facto (Ter-Minassian and Craig 1997). Additionally, if the CG authorizes a loan, it becomes difficult for the CG to later deny a bailout to a SNG that defaults.

1.2 Subnational Debt and Bailout Expectations

Traditionally, it is more common for CGs to borrow more compared to their revenues, resulting in deficits, while borrowing practiced by regional and local governments is often a smaller percent of their revenues. According to a study by Ahrend *et al.* (2012, 5), CGs debt as a share of their revenues is usually above 100% and for roughly half of those sampled, close to or above 200%. In contrast, SNG debt as a share of their revenues is almost always below 100%. This has made CGs the priority in debt accumulation research. Policy focus has shifted, however, towards the fiscal positions of SNGs as financial crises have placed downward pressure on revenues with increased borrowing ensuing, putting many SNGs in a fragile state.

Subnational debt sustainability at the local level, which can lead to insolvency and a bailout request, stems most often from two distinct types of fiscal problems. First, when a subnational suffers from a remarkably large shock, such as a hurricane or flooding (i.e. natural disasters), or economic crises or contagion. The second is more structural in nature resulting from unsustainable debt accumulation, which can result from issues of moral hazard, as creditors and local governments account for the possibility of a bailout to avoid default. A bailout can be largely justified in the first instance through risk-sharing mechanisms under a federal structure (Rodden 2006). In the second instance, understanding the differences of long term debt accumulation, either through moral hazard or issues of debt servicing capacity is key to understanding the fiscal relationship between the center and SNGs, and ultimately the legal and administrative mechanisms governing these relationships.

Rodden (2006) and Ahrend *et al*. (2012) present three core determinants of subnational debt accumulation. First, regional debt can result from CG bailout expectations. Second, SNGs borrowing levels might be determined by their debt servicing capacities. Third, political factors such as party orientation or voter density may be a determinant.

The study of SNGs is unique from sovereign states and CGs in that they are part of a larger entity. CGs are required to both monitor and provide additional capital to SNGs, blurring the lines of sovereignty and fiscal responsibility, especially during acute economic stress and soft budget constraints (Rodden 2006). These conditions may lead to expectations of bailouts for SNGs if a sufficient insolvency framework and proper mechanisms are not in place.

Under the traditional U.S. definition, CGs are sovereign debtors with complete authority over their debt obligations as there is no higher government guaranteeing their debt, nor is there any higher authority that can force them to repay it. In contrast, sub-sovereigns can be obligated to repay their debt or be bailed out by their respective sovereign; the same being understood for individuals and the private sector. In developed credit markets, when lending to firms or individuals, lenders may impose legal action or sanctions against debtors if their debts are not repaid. If the debtor is a sovereign, there is no higher body to compel their repayment. Repayment can therefore be attributed to the desire for future access to markets (Bulow and Rogoff 1989, 157). For SNGs in federalist countries, the line between sovereign and non-sovereign can be vague. Lenders must ascertain the relationship between the CG and SNGs to accurately determine the possibility of a bailout.

The determinants of a bailout are many. "Too big to fail", advocated by Wildasin (2004), argues that the size of a SNGs, with regard to population can increase the likelihood of a bailout, due to negative externalities affecting a wider group of the population, however in Wildasin's model there is no public debt. This is common to regional governments that provide public services supporting residents in other regions (Vigneault 2007).

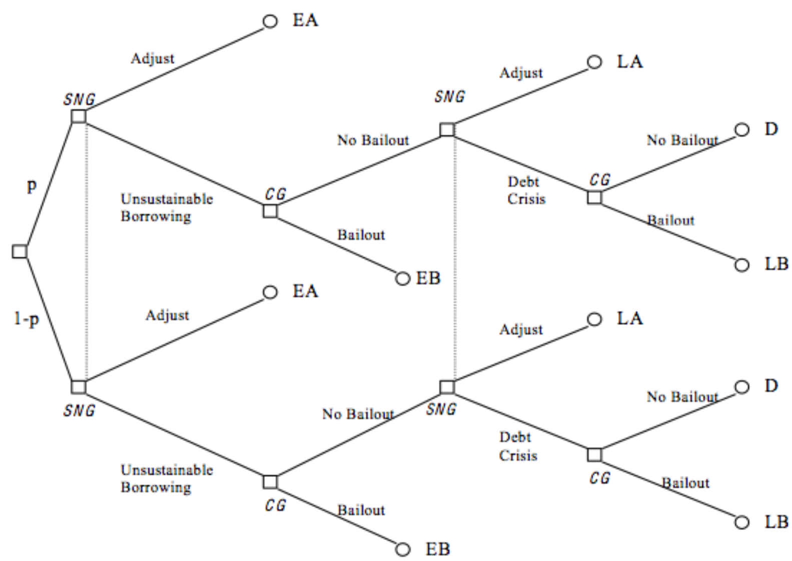
Von Hagen *et al*. (2000) argues that smaller SNGs receive bailouts more frequently, as Germany, Spain and Italy. “Too small to fail” could be attributed to the CGs greater compliance due to greater cost efficiency.

“Too sensitive to fail” proposed by von Hagen *et al.* (2000, 32), suggests, “Central governments seem to be more likely to grant bailouts, if refusing to do so puts at risk the orderly provision of public services which are regarded to be especially sensitive.” Other literature advocates that CGs provide bailouts when it is felt that SNGs rely heavily on fiscal transfers, and lack of competence to raise sufficient revenues (Rodden 2001).

Rodden (2005) and Grembi *et al* (2014) show that large vertical fiscal imbalances in conjunction with top-down, hierarchical oversight of SNG spending and borrowing may moderate problems of over indebtedness. Poterba (1995) Bohn and Inman (1996) put forth that legal frameworks and mechanisms, even those enshrined in the constitution, or numerical fiscal rules to restrain excessive SNG borrowing have, in some cases, proven to be clearly ineffective, as seen in the U.S., Germany, and Brazil. Escolano *et al*., (2012) and Ahrend *et al.* (2012) contend that, while fiscal rules are important in curbing certain types of borrowing, which could lead to large debt accumulation, they do not play a significant role in the prevention of budget deficits overall.

Rodden (2005) suggests that information is innately incomplete between SNGs and the CG with regard to bailouts, in most countries.

Chart 1: Bailout Game



Source: Rodden (2005) (CG=Central Gov., EA='Early Adjustment', EB='Early Bailout', LA='Late Adjustment', LB='Late Bailout'. D= 'Default')

While Rodden (2005) uses this model to distinguish between levels of sovereignty in SNGs, this research suggests that subnational insolvency mechanisms and bankruptcy proceedings can bridge the gap in information asymmetries between SNG and the center, facilitating earlier adjustment, decreasing borrower and lender moral hazard and fostering a more robust system.

1.3 Hypotheses

Based on the literature this analysis proposes two primary determinants contributing to borrower and lender moral hazard in federalist countries, first, the level of revenue dependency of SNGs on the CG and second, the strength of information pathways between SNGs and the CG. In order to facilitate evaluation of each hypothesis, two intervening hypotheses are adopted to clarify each dominant hypothesis.

Set One:

H_1: In federalist countries, those with SNGs that are independent in revenue generation are less prone to moral hazard in the system.

H_{1A}: In federalist countries, those providing SNGs with extensive autonomy in setting both the tax base and rate are less likely to be dependent on the CG for revenue than those providing limited autonomy.

H_{1B}: In federalist countries, those with strong federal horizontal tax equalization systems are more likely to have revenue dependent SNGs than those without such systems.

Set Two:

H_2: In federalist countries, greater information pathways between SNGs and the CG reduce moral hazard in the system.

H_{2A}: In federalist countries, defined constitutional controls on borrowing provide greater intergovernmental information pathways, if accompanied by an explicit non-bailout policy, than those without explicit non-bailout policies.

H_{2B}: In federalist countries, those having ex-post insolvency mechanisms provide greater information in intergovernmental relations and are more likely to reduce bailouts, than those without insolvency mechanisms.

1.4 Methodology

This research will follow a most-similar case methodology. Following this method the researcher "looks for cases that differ on the outcome of theoretical interest but are similar on various factors that might have contributed to that outcome" (Gerring 2007, 131). This analysis takes a qualitative approach facilitating an inductivist and exploratory examination of the U.S. and Germany. The method used to further understanding is process-tracing, which is used for within-case analysis to ascertain casual claims between variables through explanation and tracking of sequences of events, especially useful to "strengthen casual inferences in small-N designs based on the matching and contrasting of cases" (Collier 2011, 823-824). While process-tracing has a wide variety of interpretations, this analysis chooses to take a broad understanding of this method as suggested by George and Bennett (2005, 211) of constructing a "general explanation rather than a detailed tracing."

Table 1: Process Tracing Tests for Casual Inference

Process Tracing Tests for Causal Inference

		SUFFICIENT FOR AFFIRMING CAUSAL INFERENCE	
		No	**Yes**
NECESSARY FOR AFFIRMING CAUSAL INFERENCE	**No**	**1. Straw-in-the-Wind**	**3. Smoking-Gun**
		a. Passing: Affirms relevance of hypothesis, but does not confirm it.	**a. Passing:** Confirms hypothesis.
		b. Failing: Hypothesis is not eliminated, but is slightly weakened.	**b. Failing:** Hypothesis is not eliminated, but is somewhat weakened.
		c. Implications for rival hypotheses: **Passing** *slightly* weakens them. **Failing** *slightly* strengthens them.	**c. Implications for rival hypotheses:** **Passing** *substantially* weakens them. **Failing** *somewhat* strengthens them.
	Yes	**2. Hoop**	**4. Doubly Decisive**
		a. Passing: Affirms relevance of hypothesis, but does not confirm it.	**a. Passing:** Confirms hypothesis and eliminates others.
		b. Failing: Eliminates hypothesis.	**b. Failing:** Eliminates hypothesis.
		c. Implications for rival hypotheses: **Passing** *somewhat* weakens them. **Failing** *somewhat* strengthens them.	**c. Implications for rival hypotheses:** **Passing** *eliminates* them. **Failing** *substantially* strengthens.

Source: Collier 2011 (adapted from Bennett 2010)

For the purpose of process-tracing, this analysis will look for specific evidence to validate the hypotheses above. Explanatory evidence will consist of

1. Statistics on revenue generation as a signal of fiscally independent SNGs.
2. Actions of SNGs being limited by horizontal equalization systems.
3. Statements by lenders or borrowers about ratings or bond spread, relating to the efficiency of controls on borrowing.
4. Narratives of how ex-post insolvency mechanisms reduce bailouts through increased information.
5. Actions indicating a non-bailout policy.

The case selection can be justified because both the U.S. and Germany adhere to fiscal federal systems and maintain similar controls on borrowing, specifically a rule-based approach, which looks to imitate a market approach. Furthermore, both have relatively similar levels of industrialization, democracy, and give significant sovereignty to their SNGs. Many U.S. states and German Länder additionally have similar debt restrictions in their state constitutions, however the contrasting manner in which these two nations approach insolvency in their constitutions makes this selection appropriate.

This research takes a within-case study assessment of the U.S. city of Detroit's bankruptcy and insolvencies in the German city-states of Bremen and Berlin, to determine the factors involved and implications of opposing fiscal federal structures and their repercussions on insolvencies and bailouts. This research focuses primarily on the epoch just prior to, during and after the periods of bankruptcy and insolvency. The unit of analysis will be at the country level, with the dependent variable being the determinants of a bailout as effected by the independent variables of the fiscal federal structure and insolvency mechanisms practiced by each country.

Three potential methodological issues inherent in comparing a city in the U.S. with city-states in Germany are acknowledged. First, the potential differences in size, second, larger divisions in the levels of legal, political, and administrative authority and third, the authority of taxation and relative sovereignty.

In defense of the parameters chosen, the following explanation is used to mitigate the above-mentioned methodological issues. The Detroit metropolitan region is close in area to Bremen and Berlin, holding approximately one half of Michigan's population or 4,296,250 people, making the actual size and import of Detroit much greater than the downtown metro boundary. Detroit also provides services for residents outside of the downtown area. The U.S. Census Bureau (2015) defines a metropolitan area as a "large population nucleus, together with adjacent communities having a high degree of social and economic integration with that core." Most notably, the city of Detroit has traditionally provided such essential services, as water and sewage to 127 area communities or roughly 40% of Michigan's population and its infrastructure, highways and airport, are essential to the surrounding communities economic interests (Christoff and Chappatta 2014).

In terms of political and fiscal sovereignty, the State of Michigan has a strong tradition of home rule. In 1909 the state passed the 'Home Rule City Act of Michigan', enabling many communities to become their own municipal administrative areas with the right to levy taxes, making them largely politically and fiscally independent from the state of Michigan. By 2007, 274 cities out of 276, including the city of Detroit had established home-rule charters; with the capacity to levy their own income tax and largely determine both the rate and base of their taxes, providing them in most regards de facto sovereignty.

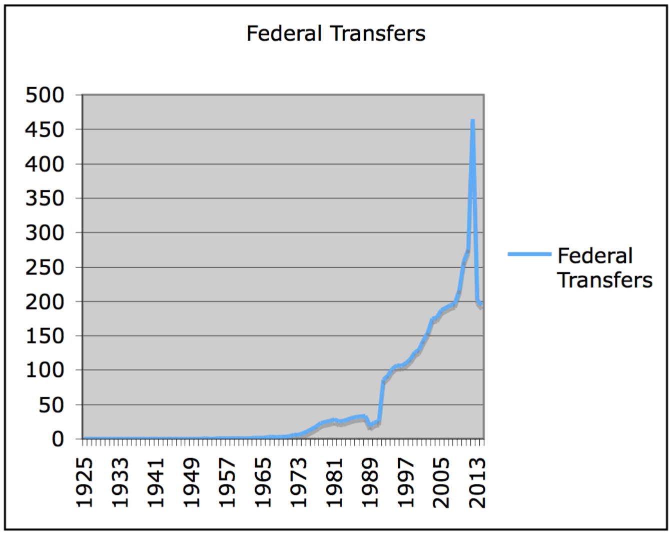
2. Political and Fiscal Federal Structures

2.1 United States of America

The U.S. federalist system of government consists of three levels; the federal, state and local governments. The U.S. has 50 states and roughly 89,476 local government units (U.S. Census Bureau 2011). U.S. SNGs generally play a much more profound role in both political and fiscal policy making than in many other countries. The U.S. Constitution, ratified in 1788, presents a basic framework of the lawful areas of interest of states and the federal governments, asserted in the Tenth Amendment. Nonetheless, the U.S. Constitution reveals major divergences between those who wished for greater federal control and those supporting greater subnational autonomy, making the assignment of responsibilities and functions of different levels of government in the U.S. Constitution intentionally unclear. The result has been a predisposition for attempting to retain sizeable autonomy in different levels of government.

There has been a gradual expansion in the role of the CG over the last century, with a noteworthy acceleration under Lynden B. Johnson's 'Great Society' programs, in which social harmonization in the form of transfers was widely expanded for poor and elderly individuals. With this expansion, an increase in transfers from the federal to the state and local level, primarily as categorical or special purpose transfers, came about as seen in Graph 3.

Graph 3: U.S. Federal Transfers ($ billion)[2]



Source: Author's Calculations (Data: U.S. Census 1971-present, U.S. Census Bicentennial 1902-1970)

Unlike most western industrialized nations, the U.S. does not have general-purpose transfers to SNGs and does not institute horizontal equalization. While transfers increased, SNGs have maintained their administrative control. Between 1875 and 1960 twenty-five states adopted municipal home-rule in one form or another. This gives local governments the authority to self-government both politically and fiscally, making them largely autonomous, able to administer their own local ordinances, regulations, license, tax and acquire debt. Similar to the U.S. Constitution, many states have passed on autonomy, both in political and fiscal policy-making, to lower level, local governments.

State and local governments traditionally provide the majority of public services and goods. States are characteristically accountable for providing transportation, public works, public welfare and higher education, while local governments are typically responsible for primary and secondary education, and public safety services (fire and police). The CG is responsible for national defense and public welfare, primarily insurance trust programs (Social Security and Medicare).

[2] This is compiled from the sum of (General Local Government Support, Public Welfare, Air Transportation, Education, Employment Security Administration, Housing and Community Development, Police and Safety, and Other).

U.S.: Taxes

The U.S. has a decentralized tax administration system, upheld by the U.S. Constitution, with each level, federal, state, and local governments maintaining their own tax administrations to collect and enforce taxes. This system provides each level of government the utmost autonomy in deciding both the tax base and rate. Local governments derive their taxing authority from the state. There are few shared taxes, and multiple governments can tax the same revenue bases.

U.S.: Borrowing

Under the U.S. Constitution, the CG does not have the authority to set borrowing limits on states. The U.S. widely adheres to a rule-based approach to borrowing, which often attempts to mimic a market-based approach. All states have 'balanced budget' provisions in their state constitutions and typically require local governments to maintain balanced budgets. State constitutions prohibit budgets that will be balanced through the issuing of debt. The level of rigidity of each state's 'balanced budget' requirements varies noticeably.

The 11th Amendment

Under the 11th amendment to the U.S. Constitution, both federal and state governments have sovereign immunity, meaning these governments do not have to review claims of state's creditors and are absolved from enforcing claims, from "citizens of another State, or by citizens or subjects of any foreign state" (U.S. Constitution 11th Amendment). With this explicit commitment of non-obligation by federal and state governments, it is imperative for local and foreign investors to have a mechanism of productively dealing with defaults and debt restructuring, which Chapter 9, attempts to fulfill.

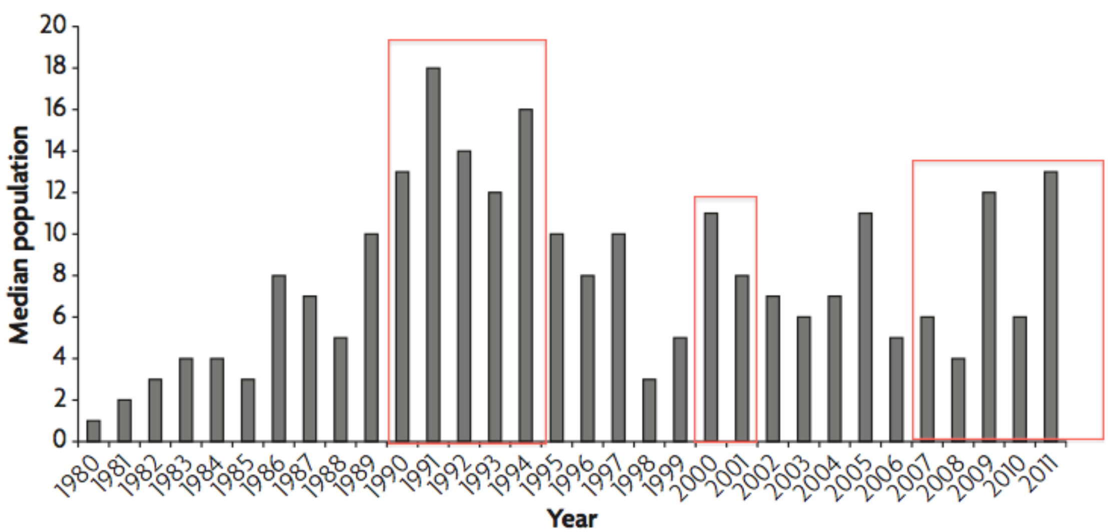
Chapter 9 as an Insolvency Tool

In subnational insolvency proceedings, individual negotiations with each creditor are tedious, costly and disruptive to debt restructuring. This has become known as a 'holdout' problem, where a few creditors can significantly disrupt debt negotiations. Chapter 9 was created to resolve this holdout problem. Besides being a means of settling creditor disputes, Chapter 9 carries a strong stigma for the borrowing SNG, which offsets debtor moral hazard. SNGs tend to be careful about filing for federal bankruptcy protection because of its implications to financial markets of possible financial mismanagement, which could lead to significant future risk premiums. In this manner, Chapter 9 acts, in practice, as an ex-ante and ex-post measure to encourage financial thriftiness by SNGs. A probable indicator of this fact is that, "Chapter 9 filings for municipal bankruptcy by a general purpose municipality is a relatively rare event" (Angelis and Tian 2013, 312).

For the purpose of this thesis, Chapter 9 will only be considered for SNG units, and not all possible municipal units, which could include but are not limited to school districts and utilities. Past literature suggests that Chapter 9 is ineffective for large cities, however the municipal bankruptcies beginning in 2000 and bankruptcy of Detroit are putting this literature to the test.

Typically the largest U.S. Chapter 9 filings have occurred during times or close after periods of economic recession as indicated in Graph 4, indicating a need for insolvency mechanisms.

Graph 4: Annual Chapter 9 Filings (1980-2011)



Source: Angelis and Tian 2013, author annotation

The Tenth Amendment limits those actions federal courts can employ over a SNG. Furthermore, the Contracts Clause limits the scope of state's capacity to compel creditors of a municipality to accept less than what is owed (Moringiello 2014, 410). Chapter 9 does not give municipalities complete control over their debt restructuring process, but is intended to facilitate state guidance over the restructuring of municipal debt (Ibid, 409).

Chapter 9 more specifically limits federal bankruptcy courts from interfering with municipal governance and state sovereignty. This emphasis on protection of sovereignty prevents the court from appointing a trustee, thus guaranteeing protection from both the court and creditors in determining the use of property. To preserve sovereignty, only the debtor can propose a restructuring plan, and Chapter 9 cannot be involuntary, thus preventing creditors from forcing a municipality into bankruptcy. These fundamentals of Chapter 9, have led some to consider it inequitable to creditors (McConnell and Picker 1993, Angelis and Tian 2013 and Moringiello 2014). Because of the strict legal aspects of entering into Chapter 9, legislated at the state level, Chapter 9 can be viewed as a piece of a state restructuring plan rather than an independent mechanism to deal with issues of insolvency. Section 109(c) U.S. Bankruptcy Code states, municipalities can only enter into Chapter 9 if they are insolvent, desire to adjust debt, attempted negotiations which proved ineffective and are authorized as debtor by the state.

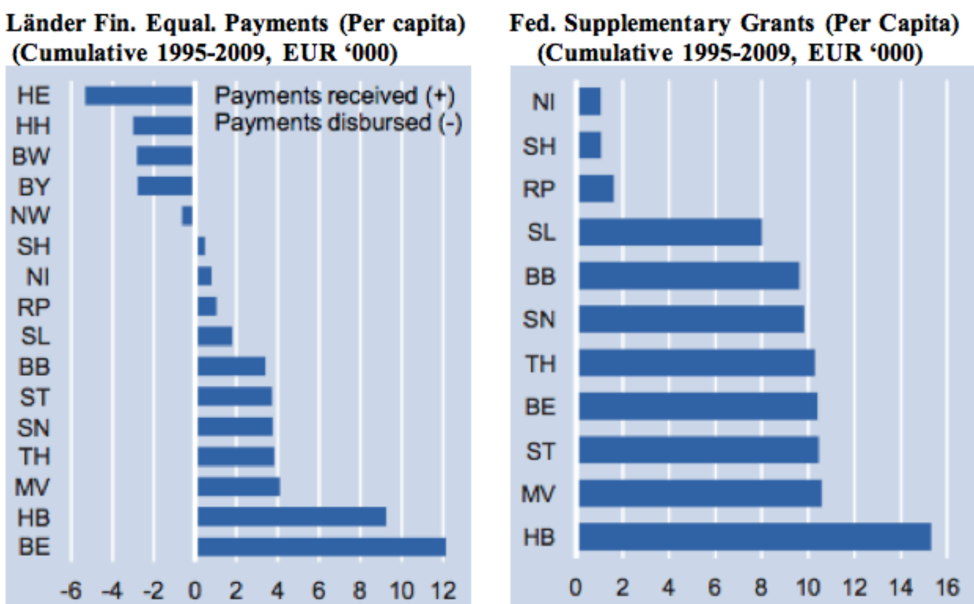
2.2 Federal Republic of Germany

Germany maintains a federally structured political system and has three levels of government: Federal (Bund), State (Land) and Local. Assignment of responsibilities of each level resides in the German Constitution and is defined in the Basic Law (Grundgesetz). The Basic Law assigns responsibilities to which the CG devolves responsibilities to the federal states. Berlin, Bremen and Hamburg do not have fiscal independent communities, but are city-states, known as 'Stadtstaaten,' which can be contrasted to 'Flachenländer' or non city-states. 'Stadtstaaten' include expenditures and revenues customarily assigned to local governments in 'Flachenländer.' Grants, which would be allocated to local governments in the 'Flachenländer ', remain at the Land level. Local governments are responsible for local utilities and services such as water, and sewage supply, and waste disposal as well as basic infrastructure construction and maintenance, primarily of roads.

Germany: Taxes

The German system follows the principles of subsidiary to citizens, yet Land and local authorities act predominantly on behalf of the CG. This condition exists because the Basic Law, in Articles 107 and 104a, attempts to merge the advantages of a unitary state with those of a federalist state. Since reunification, Germany has attempted to institutionalize the principles of harmonization and solidarity into its fiscal federal system. Two key characteristics of the German federal system exemplify harmonization. First, a strong fiscal equalization system, enshrined in the German Constitution, attempts to ameliorate uniformity of living conditions across regions, or the "Bündisches Prinzip", and second, mutual support between the Federation and the Länder and between Länder and the municipalities. Roughly 70% of tax revenues are divided between levels of government as part of this redistribution (Zipfel and Zimmer 2013).

Graph 5: German Equalization System

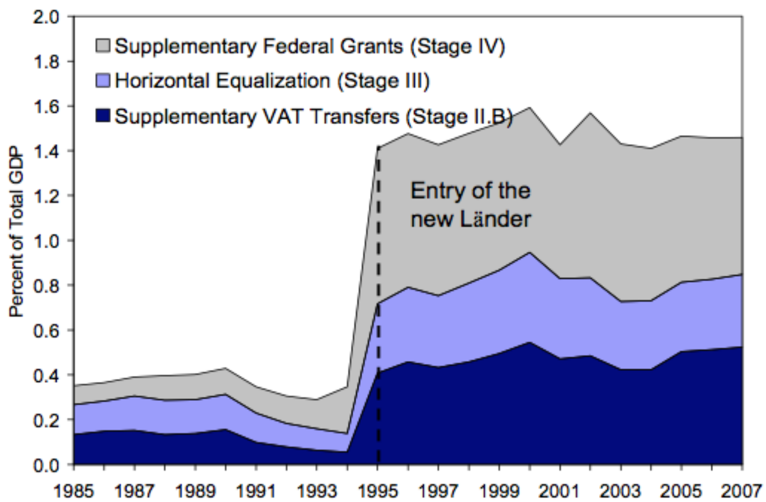


Source: DB Research, Zipfel 2011

Graph 5, shows large disparities in the German equalization system with roughly four Länder supporting the other twelve.

Comparing the 1949 German Constitution to the amendments made in 1969 and 1990-1994 of the German Constitution, one notes that the CG has significantly raised its impact on Länder policy (Blankart 1999). While the Constitution guarantees both Länder and local government the independent right to manage their own local budgets, the practice of autonomy de facto is relatively restricted based on profound dependence on (1) grant financing from the CG, (2) large portions of expenditures being mandatory, and (3) the inability for Länder to control their tax rates.

Graph 6: Evolution of German Transfer System



Source: Stehn and Fedelino 2009

Graph 6, shows the evolution of the German transfer system sharply rising after reunification.

Germany: Borrowing

The German CG has no legal authority to veto borrowing, nor does it have numeric restrictions for subnational borrowing. Länder are considered independent in their budgetary decision making under Article 109. Länder, however, all have provisions in their Land constitutions restricting borrowing to outlays for investment purposes. 'Investment' can become a loose concept, often reformulated for other expenditures. This 'Golden Rule' was weakened under the 1969 constitutional amendment, permitting this provision to be broken if there are "disturbances of general economic equilibrium" (Article 104a, par. 4). This supports a rule-based approach, which occasionally attempts to imitate market-oriented controls.

In 2009, Germany amended its constitution introducing a 'debt brake' or balanced budget provision, applicable for both the CG and Länder, replacing Germany's 'Golden Rule' provision, to take affect in 2016 for the CG and 2020 for Länder. This provision forbids Länder from running any type of structural deficit and limits the CG to running a structural deficit of no more than 0.35% of GDP, however, the Basic Law still permits exceptions for emergencies, such as economic crisis and natural disaster (Economist 2011).

2.3 Analysis of Contrasting Fiscal Federal Systems

The above review of the U.S. and Germany suggests that while these countries have similar controls on borrowing, they differ vastly in terms of revenue extraction, division of resources, intergovernmental relationships and consequences in cases of subnational debt and insolvency.

The U.S. and Germany have similar controls on borrowing, both adhering to a rule-based approach to borrowing, which attempts to imitate market-based approaches. Similarly, both U.S. states and German Länder have some manifestation, of the 'Golden Rule' or a provision, which limits borrowing to investment purposes imbedded in their constitutions. In both cases, often these rule-based systems are subject to accounting and legal loopholes. Granof (1984) has shown how in the U.S., SNG's have often exploited lease-arrangement schemes. U.S. states and German Länder use laws to regulate short-term borrowing for liquidity purposes, setting strict rules for payment by the end of the fiscal year. This is seen in the U.S. and Germany, which often place limits on debt to projected debt servicing capacity or limiting debt to benchmarks of their debt-servicing ratio based on past revenues or the projected tax base. The U.S.'s attempts to adhere to the core tenants of a rule-based system of controls on borrowing are for the most part successful and provide considerable transparency to lenders. The Länder have substantial leeway with regard to borrowing, fostering a de facto joint liability system between the CG and Länder with a non-explicit 'bailout' guarantee that has caused Länder to indulge in debt financed overspending (Seitz 2000; Zipfel and Zimmer 2013). This is directly contrary to the literature on debt controls practiced under a rule-based system, emulating a market based system. Most U.S. states and local governments must propose or sign a balanced budget. Not all are obligated to fulfill a balanced budget by the end of the fiscal year, allowing operational deficits to be carried over into the next fiscal year. Länder can still run structural deficits until the debt-break takes affect in 2020. Both countries adherence to a rule-based system can lead to a lack of flexibility during financial crisis.

There is little differentiation in taxation across regions in Germany, due to SNGs lack of authority to alter the tax rate. Germany merges notable degrees of revenue decentralization without giving significant tax autonomy to the Länder level. Länder are responsible for roughly 40% of public expenditures, however they possess little taxation authority (Rodden 2005). The result is a significant mismatch between revenues and expenditures. Länder are heavily dependent on shared taxes and intergovernmental grants. This has made the system inflexible in terms of increasing or decreasing taxes and expenditures. If the CG chooses to manipulate the VAT rate due to reductions in federal spending, a decrease in taxes, or the burdening of Länder with additional expenditures without appropriate increases in grants or tax rates, it can jeopardize the fiscal functioning of Länder. The U.S. does not have shared taxes. In 1972 the U.S. Congress enacted a provision that would allow for states to elect that the Internal Revenue Service collect their taxes, as a first step towards greater harmonization, if states conformed their state income taxes to that of the federal government. All U.S. states rejected this proposal fearing it would make state revenues subject to fluctuations when the federal tax base changed (Stotsky and Sunley 1997). These practices give evidence to H_1 as autonomy helps the U.S. SNGs and the lack of hinders German SNGs both in terms of setting tax rates and the negative impact of strong federal horizontal tax equalization systems.

Similar institutionalization of such equity related harmonization is not found in the U.S. Constitution. The subsidiarity principle, particularly strong in the U.S., gives considerable taxing autonomy to SNGs, allowing greater flexibility in financial crisis, as the literature suggests, but also creating significant overlap in taxation. Citizens must often make three separate payments, to each level of government, a disadvantage to underprivileged areas. The insolvency framework in the U.S., specifically Chapter 9, lacking in Germany, is often considered distinctive for insolvency frameworks, both for its noteworthy protection of debtors and its ex-post mechanisms and supplies evidence for increasing information flow.

3. Bankruptcy of the City of Detroit

The subnational bond market in the U.S. remains the largest in the world, with an average of $400 billion subnational bonds issued per year (Liu 2008). Chapter 9 of the U.S. Bankruptcy Code, created in 1937, under the federal bankruptcy code for municipal governments, despite its wide acclaim, has rarely been used, but came to the forefront in 2013 when Detroit became the largest municipality to file for Chapter 9 bankruptcy protection. Only 600 municipal bankruptcies have been filed since 1937 in contrast to 51,259 business filings under Chapter 7 and 11 (Angelis and Tian 2013, 312).

Detroit was once the fourth largest city in the U.S. by population, and capital of the U.S. automotive industry. After years of losing market share and profitability in the global automotive industry beginning in the 1980s and the shifting of manufacturing plants to less expensive producers, the population of Detroit rapidly declined (Swallow 2010, 50). This has led to a reduction in revenues and worsening budgetary state for the city. This paired with a lack of diversification in industries and poor fiscal management led Detroit to a state of crisis in 2013. Detroit became the Petri dish for testing Chapter 9 in the context of a large city, previously considered by the literature as incapable.

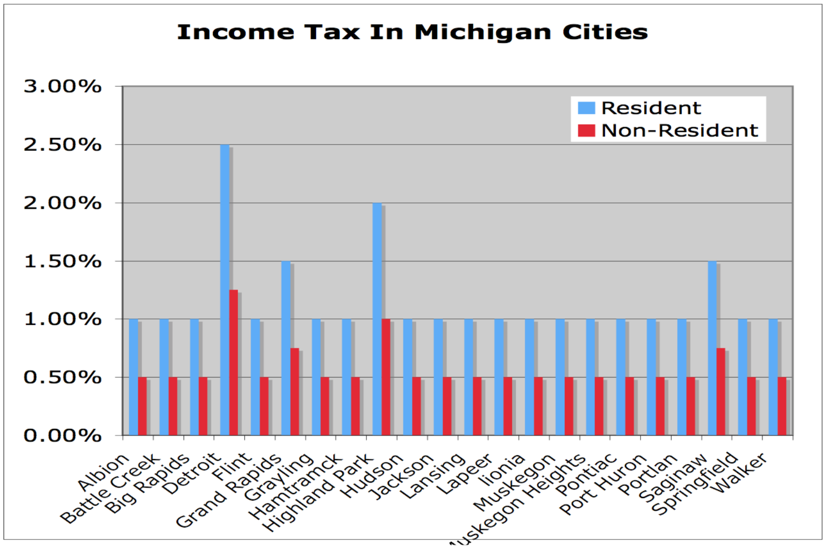
Table 2: Largest U.S. Bankruptcies by Debt

Date	Municipality	Reason for filing Chapter 9
1994	**(3) Orange County, California, ($1.7 billion debt)**	**Interest rate related losses**
1999	Prichard, Alabama, ($3.9 million)	Inability to pay pensions
2001	Desert Hot Springs, California	Loss of housing lawsuit
2005	Millport, Alabama	Loss of tax revenues due to loss of factory
2006	Los Osos, California	Debt related to wastewater facility
2008	Vallejo, California	Inability to pay pensions
2011	Central Falls, Rhode Island, ($21 million)	Inability to meet obligations, primarily pensions
2011	**(2) Jefferson County, Alabama ($4 billion debt)**	**Interest rate related losses**
2012	Stockton, California	Inability to pay pensions
2012	San Bernardino, California	Inability to pay pensions
2013	**(1) Detroit, Michigan ($18-$20 billion debt)**	**Inability to pay pensions, loss of revenues due to long term loss of automotive industry.**

Source: Author's calculations (bolded names are largest top three by debt)

On July 18, 2013 under approval by the governor of Michigan state, the city of Detroit filed for Chapter 9 bankruptcy protection, with an estimated debt of between $18-$20 billion, four times more than Jefferson County, Alabama, which filed a debt of $4 billion in 2011, as shown in Table 2. Detroit is also the most populated city to file for bankruptcy in the U.S., with a population of 713,777 according to the last 2010 census, more than double that of Stockton, California, which filed in 2012 (U.S. Census 2010). The city of Detroit has become uncompetitive in other industries and lost investments to surrounding municipalities that often take advantage of asymmetries and can provide lower tax rates, abatements, and subsidies to attract private companies, while still reaping the benefits of the city of Detroit's infrastructure and resources (James and Green 2009; Swallow 2010). As is apparent in Graphs 7 and 8, Detroit taxpayers face especially high tax burdens, with regard to both income and property taxes, not only in its geographical area but also as a city, Detroit having the 9th highest tax rate of U.S. cities (Frohlich and Hess 2014).

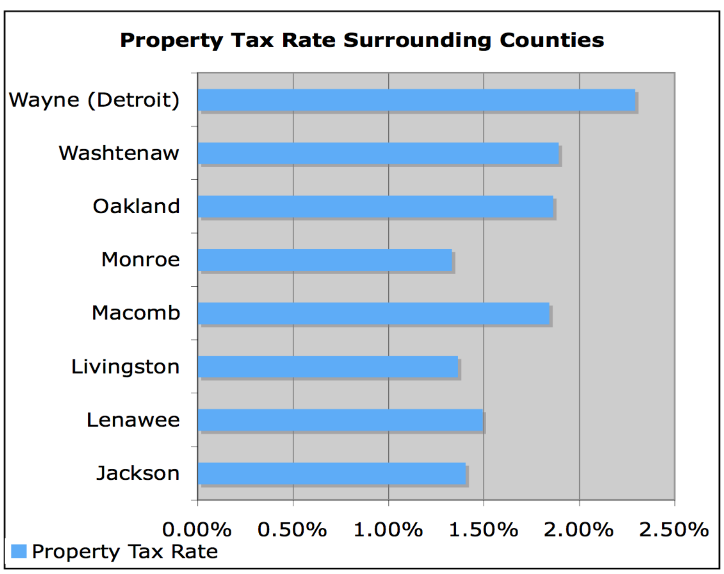
Graph 7: Income Tax in Michigan Cities



Source: Author Calculations (Michigan Department of Treasury)

This is especially concerning as both Michigan and Detroit's income tax is a flat rate, which puts a higher burden on lower income residents. Furthermore, property taxes are among the highest in U.S. cities and would be even more burdensome if the value of Detroit homes were more comparable to other U.S. cities (Ibid).

Graph 8: Property Tax Rates of Counties Surrounding Detroit



Source: Author Calculations (Data: Michigan Department of Treasury, U.S. Census Bureau)

In December 2012 after an extensive financial review by the city, the legislator approved legislation, Public Act 436, requesting that Michigan Governor, Rick Snyder, appoint a financial review team, headed by an emergency manager. This act allows a fiscally struggling city to "choose from mediation…a state-appointed emergency manager or Chapter 9 bankruptcy" (Detroit News 2014). A preliminary audit revealed that Detroit owed $327 million in accumulated deficits as of June 30th 2012. Left without an adequate restructuring plan in place, the city of Detroit declared a financial emergency in March of 2013, leading to the appointment of Kevyn Orr as "emergency manager". After his appointment, Orr publicly considered three critical options to reduce Detroit's debt burdens. First, that the city sells the Detroit Institute of Arts (DIA) collections to private buyers. Second, cuts to pensions and retiree healthcare benefits where put under review. Lastly, a proposal to slash bonds was put forth. Three primary opponents rallied against this restructuring deal, the DIA, retirees and bondholders. Finding a balance between the three, and preventing holdouts, would be critical in restructuring Detroit's debt. Table 3, reflects impact on pension funds.

Table 3: Top 5 Creditors in Detroit Bankruptcy

U.S. Bankruptcy Court: Eastern District of Michigan Creditor	Nature of Claim	Amount of Claim
General Retirement System of the City of Detroit	Pension unfunded actuarial accrued liability	2,037,000,000
Police and Fire Retirement System of the City of Detroit	Pension unfunded actuarial accrued liability	1,437,000,000
U.S. Bank N.A. as trustee and contract admin.	Pension-related Certificate of Participation ("COP") liabilities, series 2006-B	801,361,345
U.S. Bank N.A. as trustee and contract admin.	Pension-related Certificate of Participation ("COP") liabilities, series 2005-A	516,496,945
U.S. Bank N.A. as trustee and contract admin.	Pension-related Certificate of Participation ("COP") liabilities, series 2006-A	153,358,699

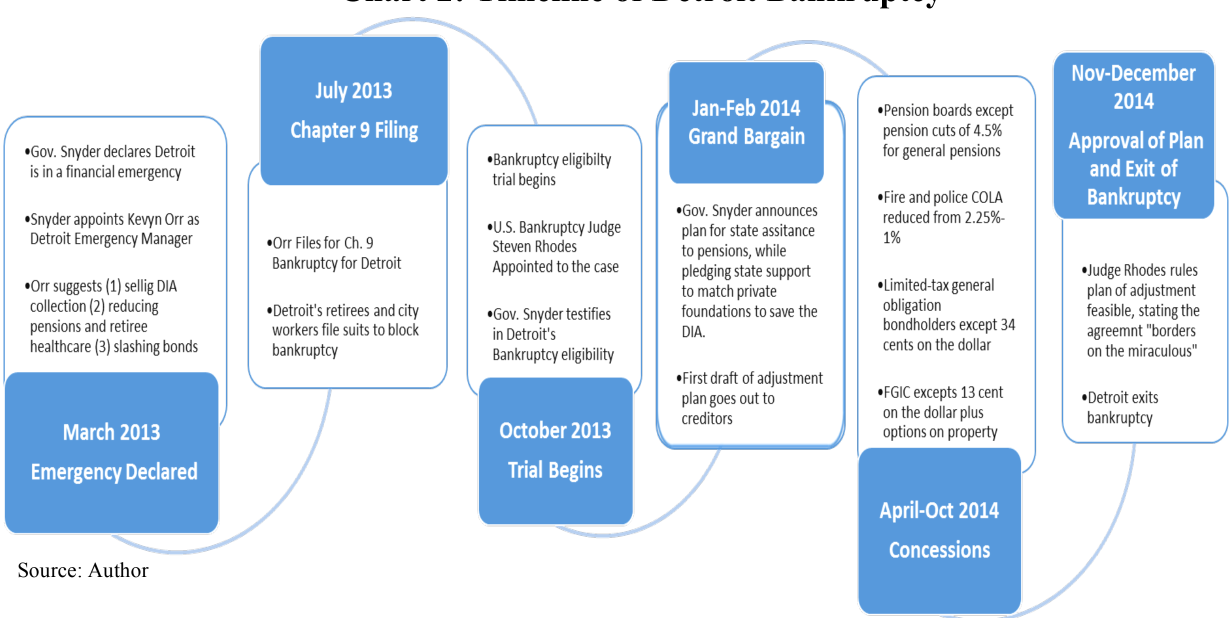
Source: Author calculation (Data: U.S. Bankruptcy Court: Eastern District of Michigan, *504 B.R. 97 (Bankr. E.D. Mich. 2013) (No. 13-53846)*

Shortly after, Orr filed a petition for Chapter 9 municipal bankruptcy in U.S. District Court's Eastern District in Detroit. The filing of a Chapter 9 suit led to the appointment of U.S. Bankruptcy Judge Steven Rhodes, who froze all lawsuits against the city on July 24, 2013, providing space for the city to begin to establish a case to warrant protection from its creditors. Moody's downgraded roughly $1.5 billion of certificates of participation to the lowest level D and cut Detroit's general obligation unlimited bond ratings to Caa3, Standard & Poor's reduced $5.42 billion in water and sewage revenue bonds to junk and Fitch Ratings dropped $1.5 billion D in response (Reuters 2013).

A critical feature of initiating Chapter 9 in subnational insolvency cases in the U.S., is that it provides a mechanism to create space for the SNG to build it's case while still assuring the proper functioning of the subnational unit by freezing lawsuits and payments to creditors until a decision is determined. In Detroit, this act allowed the city, in the short-term, to deal with some of its cash-flow problems, which were preventing it from borrowing money.

On December 3rd Judge Rhodes approved Detroit's eligibility to file for Chapter 9. This approval further continued to provide space for the city to negotiate with creditors while all other actions were frozen. It also facilitated Detroit's ability to negotiate a deal with the State of Michigan for $350 million to be put into Detroit's pension funds over two decades and procuring a pledge from the State to match $330 million in contributions from nine private foundations to aid pensioners, to prevent city-purchased art at the DIA from being auctioned. Additionally, Michigan approved $195 million in aid for Detroit pensioners, and approval from the state loan board for $1 billion in loans, including $325 million in exit financing (Ibid). On November 7th, 2014 only fifteen months after filing, Judge Rhodes approved Detroit's fiscal adjustment program and Detroit exited bankruptcy in December 2014.

Chart 2: Timeline of Detroit Bankruptcy



Source: Author

Exiting bankruptcy resulted first in, allowing Detroit to reduce $7 billion of its long-term debt from its balance sheet, second, it enabled Detroit to reinvest $1.7 billion in city service improvements, and while initial plans suggested bondholders could potentially recover as little as 10% owed, LTGOs and UTGOs settled with 34% and 74% respectively (Dolan 2014b). Most notably, Detroit convinced water and sewer bondholders to take cuts, despite the fact that their debts where guaranteed by the city's utility company, which was not in bankruptcy. This was possible through the creation of the Great Lakes Water Authority, giving more control to surrounding counties who would lease the system for $50 million a year, and allowing for better rates, which Detroit used to sell $1.8 billion in bonds to buy back existing debt. The new authority made a one-time lump sum pension payment of $386 million, which the department owed in "catch up" pension payments (Lambert 2014; Cherney 2014). Additionally, the city successfully forced bondholders who held liabilities tied to property taxes to receive less than what was fixed.

3.1 Analysis of Detroit Case

While the State of Michigan did provide considerable support to the city of Detroit, through loans to support state worker's pensions, and funds to protect the DIA, it did not explicitly bailout out Detroit. Furthermore, the U.S. federal government did not intervene or provide any form of bailout or liquidity to either the State of Michigan or city of Detroit, arguing their individual sovereignty. This is important for the U.S.'s intergovernmental commitment to a policy of non-bailout and support of the 10^{th} and 11^{th} amendments, that SNGs are largely treated as sovereign debtors. These actions supply evidence of non-bailout policy in our process-tracing model and a signal of fiscally independent SNGs.

This case reconfirmed that Chapter 9 does not favor one form of creditor over another and has been seen as a significant win to municipal debt investors from a legal perspective, as retiree's pensions will not receive special treatment under the law over unsecured bondholders (Church 2014). This is critical in the case of U.S. subnational bond markets because provisions held in the 11^{th} Amendment implicitly indicate that SNGs should be treated as sovereigns and are not backed by the CG. It is then imperative that creditors have recognized legal and administrative provisions to deal with defaults, without bailouts. While this was a triumph for municipal debt investors from a legal standpoint regarding restructuring, it also sent a signal to markets that even general obligation bonds, widely regarded as safe could be subject to losses. Moreover information pathways remained integral, providing process-tracing evidence through downgrades by major rating agencies, information flow and a non-bailout policy. Lastly, and often heavily disputed in subnational insolvency and bankruptcy is drawing the line between what assets a SNG can sell and what are essential.

Following McConnell and Picker (1993) the case of Detroit is a hybrid case in that it treats the SNG as both a political subdivision of a sovereign state, but also the agent of private citizens who inhabit it. As a political subdivision of the State of Michigan, we see the State intervening in the case of the DIA, to shelter these assets. From the perspective of the city as an agent of private citizens under insolvency, the corporation must be dissolved into its principal parts, in this case primarily real estate options. These options were allocated to some of the largest claimants, primarily Financial Guaranty Insurance (FGIC), which had a $1 billion claim. FGIC was allocated a nearly nine-acre piece of land (3.6 ha) where a stadium would be demolished for redevelopment to satisfy their remaining liabilities (White 2014). This highlights the unique potentials of Chapter 9, which provides debtors the capacity to mitigate differences and prevent holdouts in restructuring by shifting opponents to the restructuring and reinvestment plan into critical partners and stakeholders for the city's future success, and provides evidence of increased communications attained through insolvency mechanisms.

Additionally, a much broader and relatively unacknowledged outcome resulted from Detroit's case. The introduction of H. Res. 41 on January 21, 2015, states, "that the Federal Government should not bail out State and local government employee pension plans or other plans that provide post-employment benefits to State and local government retirees" (H.R. 41, 114th Cong. 2015). This bill, if passed, would reinforce the CGs commitment to no category of bailout.

4. Insolvencies of the Federal Republic of Germany

4.1 Insolvency of the Land of Bremen

Subnational bond issuances in Germany are now roughly worth 350 billion Euros, reaching equal value to that of the Netherlands and quintuple what was held in 2000 (Zipfel and Zimmer 2013).

“20% of all public-sector bonds outstanding have been issued by the Länder,” which is nearly double that amount in 2000 (Ibid).

In 1988, the ‘Stadtstaaten’ of Bremen, appealed to the FCC requesting a ruling to urge the CG to provide support to manage their deteriorating public finances and increase margins of public debt. Bremen claimed its high levels of debt were caused by external circumstances, qualifying them for assistance under Article 104a, par. 4 or ‘disturbances of general economic equilibrium’. Additionally, Bremen argued it could not maintain its constitutional duties to provide equal living standards to its citizens and was forced to violate Art. 115 of the German Federal Constitution, with regard to public debt ratios to maintain public provisions, such as welfare payments. The Land of Bremen simply ignored their constitutional debt control provisions and even used the unconstitutionality of their deficits to pressure the FCC to release bailout funds.

In 1992, the FCC ruled in support of Bremen’s case, arguing that equal living standards throughout Germany must be maintained under Art. 109 para. referenced 2 GG (Bundesverfassungsgerichts 2006). The federal government in 1993 signed a contract providing transfers to Bremen until 1998, to reduce excessive debt. Transfers to Bremen were equal to roughly 22.5% of total expenditures (von Hagen *et al.* 2000). This contract stipulated, first, that Bremen must limit expenditure growth to a maximum of 3% per year, later reduced to 2% in 1997, and habitually missed by 2-3% (Ibid). Secondly, transfers must be used to reduce public debt. Third, that savings in interest payment only be allocated for additional infrastructure investment or additional debt servicing. Fourth, Bremen was required to submit detailed reports outlining their fiscal positions. Lastly, Bremen would be placed under extensive review in 1997 to determine its fiscal standing.

Table 4: Federal Government Transfers to Bremen (millions of DM)

	1994-1998 (Per Year)	1999	2000	2001	2002	2003	2004	1994-2004 Total
Bremen	1.600	1.200	1.050	900	750	600	500	13.000

Source: Federal Ministry of Finance, Seitz 1999

In 1999, Bremen was offered an additional bailout contract until 2004, with the explicit provision that no bailouts would be offered thereafter.

Graph 9: Unemployment Bremen

Source: Author (Data: Statistisches Landesamt Bremen)

Graph 9 shows rising unemployment throughout the 1980s leading to a bailout request in 1988. This increase resulted primarily from Bremen's primary reliance on shipbuilding, which was damaged during the oil price shocks in 1973-1974. From 1975 to 1995 Bremen lost 6.1% of its population (Seitz 1999, 14). Bremen never recovered from this crisis and has become heavily dependent on bailouts.

Table 5: Länder Per Capita Debt and Interest Payments as % of Total Expenditures

Länder	Per Capita Debt in DM		Interest Payments as a % of Tot. Expenditures	
	1988	1992	1988	1992
Bremen	19,150	24,050	14.6%	15.3%
Saarland	11,650	14,730	13.0%	14.7%
Hamburg	10,760	12,164	9.6%	8.9%
Nordrhein-Westfalen	7,780	8,510	9.3%	8.7%
Schleswig-Holstein	7,710	9,120	8.8%	9.0%
Nidersachsen	7,260	8,180	8.7%	8.2%
Rheinland-Pflaz	7,150	7,960	8.9%	8.5%
Hessen	7,030	7,920	6.8%	7.0%
Baden-Wurttemburg	4,980	5,730	5.3%	5.3%
Bayern	3,820	4,100	4.71%	4.36%

Source: Data Seitz 1999

Table 5 figures represent consolidated data of both state and local governments since Bremen does not make transfer payments to lower government units. Table 5 indicates that in 1988 and 1992 when Bremen filed requests from the Court and received judgments, that these debt ratios where far above those of other German Länder. These figures were pivotal in the FCC's decision. The FCC estimated that Bremen would require 8.5 billion Deutsche Mark (DM) to be fiscally on track and meet the West German average (Ibid, 14).

4.2 Budgetary Distress in the Land of Berlin

Before World War II Berlin was both a thriving financial and industrial center, and after WWII received significant subsidies to make it the "showcase of the West." Since the fall of the Berlin wall in 1989, Berlin has struggled to regain a semblance of its special status and prestige as a symbol of modernism.

After the 1990 reunification, Berlin and the rest of Eastern Germany were not incorporated into the fiscal equalization system until the 1993 Federal Consolidation Program, instituted in 1995. Despite Berlin's inclusion, its debt has continued to rise, largely resulting from costly infrastructure projects and an unwieldy public administration, leading to ballooning public finances, which lacked political will and relied on past subsidies (Economist 2006). Berlin's poor budgetary performance peaked in 2000. In 2003, Berlin filed a claim for financial assistance for 35 billion Euros, significantly larger than Bremen and Saarland's combined 15 billion Euro bailout request to the FCC. In 2005 Berlin had the highest interest payment-to-revenue ratio in Germany, while from 2000 to 2005 Berlin had the highest growth rate of per-capita debt of German Länder (Heppke-Falk and Wolff 2007). In 2006, Berlin owed more than 60 billion Euros, roughly 70% of its GDP and three times the average of other Länder (Economist 2006; Homola 2006). Between 2003 and 2006 Berlin's finance minister, Thilo Sarrazin, cut Berlin's three universities and opera house budgets by negotiating salary cuts and increasing working hours. In 2006, Sarrazin proposed a balanced budget of roughly 18 billion Euros, excluding 2.4 billion Euros a year of interest payments (Ibid). Berlin, lacking legal authority to increase revenues through tax rates or reduce costs by cutting services, was limited by the German fiscal federal structure. On October 19th 2006, the FCC ruled against Berlin's case, diverging from their previous rulings for Bremen and Saarland. The FCC acknowledged Berlin's increasing budget crises but pointed out that Berlin had habitually foregone Art. 87 2m, sentence 2, pertaining to limits on borrowing.

The court further gives four reasons why Berlin has had long-term budgetary hardships, but was not in a state of 'extreme financial distress' (Bundesverfassungsgerichts 1996):

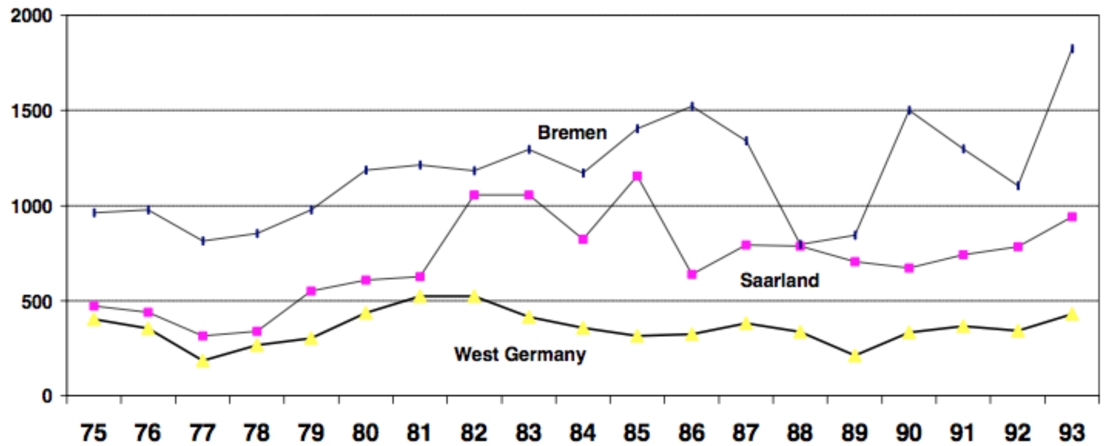
1. During the time of division Berlin was primarily financed through federal aid.
2. After reunification Berlin was, for a number of years, without adequate arrangements in the regular federal funding system.
3. Berlin's highly subsidized economy under reunification terms is no longer competitive in many respects.
4. This economic weakness has brought about enduring economic difficulties and lasting structural tax weakness.

4.3 Analysis of Insolvency of Bremen and Berlin

Often if SNGs are too heavily reliant on fiscal transfers from the CG and incapable of either raising tax rates or expanding their base, they may resort to borrowing to meet increased expenditures as observed in both Bremen and Berlin, potentially leading to excessive debt and bailout situations, additionally supporting evidence needed to validate. Literature suggests this scenario creates both an issue of accountability and moral hazard, as it effectively compensates SNGs for poor fiscal performance through large bailouts. This runs contrary to the literature arguing that excessive debt is the product of poor fiscal management combined with implicit bailouts. Germany as shown, is not simply a common pool problem between SNGs, but a fiscal bondage for some and disincentive for others to increase revenues even where they can, evidencing limitations of horizontal equalization and lack of autonomy.

Graph 10 illustrates that Bremen had exceptionally high deficits from 1975 to 1993, suggesting not a singular event driven disturbance, but a more structural fiscal crisis. In rigid fiscal federal systems like Germany, Länder are left with few alternatives when fiscally distressed than taking on more debt to meet preordained service requirements, evidencing problems due to lack of autonomy.

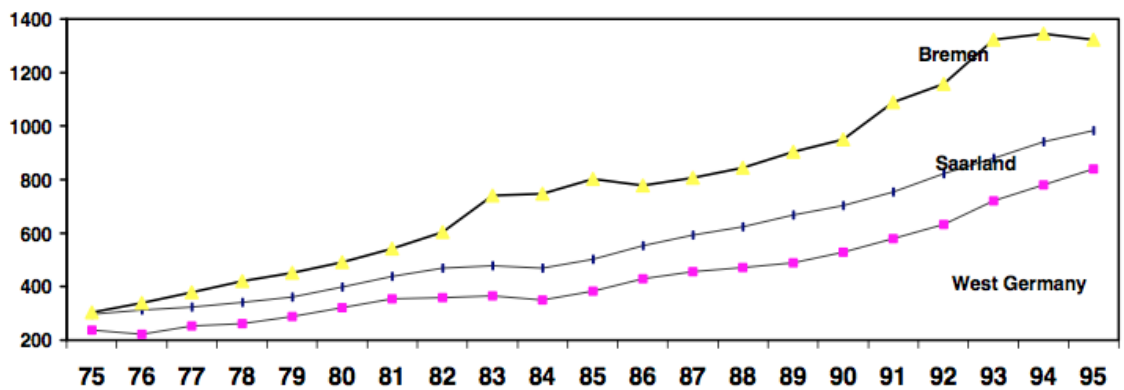
Graph 10: Per Capita Deficit in DM Bremen Compared to West German States



Source: Seitz 2000

Welfare payments, as seen in Graph 11, can be seen as greatly rising in conjunction with a rise in unemployment.

Graph 11: German Welfare Transfer Payments (Per Capita)



Source: Seitz 2000

During this period of increased crisis, scholars such as Seitz (1999) and Rodden (2001; 2005) have both suggested that Bremen's government expended sizeable amounts of capital on reports to document and market their fiscal stress to garner endorsements from the other Länder and appeal to the CG. This provides evidence that Bremen was limited by the rigidity of the system and forced to solicit assistance.

The goal of the bailout program was to reduce per capita debt to roughly 11.500 DM by the end of the 1998 fiscal year. However, by the end of 1998 per capita debt in Bremen was roughly 16.600 DM, approximately the same as Bremen's 1992 figure (Seitz 1999; von Hagen et al.

2000; Rodden 2005; 2006), indicating that the bailout program was unsuccessful. Despite a clause in the last contract denying future bailout transfers, in 2005 Bremen had already begun the process of requesting more financial assistance (Buttner 2006). Constituting evidence of unclear bailout protocol.

Unlike previous transfers to local governments, bailout transfers to Bremen came without any provisions for payback to the CG (Seitz 1999). The FCC upheld the principles of harmonization and solidarity of the German federal system, stressing shared support between Länder and the CG and between Länder, as necessary in times of 'disturbances of general economic equilibrium.'

Seitz (1999, 23) suggests that rising debt levels and a lack of adherence to Berlin's own constitutional budget restraints stemmed from the 1992 FCC ruling, leading Berlin to increase its per capita debt from 4.000 DM in 1991 to almost 17.000 DM in 1998, and rising from having the lowest debt of German city-states to the highest (Ibid 1999). Both Bremen and Berlin can be observed as following the stages of the 'Bailout Game', routinely choosing not to restructure at each stage and to deliberately discount their constitutional restrictions by increasing their debt in the anticipation of a bailout. Berlin's situation is especially salient in this regard. The negative impact of bailout expectations is evidenced here.

Reaction by Financial Markets

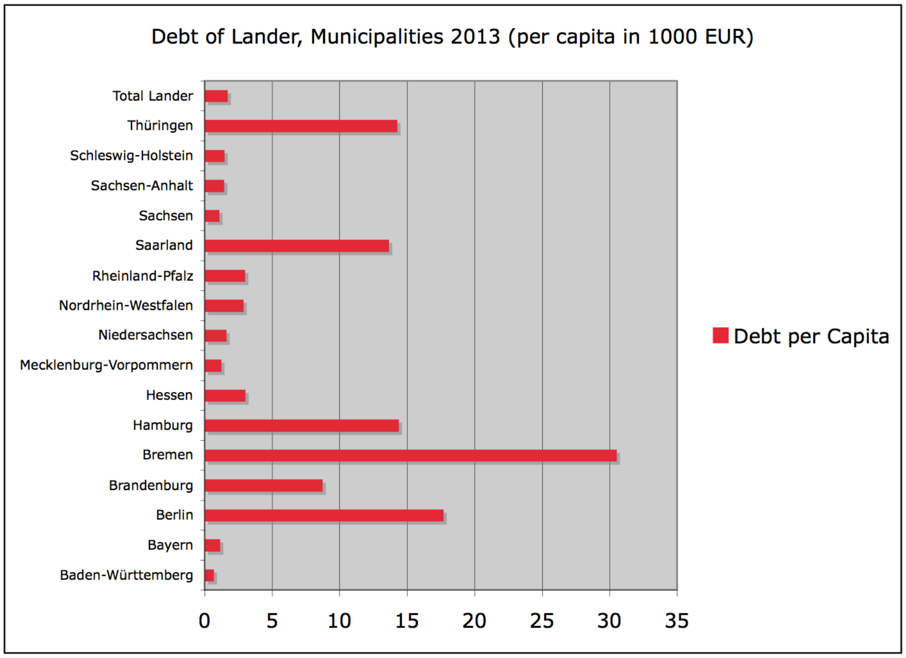
The rulings of the FCC in the cases of Bremen and Berlin have signaled that, in Germany there is a high probability of bailout for lenders should SNGs' fall into financial distress. Fitch IBC in 1999 concluded that because of Germany's highly interconnected federal system, all German Länder bonds would be considered to have equal default risk as the federal government, which led to all Länder receiving the highest ranking of triple-A (Fitch IBCA 1999). These statements suggest verification of an information break down with creditors and the irrelevance of debt controls with bailout expectations.

Fitch (1999) suggests three core reasons for awarding these rankings, all of which ironically foster moral hazard as outlined in this analysis:

1. The intertwined nature of the German federal system both politically and fiscally.
2. The principle of harmonization and solidarity dictated by the German Constitution and reinforced by this 1992 FCC ruling.
3. The adherence to a strict horizontal fiscal equalization system.

While the FCC ruled against Berlin in 2006, arguing Berlin was not in a position of 'extreme financial distress' at that time, the FCC did not exclude the possibility of a bailout in the future. Heppke-Falk and Wolff (2007) and Zipfel and Zimmer (2013) suggest that this outcome represents a negative surprise to lenders, who expected a decision to support Berlin's claims for additional funds, as in Bremen. "On the first day after the hearing, the yield spread fell from above 14 to almost 9 bps" indicating initially investors expected a bailout and began reducing their premium on Berlin government bonds as a sign of lower risk (Heppke-Falk and Wolff 2007, 16). After six months of hearings on Berlin's bailout case, yield spreads returned roughly to where they had been previous to deliberations, showing that investor's attitudes stayed relatively unchanged despite Berlin's declined request. Fundamentally this outcome demonstrates, (1) that investors still view a bailout for Berlin as probable should debt levels get higher, reflected by no increase in premium on Berlin municipal bonds and (2) that Germany and the FCC potentially have begun to reevaluate their position of CG bailouts, with Berlin being the first signal of communication to SNGs of a new commitment towards a non-bailout position of the CG.

Graph 12: Länder Debt Per Capita



Source: Author (Data: Statistisches Bundesamt)

Despite Länder such as Bremen and Berlin historically having received more than double the amount of supplementary grants from the CG and Bremen receiving a bailout, both remain on the verge of insolvency as shown in Graph 12, with the highest debt ratios.

5. Conclusions and Recommendations

5.1 Assessment of Hypotheses

Assessing H_{1A}, the cases involved indicate that providing more autonomy in setting the tax rate and base increased the city of Detroit's ability to operate without CG capital even in the case of bankruptcy. This is contrasted by the heavy reliance of both Bremen and Berlin on the German fiscal equalization system and direct federal transfers. This reliance, not present in the U.S., as federal transfers are relatively small in comparison, confirms H_{1B}, that in federal countries, those with strong federal horizontal tax equalization systems are more likely to have revenue dependent SNGs than those without. Furthermore, moral hazard has not diminished in either Länder as they still have significant debt burdens, even in Bremen post-bailout. This strengthens both H_{1A} and H_{1B} and the dominant hypothesis H_1, that in federal countries, SNGs that are independent in revenue generation are less prone to moral hazard in the system.

H_1 can therefore be considered valid for this analysis. Although relevant, H_1 is not confirmed, nor does it eliminate potential rival hypotheses and both can be categorized as 'straw-in-the-wind' by table _. The cumulative evidence, however, would add up to what Collier (2011, 825-826) refers to as, "important affirmative evidence" stating, "[I]f a given hypothesis passes multiple straw-in-the-wind tests, it adds up to important affirmative evidence.

In the U.S., there is a clear signal that the CG considers SNGs, as sovereign borrowers and therefore will not guarantee debt or provide bailouts. In the German case, despite constitutional controls on borrowing providing clear information to investors, the opposite signal is given through Articles 107 and 104a, which suggest implicit bailouts. Furthermore, the within-case of Berlin provides conflicting signals, for even after a bailout denial and an increasingly dire fiscal position; investors did not punish Berlin by making borrowing more costly, suggesting the mechanism had broken down. This clearly contrasts Detroit, which experienced downgrades by all major rating agencies. Germany's adoption of a 'debt break' reaffirms a signal limiting bailouts, however it is too soon to determine its impact on investors. The U.S. case affirms the relevance of H_2 that in federal countries, greater information pathways between SNGs and the CG reduces moral hazard in the system and H_{2A} that in federal countries, rule-based controls on borrowing only provide greater information in intergovernmental relations if there is an explicit non-bailout policy. Both are demonstrated in Detroit's successful use of Chapter 9. Likewise, the case of Germany confirms H_{2A} as the expectation of bailout perpetuated insolvency in both Bremen and Berlin. In the Detroit case, we find that Chapter 9 as an ex-post insolvency tool produced significant information channels allowing for a successful restructuring without a CG bailout, supporting H_{2B}. In Germany, both Bremen's, continuing as one of the most indebted Länder in the federation with a bailout and Berlin's inability to reduce its debt without a bailout, also serve to validate this hypothesis. Additionally, Berlin's indebtedness after bailout denial suggests a lack of space to do so without proper insolvency mechanisms. As seen here, the cumulative affect of Germany's wavering bailout policies and lack of insolvency tools and space for restructuring, promotes moral hazard.

This analysis suggests that both H_1 and H_2 have been strengthened, although they do not have the strength to eliminate other potential hypotheses following the method of process-tracing. This thesis concludes that the analysis supports the validation of the proposed hypotheses as relevant.

5.2 Conclusions

The U.S. and Germany, as shown in this MA thesis and the within-case assessments of the U.S. city of Detroit and the German city-states of Bremen and Berlin, although sharing similarities, demonstrates that differing fiscal federal structures and bailout expectations have profound affects on their predispositions towards moral hazard.

Following the precepts of these hypotheses can assist in the prediction of current trends and be used as a means of diverting moral hazard by putting in place insolvency mechanisms similar to Chapter 9. This analysis confirms that insolvency mechanisms and constitutional debt controls containing a clear non-bailout policy, provide valuable information pathways in intergovernmental relations, alleviating strain between not only borrowers and lenders but, the CG and SNGs. Establishing the commitments of the CG to its SNGs is vital in determining to what extent and how SNGs will accumulate debt. Additionally, this study supports Rodden and Liu's views that clear and predictable laws and institutions need to establish expectations and burden sharing arrangements between the SNGs and creditors as well as the commitments of the center under a federal arrangement (Rodden 2006, Liu 2008). The U.S.'s, Chapter 9 provides such a framework, which continually becomes more defined and predictable with each bankruptcy. East Cleveland, Ohio has acknowledged Detroit's success and stated its desire to follow a similar path.

In Europe, many states are beginning to reevaluate their debt controls and consider similar insolvency frameworks to accommodate fiscally weak SNGs. This can also be observed from one interpretation of the FCC's ruling in the case of Berlin, and Germany's adoption of a 'debt-break.' Scholars, politicians and economist are beginning to reassess Germany's CG guarantee provisions, and the German Länder's implicit debt guaranteeing of Ländesbanker, after observing the fallout of the southern Austrian province of Carinthia. Carinthia went bankrupt due to debt guarantees on the now defunct lender, Hypo Alpe Adria, where guarantees were found to be equivalent to almost five times the province's 2014 operating revenue (Reuters 2015). Austrian officials stated, "No Austrian province has ever gone bankrupt and there is no legislation on how to handle such an event" (Ibid). While this may seem like an isolated event, the majority of the world's countries do not have ex-post insolvency mechanisms for SNGs to deal with situations similar to Carinthia. This thesis offers valuable insights for the prevention of similar manifestations of moral hazard worldwide.

5.3 Policy Recommendations

U.S. Recommendations

1. Chapter 9 should balance all parties, by allowing lenders to submit debt-restructuring plans to the court thereby increasing information flow and efficiency. Chapter 9 can be overly protective of the borrower, leaving lenders in a disadvantaged position but care should be taken to use well-defined language granting submissions to prevent compromising sovereignty.

2. Tracking the interest payments on public debt-to-revenue ratio and allowing for earlier intervention of municipal insolvencies would allow restructuring to occur earlier, lessening the burden for both parties. In U.S. Section 109(c), a municipality must be insolvent on a cash-flow basis, in order to file for bankruptcy. This is poor for both debtors and creditors, because it postpones reorganization, while the debtor builds up more debt at increasing interest rates, and likely means creditors will lose more on their investment in bankruptcy. Furthermore, due to special protection on municipal assets, a balance-sheet insolvency would also be insufficient. This criterion could be eliminated from the conditions of Chapter 9, making it more flexible.

3. Chapter 9 should give lenders that provide financing priority in debt negotiations to attract financing for restructuring. This would keep restructuring at the municipal level, preventing municipalities from losing out on new financing and being reliant on the CG for financing after insolvency.

Germany Recommendations

1. Germany must decide which system it wants to adhere to in the future, (1) a more entrenched market-based approach as practiced in the U.S., which does not regulate

borrowing and decentralizes the majority of revenue generation to SNGs, but has a very explicit commitment to no bailouts or (2) a more administrative approach, in which there are increased regulations on borrowing, and revenue extraction but guarantees bailouts from the center in cases of insolvency. This appears to be the direction Germany is heading.

2. Provide greater revenue decentralization to the Länder. This would allow Länder under fiscal distress and insolvency to meet increasing expenditures without borrowing, increasing flexibility and resistance to economic and fiscal shocks.

3. A definition and the costs of financial distress of SNGs should be clearly described in a legal municipal bankruptcy code, potentially fashioned after the U.S.'s Chapter 9. Currently without a legal definition it is exceedingly difficult to acknowledge the situation let alone begin to remedy it. To avoid the stigma of declaring insolvency or bankruptcy, Germany could adopt a debt restructuring mechanism that involves a 'good faith' condition approved by the court, which would facilitate municipalities to restructure without explicitly declaring insolvency.

General Recommendations

This analysis attempted a more empirical study of the bond prices in relation to lender moral hazard surrounding cases of insolvency in both the U.S. and Germany, but the author was unable to achieve a broad enough sample and find sufficient data from publicly accessible sources. This is a major problem for two reasons; first, for systems attempting to use a market approach to regulation it is essential that pricing information as well as information on borrowers be easily accessible in a timely fashion. Second, as the issuers of SNG bonds are public institutions, it is essential from a position of accountability and transparency to the public, that this information is easily accessible to the public, who are ultimately responsible for these debts.

Bibliography

Ahrend, Rudiger, Marta Curto-Grau and Camila Vammalle, (2012). "Passing the Buck? Central and Sub-National Governments in Times of Fiscal Stress." OECD.

Angelis, Michael De, and Xiaowei Tian, (2013). "United States: Chapter 9 Municipal Bankruptcy- Utilization, Avoidance, and Impact," in *Until Debt Do Us Part: Subnational Debt, Insolvency, and Markets,"* ed. by Otaviano Canuto and Lili Liu, Washington D.C.: The World Bank.

Federal Republic of Germany Basic Law, Art. 87

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______________________________________ 107

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Bayoumi, T., M. Goldstein, and G. Woglom, (1995). "Do Credit Markets Discipline Sovereign Borrowers? Evidence from U. S. States," *Journal of Money, Credit and Banking* Vol. 27 Part 1 (November) 1046-59.

Blankart, C. (1999). "The Process of Government Centralization: A Constitutional View." Berlin, Germany: Humboldt University. Manuscript.

Bohn, Henning and Robert P. Inman, (1996). "Balanced Budget Rules and Public Deficits: Evidence from the U.S. States," NBER Working Paper Series, National Bureau of Economic Research*,* April.

Bulow, Jeremy, Kenneth Rogoff, (1989). "Soverign Debt: Is to Forgive to Forget?" *The American Economic Review,* Volume 79, Issue 1(March), 43-50.

Bundesverfassungsgerichts, (2006). "zum Urteil des Zweiten Senats des Bundesverfassungsgerichts vom, October 19.

Buttner, Thiesse, (2006). "The Debt Hanging Over Berlin," *Center for Economic Policy,* November 03.

Braun, Dietmar, (2003). "Contrasted Cases: Canada and Germany," in *Fiscal Policies in Federal States*, Aldershot: Ashgate.

Cherney, Mike, (2014). "Bankrupt Detroit Sells $1.8 Billion in New Water-and-Sewer Bonds," *The Wall Street Journal*, August 26, 2014 (accessed), May 07, 2015, http://www.wsj.com/articles/bankrupt-detroit-sells-1-8-billion-in-new-water-and-sewer-bonds-1409092035.

Christoff, Chirs, and Brian Chappatta, (2014). "Detroit Suburbs Balk at Spinning Off Water Works to Help City," *Bloomberg*, January 28, (accessed), June 02, 2015, http://www.bloomberg.com/news/articles/2014-01-28/detroit-suburbs-balk-at-spinning-off-water-works-to-help-city.

Church, Steven, (2014). "Detroit Bankruptcy Taught Muni Investors Painful Lessons," *Bloomberg*, November 7, (accessed), April 20, 2015 http://www.bloomberg.com/news/articles/2014-11-07/detroit-bankruptcy-taught-muni-investors-painful-lessons.

Collier, David, (2011). "Understanding Process Tracing," *Political Science and Politics* 44, No.4 pg, 823-30.

Detroit News, (2014). "Timeline: Detroit's Road through Bankruptcy," *The Detroit News*, November 7, (accessed), May 23, 2015, http://www.detroitnews.com/story/news/local/wayne-county/2014/11/07/timeline-detroits-road-bankruptcy/18654077/ .

DiSalvo, Daniel, (2013). "Government Crowded Out: How Employee Compensation Costs are Reshaping State and Local Government," *Manhattan Institute for Policy Research*, Civic Report No. 77, April.

Dolan, Matthew, (2014a). "Judge Approves Detroit's Bankruptcy Exit Plan," *The Wall Street Journal*, November 7.

____________ , (2014b). "Detroit Reaches Bankruptcy Settlement With Some Bondholders," *The Wall Street Journal*, June 13th.

Economist, (2006). "Berlin's Finances, Painful Relief" *The Economist*, April 27th.

_________, (2011). "Tie Your Hands, Please," *The Economist,* December 10th.

Escolano, Julio, and Luc Eyraud, Marialuz Moreno Badia, Juliane Sarnes, and Anita Tuladhar, (2012). "Fiscal Performance, Institutional Design and Decentralization in European Union Countries, IMF Working Paper, Fiscal Affairs Department.

Fitch IBCA, (1999). "Press Release: Germany" London: March 25th.

Frohlich, Thomas, C. and Alexander E.M. Hess, (2014). "Top 10 Cities with the Highest Tax Rate," *USA Today*, February 17.

George, Alexander L. and Andrew Bennett, (2005). *Case Studies and Theory Development in the Social Sciences*, Cambridge MA: MIT Press.

Gerring, John, (2007). *Case Study Research: Principles and Practices*, Cambridge University Press.

Granof, Michael H., (1984). "A Fundamental Flaw of Debt Limitations for State and Local Governments," *Journal of Accounting and Public Policy*, Vol. 3 (Winter) 293–310.

Grembi, Veronica and Tommaso Nannicini and Ugo Troiano, (2014). "Policy Responses to Fiscal Restraints: A Difference-in-Discontinuities Design." *Harvard Economic Department* (February).

Heppke-Falk, Kirsten H. and Guntram B. Wolff, (2007). "Moral Hazard and Bailout in Fiscal Federations: Evidence for the German Länder," *Deutsche Bundesbank*,.

Homola, Victor, (2006). "Germany: No Bailout for Debt –Ridden Capital," *New York Times*, October 20, 2006.

H.R. 41, 114th Congress, 1st session (2015)

James, E, and Green, N, (2009). *Planning Local Economic Development: Theory and Practice*, Thousand Oaks, CA: Sage Publications, Inc.

Lambert, Lisa, (2014). "Detroit, Counties Reach Deal Over Water, Sewer Authority," *Reuters*, September, 10, (accessed), May 23, 2015, http://www.reuters.com/article/2014/09/10/us-usa-detroit-bankruptcy-water-idUSKBN0H41Q420140910.

Lane, Timothy D., (1993). "Market Discipline," Staff Papers, International Monetary Fund, Vol. 40 (March) 53–88.

Liu, Lili and Michael Waibel, (2008). "Subnaitonal Insolvency: Cross-Country Experiences and Lessons," Policy Research Working Paper 4496, The World Bank: Washington D.C. January.

McConnell, Michael and Randal C. Picker, (1993). "When Cites Go Broke: A Conceptual Introduction to Municipal Bankruptcy," 60 University of Chicago Law Review 425.

Michigan Department of Treasury, (2015). "Michigan Taxes: Individual Income Tax", accessed June 02, 2015 http://www.michigan.gov/taxes/0,4676,7-238-43715-153955--F,00.html.

Moringiello, Juliet M., (2014). "Goals and Governance in Municipal Bankruptcy," *Washington and Lee Law Review*, Vol. 71, Issue 1, Art. 10 (Winter) 403-485.

Oates, Wallace E., (2004). "An Essay on Fiscal Federalism." In *Fiscal Federalism and European Economic Integration*, ed. by Mark Baimbridge and Phillip Whyman, London and New York : Routledge.

Poterba, James M. (1995). "Balance Budget Rules and Fiscal Policy: Evidence from the States." *National Tax Journal* Vol. 48, No. 3, (September), 329-36.

Rodden, Jonathan A., (2002). "The Dilemma of Fiscal Federalism: Grants and Fiscal Performance around the World," *American Journal of Political Science*, Vol. 46, No. 3, (July) 670-687.

Rodden, Jonathan A. (2001). "And the Last Shall be First: Federalism and Fiscal Outcomes in Germany," *Presented Harvard University,* October 10.

____________, (2005). "And the Last Shall be First: Federalism and Soft Budget Constraints in Germany," *MIT Working Paper*.

_______________, (2006). *Hamilton's Paradox: The Promise and Peril of Fiscal Federalism*, Cambridge University Press.

Reuters, (2013). "Moody's: Detroit Bankruptcy Filing Credit Negative," *Reuters*, July 18. (accessed) May 02, 2015, http://www.reuters.com/article/2013/07/19/us-usa-detroit-moodys-idUSBRE96I02D20130719.

_______, (2015). "Carinthia Asks Vienna for Financial Support Over Heta," *Reuters*, April 23, 2015. Accessed May 31, 2015 http://www.reuters.com/article/2015/04/23/austria-heta-carinthia-idUSL5N0XK2GG20150423.

Swallow, D. E., (2010). "Does Regional Intergovernmental Cooperation Improve Economic Development," Capstone Project, Eastern Michigan University, Ypsilanti.

Seitz, Helmut, (1999). "Subnational Government Bailouts in Germany," ZEI *Center for European Integration Studies*, No. B20.

___________, (2000). "Subnational Government Bailouts in Germany," *Inter-American Development Bank*, Washington D.C. November.

Singh, Raju and Alexander Plekhanov, (2005). "How Should Subnational Government Borrowing Be Regulated? Some Cross-Country Empirical Evidence," IMF Working Paper: Fiscal Affairs Department, March.

Statistisches Bundesamt, (2015). "Länder Debt" accessed May 23, 2015, https://www.destatis.de/EN/FactsFigures/SocietyState/PublicFinanceTaxes/PublicFinance/DebtFinancialAssetsPublicBudgets/Tables/Debt300614.html.

Statistisches Landesamt Bremen, (2015). "Unemployment" accessed May 01, 2015, http://statistik.bremen.de/sixcms/detail.php?gsid=bremen65.c.8409.de.

Stehn, Seven Jari and Annalisa Fedelino, (2009). "Fiscal Incentive Effects of the German Equalization System," *IMF*, Washington D.C.

Stotsky, Janet G. and Emil M. Sunley (1997). "United States," in *Fiscal Federalism in Theory and Practice*, ed. by Ter-Minassian Washington: International Monetary Fund.

Ter-Minassian, Teresa, ed., (1997). *Fiscal Federalism in Theory and Practice*, Washington: International Monetary Fund.

Ter-Minassian, Teresa, and Jon Craig, (1997). "Control of Subnational Government Borrowing," in *Fiscal Federalism in Theory and Practice*, ed. by Ter-Minassian Washington: International Monetary Fund.

Tocqueville, Alexis de, (2003). *Democracy In America*, Barnes & Noble Publishing, Inc.

US Census Bureau, (1975). "US Census Bureau Bicentennial Edition: Historical Statistics of the United States, Colonial Times to 1970" Washington D.C.

_________________, (2010). "Table 1. Annual Estimates of the Population of Metropolitan and Micropolitan Statistical Areas: April 1, 2010 to July 1, 2011," *US Census Bureau*, 2011. (accessed) May 24, 2015. http://www.census.gov/popest/data/metro/totals/2011/tables/CBSA-EST2011-01.csv.

________________, (2011). "US Census Bureau Statistical Abstract of the United States" Washington D.C., (accessed) June 05,. http://www.census.gov/govs/local/.

_________________, (2012). "State and Local Government Finances and Employment," *2012 census of Governments,* Washington D.C..

________________, (2013). "American Community Survey 2005-2012," Washington D.C.

_______________, (2015). "Definitions" Washington D.C. (accessed) April 01, https://www.census.gov/econ/susb/definitions.html.

U.S. Constitution 11th Amendment, Article III, Section 2, Clause I.

_______________ 10th Amendment

U.S. Bankruptcy Code: Title 11, Chapter 9, section 101 (32)(C).

____________________________________, section 109(c)

U.S. Bankruptcy Court: Eastern District of Michigan, (2015). "List of Creditors Holding 20 Largest Unsecured Claims, In re City of Detroit", *504 B.R. 97 (Bankr. E.D. Mich. 2013) (No. 13-53846)*, (accessed) May 01, http://www.mieb.uscourts.gov/sites/default/files/detroit/docket15.pdf.

Vigneault, Marianne, (2007). “Grants and Soft Budget Constraints” In *Intergovernmental Fiscal Transfers: Principals and Practice*, edited by Robin Boadway and Anwar Shah, 133-171. The World Bank.

von Hagen, and Jürgen, Massimo Bordignon, Matz Dahlberg, Bhajan S. Grewal, Per Petterson, Helmut Seitz, (2000). “Subnational Government Bailouts in OECD
Countries: Four Case Studies,” *Inter-American Development Bank Research Network*
Washington D.C.

White, Ed, (2014) “Detroit Gives Arena Land to Creditor in Bankruptcy,” *The Washington Times*, October 16.

Wildasin, David E., (2004). “The Institutions of Federalism: Towards an Analytical Framework.” *National Tax Journal* Vol. 57, No. 2: Part 1 247-72.

World Bank, (2000) “World Development Report: Entering the 21st Century. New York, Oxford University Press.

Zimmermann, Klaus, (2014) “Germany’s Hypocrisy on Pensions will Cost Money and Friends,” *Financial Times*, May 22.

Zipfel, Frank, (2011). “German Finances: Federal Level Masks Importance of Länder,” *Deutsche Bank Research*, May 27.

Zipfel and Zimmer, (2013). “Länder Bonds: What drives the Spread Between Federal Bonds and Länder Bonds?,” *Deutsche Bank Research*, December 05.