INTRODUCTION

It is a common misperception that a debtor must prove insolvency in order to qualify for relief under the Bankruptcy Code. But only municipal debtors seeking relief under Chapter 9 must do so. It is this Chapter 9 insolvency requirement, more specifically the judicially created service delivery insolvency test, with which Professor Gillette takes issue in How Cities Fail: Service Delivery Insolvency and Municipal Bankruptcy.

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2. See In re City of Stockton, 493 B.R. 772, 789 (Bankr. E.D. Cal. 2013) (stating that the service delivery insolvency test “focuses on the municipality’s ability to pay for all the costs of providing services at the level and quality that are required for the health, safety, and welfare of the community”). See generally Clayton P.
The Bankruptcy Code provides that a municipal debtor is insolvent if it is “generally not paying its debts as they become due unless such debts are the subject of a bona fide dispute” or the municipal debtor is “unable to pay its debts as they become due.” Courts consider the first alternative of the Code’s definition—general nonpayment of debts—to be a measure of current insolvency. The second alternative—inability to pay as debts become due—is forward looking and “looks to future inability to pay.” The few courts that have used the service delivery insolvency test have done so in determining the municipality’s future inability to pay under the Code’s second alternative insolvency definition.

Insolvency, however, is only one of six statutory requirements that a debtor must satisfy in order to be eligible for relief under Chapter 9. Several of the Code’s statutory requirements, such as insolvency and good faith, require a fact-intensive inquiry, which provides creditors with an incentive to object to the Chapter 9 filing and delays the municipality’s efforts to reorganize its debts. Complicated and ill-defined eligibility requirements provide fertile ground for objection to relief, which can lead to the patient dying on the operating table while

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6. See, e.g., In re City of Detroit, 504 B.R. 191, 262–63 (Bankr. E.D. Mich. 2013) (discussing service delivery insolvency in context of the second prong of the Code’s insolvency definition); see also In re City of Stockton, 493 B.R. at 787, 789 (using service delivery insolvency and budget insolvency to inform decision that City’s insolvency was real and not transitory).
7. Section 109 contains five eligibility requirements, one of which is insolvency. See § 109(c). A court, however, also may dismiss a Chapter 9 petition if it finds that the “debtor did not file the petition in good faith or if the petition does not meet the requirements of this title.” § 921(c).
8. See Laura N. Coordes, Gatekeepers Gone Wrong: Reforming the Chapter 9 Eligibility Rules, 94 WASH. U. L. REV. 1191, 1218–19 (2017) (noting that “[i]n the Detroit bankruptcy, the court considered 110 objections to eligibility alone, many of which required substantial discovery, which further delayed the court’s decision”); see also In re City of Vallejo, 408 B.R. 280, 288 (B.A.P. 9th Cir. 2009) (stating that after an eight-day trial the bankruptcy court had concluded that city was insolvent, desired to effectuate a plan, and had negotiated with its creditors before filing for bankruptcy, and, thus, was eligible for relief under Chapter 9).
debate rages about the need for Chapter 9 relief. Some commentators argue that the Code’s eligibility requirements result in municipal delay in filing for bankruptcy, thereby impeding the optimal use of Chapter 9. For example, Professor Coordes contends that the Code’s insolvency requirement is “a prime source for delay and expense.” She suggests that the court evaluate insolvency at plan confirmation when more information about a municipality’s financial condition is available. Professor Buccola argues that the Code’s insolvency requirement is “[t]he principal obstacle to earlier municipal debt relief.”

Professor Gillette also has concerns about the Code’s insolvency definition. Unlike Professors Coordes and Buccola, however, he does not recommend eliminating the insolvency requirement or changing the stage at which the bankruptcy court determines insolvency. Instead, Professor Gillette criticizes the service delivery insolvency test—a judge-made test used by a few bankruptcy courts in determining insolvency—and proposes using agglomeration economies as a better measure of a municipality’s current financial condition and future financial prospects.

Each chapter of the Bankruptcy Code has particular eligibility requirements. Regardless of how simple and understandable those requirements are, they operate as barriers to entry for some debtors. Complex and unclear eligibility requirements raise the existing barrier to entry by increasing costs because the debtor must expend significant time and money satisfying complicated and imprecise tests for

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10. See generally Vincent S.J. Buccola, The Logic and Limits of Municipal Bankruptcy Law, 86 U. CHI. L. REV. 817 (2019) (arguing that spatial economies should be preserved and that Chapter 9 fails to do so); Coordes, supra note 8 (arguing that Chapter 9 delays prevent municipalities from obtaining relief).

11. Coordes, supra note 8, at 1232–33.

12. See id. at 1232.


14. Id.

15. For example, only individuals may file for relief under Chapter 13, see 11 U.S.C. § 109(e) (2018), and railroads are not eligible for relief under Chapter 7. See § 109(b)(1).
eligibility. Therefore, suggestions for reform, such as Professor Gillette’s recommendation to evaluate the loss of agglomeration benefits in order to determine insolvency, should satisfy two conditions. First, the reform should solve identifiable and documented problems with the test being replaced. Second, the reform, if implemented, should be clearly better than the test it replaces, taking account of the costs of change and the benefits associated with the reform measure. Professor Gillette’s suggested reform satisfies neither of these two conditions.

In Part I, I examine the basis for Professor Gillette’s concern that the service delivery insolvency test may result in strategic overuse of Chapter 9. I conclude that there is no empirical basis for the contention that adoption of the service delivery insolvency test results (or will result) in strategic manipulation of service ratios by municipal officials. In Part II, I explain why agglomeration economies theory is an even more flawed measure of insolvency than the infrequently used service delivery insolvency test. I conclude with a cautionary comment about the tendency, by both legislators and academics, to identify problems that may not exist in the world of bankruptcy and to propose solutions whose cost and complexity make them a poor fit for bankruptcy practice.

I. THE GOLDFILOCKS QUESTION

What is the optimal number of Chapter 9 filings? Does the current statutory structure strike the balance just right between the need for municipal debt adjustment and the threat of strategic misuse of Chapter 9? Scholars disagree on this point.

Professors Coordes and Buccola contend that Chapter 9’s insolvency requirement (as well as the Code’s other eligibility requirements) causes municipalities in dire need of debt adjustment to delay filing for Chapter 9 relief. Professor Coordes claims that
Atlantic City, Chicago, and North Las Vegas “arguably have waited too long to file for bankruptcy or are nearing the point where bankruptcy may become less effective for them.”

Professor Buccola argues that “[u]nder current law, bankruptcy intervenes too late.” In the Detroit bankruptcy case, Judge Rhodes noted that Detroit’s “financial crisis ha[d] been worsening for decades and it could have, and probably should have, filed for bankruptcy relief long before it did, perhaps even years before.”

Professor Gillette, on the other hand, is not convinced that eliminating the insolvency requirement as an initial gatekeeper will generate an optimal level of debt adjustment. His concern is with strategic overuse of Chapter 9, specifically the incentives that he claims the service delivery insolvency test creates for municipal officials. More specifically, Professor Gillette worries that municipal officials will respond to the focus in some bankruptcy court decisions on police and fire protection by reducing monies available to police and fire services as a way to make (or, perhaps strengthen) the city’s case for insolvency.

Professor Gillette starts by noting that courts that have used the service delivery insolvency test have not conducted a “thorough review of the service package that the debtor municipality purports to provide.” Instead, their examination of services has been selective and limited to those for which there are readily available statistics, such as for police and fire services. Professor Gillette then argues that the “disproportionate attention in the insolvency analysis” given to these services creates an incentive for municipal officials to undersupply them.

Why? Because doing so better positions the municipality for Chapter 9 and the ability to offload debt held by non-municipal residents, such as nonresident bondholders. In other words, municipal officials believe that city residents will accept short-term pain for long-term gain in the form of debt relief in bankruptcy. The problem is that there simply is no empirical evidence showing either underuse or overuse of Chapter 9. We do not know whether the Code’s

18. Coordes, supra note 8, at 1223.
21. See Gillette, supra note 2, at 1217–18.
22. See id.
23. Id. at 1232.
24. See id. at 1231–32.
25. Id. at 1233.
26. See id. at 1235.
insolvency requirement is a significant deterrent to filing for relief under Chapter 9, as Professors Coordes and Buccola argue. Nor do we know whether widespread adoption of the service delivery insolvency test, or elimination of the insolvency requirement altogether, would lead to overuse of Chapter 9, as Professor Gillette contends.

Professor Gillette recognizes that there is no empirical evidence on the insolvency question. But he offers several studies of the impact of tax caps and other budget constraints on school districts and other city officials to support his claim that municipal officials may engage in strategic behavior with regard to the provision of city services in order to position the municipality for Chapter 9 relief. Three of the four studies offered address the impact of tax or budget limitations on school spending; these studies are not on point and do not provide empirical support for Professor Gillette’s strategic manipulation thesis.

A. The School Spending Studies

In two separate studies, Professor Figlio found that local property tax limitations enacted first in the late 1970s and early 1980s and later in the 1990s resulted in higher student–teacher ratios but no reduction in administrative costs or the ratio of administrative to instructional spending. In his study of the impact of the earlier wave of property tax limitations (late 1970s and early 1980s) on school spending, Professor Figlio also found that the limitations resulted in statistically significant declines in “student performance in reading, science, and social studies.” In a third study, Professor Nguyen-Hoang found that budget referenda for small-city

27. See Buccola, supra note 10, at 864–65; Coordes, supra note 8, at 1224–25.
28. See Gillette, supra note 2, at 1217–18.
29. See id. at 1225, 1237, 1245.
30. See id. at 1235–36.
33. See Tax Revolt, supra note 31, at 247–48, 266.
34. See Property Tax Limit, supra note 32, at 67.
35. Tax Revolt, supra note 31, at 248–49.
school districts in New York, which allowed residents to vote on the district budget, resulted in decreased spending per student and increases in student–teacher ratios but no change in administrative spending.36

These findings do not support Professor Gillette’s manipulation argument. At best, they demonstrate rent-seeking behavior on the part of school administrators.37 In these studies, school administrators dealt with curtailed resources by cutting back on instructional revenues—what Professor Nguyen-Hoang called “preserving their own benefits.”38 In other words, administrators responded to budget limitations by protecting themselves.39 It is unclear how studies that show administrative officials maintaining administrative resources after budgetary cuts provide support for the proposition that city officials will undersupply measured services, such as police and fire, as part of a long-term strategy to qualify for Chapter 9 relief. The tax and budget studies show nothing more than self-interested responses to resident-imposed budgetary restrictions, such as voter-approved property tax limitations.

The behavior about which Professor Gillette raises concerns is different. It is not a self-interested response to budget cuts. Manipulation of service ratios by city officials does not directly benefit city officials; allocating more money to police administration as opposed to police on the street, for example, does not provide city councils or mayors, who make these funding decisions, with more money for their offices.

Moreover, such manipulation may work, but it may not. In the school spending cases, voters or residents restricted available funds and, as a consequence, administrators altered how they allocated funds. Administrators achieved their desired end—no change in


37. Professor Figlio states that one possible explanation for why the impact of Oregon’s Measure 5 was “borne at least as much by instruction as by administration . . . is that school districts are quasi-monopolists capable of extracting rent.” Property Tax Limit, supra note 32, at 67. Professor Figlio noted that if it is costly to move and if “decision makers value administrative consumption, it is unsurprising that administrators might pass most of the burden of a tax limitation onto instruction.” Id. 38. See Nguyen-Hoang, supra note 36, at 90.

39. Professors Figlio and O’Sullivan make this general point in the tax override study described infra Section B. See Figlio & O’Sullivan, supra note 17, at 235–36 (“We assume that the city has a bias toward administrative inputs: the city’s decision makers, who are of course administrators, have a bias toward the inputs over which they have the most direct control.”).
administrative spending—by simply acting to change funding allocations. But under Professor Gillette’s hypothesis, budget manipulation *causes*, at least in part, what city officials desire—a Chapter 9 filing; budget manipulation is not the *consequence* of a Chapter 9 filing. That difference is important because insolvency is only one of six Chapter 9 eligibility requirements, and the few courts that use the service delivery insolvency test do not rely *solely* on that test to determine insolvency.\(^40\) Manipulating spending ratios in order to file for relief under Chapter 9 is a far-from-certain strategy; there are multiple other steps that are necessary in order for city officials to achieve their desired result. Thus, rent-seeking responses to enacted budgetary limitations say very little about whether city officials will engage in long-term budget manipulation in order to potentially increase the odds of a successful Chapter 9 filing.

B. The Tax Override Study

Professor Gillette does cite to one study by Professors Figlio and O’Sullivan that addresses the question of budgetary manipulation by local government officials in order to obtain some long-term strategic end.\(^41\) Professors Figlio and O’Sullivan examined service ratios—the amount spent on basic services, which they defined as police and fire protection, compared with the amount spent on administrative overhead\(^42\)—in the years following imposition of statewide tax limitations, such as Proposition 13 in California.\(^43\) They drew their

\(^{40}\) *See infra* notes 60–66 and accompanying text.

\(^{41}\) *See* Figlio & O’Sullivan, *supra* note 17, at 233.

\(^{42}\) In the first portion of their paper, Figlio and O’Sullivan defined administrative overhead as spending on general government, exclusive of spending on financial administration and spending on general public buildings. *See id.* at 240. Thus, fire and police spending “include[d] spending both on uniformed personnel and on administrative services.” *Id.* at 252. Later in their paper, Figlio and O’Sullivan compared spending on uniformed personnel versus spending on police and fire administration and found a statistically significant difference in the service ratios in override versus no-override cities. *See id.* at 253 tbl.5. The authors, however, did not break down these latter findings by the nature of city government—strong mayor versus strong city manager.

\(^{43}\) Figlio and O’Sullivan also compared the ratio of teachers to administrators in override and no-override school districts after enactment of a tax limitation. The study examined data from 9,069 school districts. *Id.* at 253. They found that “no-override school districts tended to increase their teacher-administrator ratio following a tax limit, while those in override school districts tended to reduce this ratio.” *Id.* The difference between override and no-override districts, however,
data from cities in which voters could override the state tax limitation and from cities in which voters were unable to do so.\textsuperscript{44} They found that “override limit states differ significantly from no-override limit states: [ ] override limit states reduce their relative police and fire spending by .26 more than no-override limit states, a difference significant at any conventional level.”\textsuperscript{45} Figlio and O’Sullivan concluded that city officials manipulated the level of services in override cities because they then could appeal to voters to override the state tax limitation in order to obtain more funding for under-supplied basic services.\textsuperscript{46}

Figlio’s and O’Sullivan’s findings, however, hold only for cities with strong city managers, not those with strong mayors. Figlio and O’Sullivan divided the cities in their dataset\textsuperscript{47} into those with a strong mayor, which they defined as a “mayor-council form of government,” and those with a “strong city manager (a council-manager form), with any elected mayor assuming a less important role.”\textsuperscript{48} In strong city manager cities, they found a statistically significant difference in service ratios between override and no-override cities.\textsuperscript{49} But, for cities with a strong mayor, they found no difference in service ratios; in fact, they estimated that for both override and no-override cities with strong mayors, “the service ratio may actually increase following a tax limitation.”\textsuperscript{50} Figlio and O’Sullivan concluded that “the political structure of municipalities matters, at least in terms of the municipality’s response to tax limits.”\textsuperscript{51}

Thus, Professor Gillette’s concern about the service delivery insolvency test leading to strategic manipulation of service ratios appears overblown. The evidence offered for strategic manipulation is quite weak. While Figlio and O’Sullivan found strategic manipulation by city officials of service ratios after imposition of statewide tax

\textsuperscript{44.} The study included 5,147 cities; included in the study are cities located in states with no tax limitations. \textit{Id.} at 241. For this Article, however, the relevant data are from cities located in states with tax limitations, and the comparison is between those in override versus those in no-override states.

\textsuperscript{45.} \textit{Id.} at 245.

\textsuperscript{46.} \textit{See id.} at 253–54.

\textsuperscript{47.} Figlio’s and O’Sullivan’s analysis of the impact of the structure of municipal government involved 2,920 cities. \textit{See id.} at 249.

\textsuperscript{48.} \textit{Id.}

\textsuperscript{49.} \textit{See id.} at 250 tbl.4.

\textsuperscript{50.} \textit{Id.} at 249; \textit{see also id.} at 250 tbl.4.

\textsuperscript{51.} \textit{Id.} at 250. These results seem to comport with the authors’ hypothesis that “the difference between override and no-override tax limit cities should decrease as electoral accountability increases.” \textit{Id.} at 249.
limitations, their findings support the possibility of strategic manipulation only for a subset of cities—those with a strong city manager.52

C. Is There Really a Problem?

Professor Gillette fails to demonstrate that the service delivery insolvency test poses a serious threat to the Chapter 9 process. The number of cases in which courts have adopted the service delivery insolvency test is incredibly small.53 It is possible that use of the test in large-scale bankruptcies, such as those in Detroit and Stockton, may shape the behavior of officials in other cities with consequences that we have yet to see. At present, however, there is no empirical evidence showing strategic manipulation of service ratios in the run-up to municipal bankruptcy.


53. See generally In re City of Detroit, 504 B.R. 191 (Bankr. E.D. Mich. 2013); In re City of Stockton, 493 B.R. 772 (Bankr. E.D. Cal. 2013). Professor Gillette also mentions the Ninth Circuit’s Bankruptcy Appellate Panel (BAP) decision in Vallejo and the bankruptcy court’s opinion in the San Bernardino bankruptcy in his discussion of the service delivery insolvency test. But, neither case is really about service delivery insolvency. In Vallejo, the BAP noted that the bankruptcy court had correctly concluded that further funding reductions would jeopardize the city’s ability to provide basic health and safety services to its residents. See In re City of Vallejo, 408 B.R. 280, 294 (B.A.P. 9th Cir. 2009). The BAP’s opinion in Vallejo, however, is about the contention by various city unions that the city was not insolvent because it had sufficient unrestricted funds to operate and could have avoided bankruptcy by making other budgetary cuts and taking other actions. See id. at 290–94. The decision is not about service delivery insolvency; in fact, the court never uses that term in its opinion. The court in San Bernardino contains a footnote about service delivery insolvency, and the court does discuss the failure of the city to provide essential services to its residents. See In re City of San Bernardino, 566 B.R. 46, 51 n.9, 59–61 (Bankr. C.D. Cal. 2017). But, the court’s opinion is not about eligibility for bankruptcy; it concerns the injunction in the city’s reorganization plan. See id. at 49. While earlier in the Chapter 9 case the San Bernardino Public Employees Association (SBPEA) objected to the city’s eligibility for relief, in part on the basis of insolvency, the SBPEA withdrew that objection prior to the court’s ruling on eligibility. See City of San Bernardino, 499 B.R. 776, 781 (Bankr. C.D. Cal. 2013). The bankruptcy court, in its eligibility decision, calls the insolvency issue “uncontested.” Id. at 786.
Evidence of strategic manipulation of service ratios in other contexts is weak, at best. Moreover, scholars disagree as to whether Chapter 9 is under- or over-utilized. This disagreement alone suggests caution in recommending changes to current Chapter 9 tests. After all, if the service delivery insolvency test does not create incentives for municipal officials to undersupply certain services, thereby increasing the likelihood of a Chapter 9 filing, then what problem are we solving?

II. SERVICE DELIVERY INSOLVENCY VERSUS AGGLOMERATION ECONOMIES

Professor Gillette recognizes that below a certain point a municipality’s failure to deliver basic services is a “plausible proxy for fiscal distress.”54 Notwithstanding this concession, he devotes several pages of his Article to explaining why the service delivery insolvency test is of limited utility in measuring when a municipality is in need of debt relief under Chapter 9.55 While Professor Gillette makes some interesting observations in this portion of his paper, his critiques of the service delivery insolvency test not only fall short but also are equally applicable to agglomeration economies, which he proposes as an alternative or supplement to the service delivery insolvency test.

A. An Ill-Defined and Imprecise Test?

The Code does not include service delivery insolvency as a measure of insolvency; the test is a judge-made one. Courts have defined the term as “the municipality’s ability to pay for all costs of providing services at the level and quality that are required for the health, safety, and welfare of the community.”56 One of Professor Gillette’s critiques is that “the term [service delivery insolvency] lacks precision.”57

This complaint, however, applies to many legal tests, including other Chapter 9 eligibility requirements. For example, in some Chapter 9 cases, the bankruptcy court has had to determine whether the municipality negotiated in good faith with its creditors prior to

55. See id. at 1226–38.
56. In re City of Stockton, 493 B.R. at 789.
57. Gillette, supra note 2, at 1219.
filing its petition. Bankruptcy courts also must resolve any objections to Chapter 9 relief based on a municipality’s failure to file its petition in good faith. The Code does not define the term “good faith,” leaving it up to the courts to establish the parameters of the concept over time. While “good faith” is an express statutory requirement, unlike service delivery insolvency, Professor Gillette’s complaint is with the imprecision of the term, not the absence of statutory authority for the test.

Is it really the case that courts are incapable of determining that a city’s funding of basic municipal services is so inadequate as to render the municipality insolvent? Professor Gillette does not argue that the courts in the Detroit or Stockton Chapter 9 cases got it wrong. Instead, he seems concerned with the next case: how does a bankruptcy court in a future Chapter 9 case determine service delivery insolvency on the basis of “bleak qualitative statements that have a res ipsa loquitur quality” to them?

There are two issues with this articulation of the problem. First, the statements that Professor Gillette pulls from the Detroit and Stockton bankruptcy court opinions are not a fair representation of either Judge Rhodes’s or Judge Klein’s findings. Judge Rhodes did not simply say that the Detroit crime rate was “extremely high”; he explained that Detroit’s “violent crime rate was five times the national average” with a “clearance rate for violent crimes [of] 18.6%,” which was “substantially below those of comparable municipalities nationally and surrounding local municipalities.” Judge Rhodes did not simply conclude that police, fire, and EMS equipment was outdated and inadequate. He provided detailed findings about the equipment, including findings that less than half of Detroit’s ambulances were in service and that the Detroit Fire Commissioner had ordered firefighters not to use the hydraulic ladders on fire trucks except in cases of imminent threat to life because safety inspections

58. See 11 U.S.C. § 109(c)(5)(B) (2018); In re City of Detroit, 504 B.R. at 266–69 (finding that the city had not negotiated in good faith but that such negotiation was impracticable under § 109(c)(5)(C); In re Mendocino Coast Recreation & Park Dist., No. 11-14625, 2012 WL 1431219 (Bankr. N.D. Cal. Apr. 22, 2012) (overruling bank’s objection to Chapter 9 petition, finding that municipality had negotiated in good faith with creditors under § 109(c)(5)(B)), aff’d, In re Mendocino Coast Recreation & Park Dist., No. 12-CV-02591-JST, 2013 WL 5423788 (N.D. Cal. Sept. 27, 2013).

59. See § 921(c).

60. Gillette, supra note 2, at 1224.

61. In re City of Detroit, 504 B.R. at 214.
What Problem? A Response to How Cities Fail

had not taken place for years.\textsuperscript{62} While Professor Gillette uses one sentence from the Stockton bankruptcy case—“[p]olice often respond only to crimes-in-progress”\textsuperscript{63}—to support his \textit{res ipsa loquitur} assertion, that sentence follows Judge Klein’s statement that homicides were at “record levels” and Stockton ranked among the top ten cities in the country in terms of aggravated assaults with a firearm.\textsuperscript{64}

What more is needed? Can we not say with some certainty that the social contract is fundamentally broken when city police can respond only to crimes in progress?\textsuperscript{65} When more than 80\% of violent crimes remain unsolved? Why do these statements \textit{alone} not suffice to show service delivery insolvency?

Second, those courts that use the service delivery insolvency test do not rest their insolvency determinations \textit{solely} on conclusions about service delivery insolvency. The service delivery insolvency test is only one piece of the courts’ insolvency analyses. The Code’s definition of insolvency provides that a municipality is insolvent if it proves either that it cannot “generally pay its debts as they become due” or is “unable to pay its debts as they become due.”\textsuperscript{66} Courts consider the first prong a test of \textit{current} general nonpayment of debt, while they view the second as a test of \textit{future} inability to pay.\textsuperscript{67} The few courts that have used the service delivery insolvency test have applied it in evaluating the second prong of the Code’s insolvency requirement.\textsuperscript{68} In the \textit{Stockton} bankruptcy case, the court held that cash

\begin{itemize}
\item \textsuperscript{62}See \textit{id.}
\item \textsuperscript{63}See \textit{In re City of Stockton}, 493 B.R. 772, 790 (Bankr. E.D. Cal. 2013).
\item \textsuperscript{64}See \textit{id.}
\item \textsuperscript{65}See \textsc{Thomas Hobbes}, \textsc{Leviathan} 121 (Richard Tuck ed., 1991) (stating that the Commonwealth is “[o]ne Person, of whose Acts a great Multitude, by mutuall [sic] Covenants one with another, have made themselves every one the Author, to the end he may use the strength and means of them all, as he shall think expedient, for their Peace and Common Defence”); see also \textsc{Bertrand Russell}, \textsc{A History of Western Philosophy} 550 (4th prtg. 1945) (explaining that without the Commonwealth, men live in a state of nature).
\item \textsuperscript{67}See \textit{In re Detroit}, 504 B.R. at 262.
\item \textsuperscript{68}See \textit{id.} at 262–63; \textit{In re City of Stockton}, 493 B.R. at 787–91.
\end{itemize}
insolvency, budget insolvency, and service delivery insolvency informed its determination of the city’s future inability to pay its debts as they became due under § 101(32)(C)(ii). In the Detroit bankruptcy case, Judge Rhodes held that the city had proved insolvency under both of the Code’s alternative definitions of insolvency. While Judge Rhodes found the City’s service delivery insolvency to be the “most strikingly disturbing,” he also noted that “the City’s tumbling credit rating, its utter lack of liquidity, and the disastrous COPs and swaps deal might more neatly establish the City’s ‘insolvency’ under 11 U.S.C. § 101(32)(C).” In other words, the few courts that have used the service delivery insolvency test did so as part of a larger financial analysis, thereby reducing the likelihood of a “false positive” finding of insolvency.

B. When Do Things Fall Apart?

As pointed out above, Professor Gillette concedes that municipal delivery of services below a certain baseline is a “plausible proxy for fiscal distress.” At what point, however, is a municipality’s failure to deliver services sufficiently dire to warrant relief under Chapter 9? For Professor Gillette, the problem is that the value of the service delivery insolvency test as a standard for allowing a locality to initiate the debt adjustment process “depends on judicial capacity to detect that services have fallen to a level that places the ‘health, safety, and welfare of the community’ at risk.” It may be easy to conclude that a city like Detroit or Stockton has failed to provide even a baseline level of municipal services. But how does the test work in cases with less egregious facts? In other words, where do we draw the line?

While I believe that we can trust bankruptcy judges to draw these lines, these questions posed by Professor Gillette are interesting ones. Other than the points raised above, however, I do not tackle the line-drawing issue here. Instead, I wonder why Professor Gillette proposes the theory of agglomeration economies as a substitute for or a supplement to the service delivery insolvency test. As Professor Gillette himself acknowledges, researchers have yet to achieve

69. See In re City of Stockton, 493 B.R. at 788.
70. See In re City of Detroit, 504 B.R. at 262.
71. COP stands for certificate of participation and in the Detroit bankruptcy case these COPs related to the city’s pension liabilities. See id. at 208.
72. Id. at 263–64.
73. Gillette, supra note 2, at 1223–24.
74. Id. at 1224.
reliable and consistent measures of agglomeration benefits, and the substantial literature on the subject "reveals significant variation in both methodology and results."\textsuperscript{75} In other words, agglomeration benefits as a metric for determining insolvency suffers from the exact same line-drawing problem that Professor Gillette attributes to the service delivery insolvency test. Perhaps most important, however, the theory is not well-known outside the small world of academic journals; thus, judges and lawyers will have to devote significant time and resources to learning how to apply it in real-world cases, thereby driving up the cost of entry to Chapter 9.

Before getting too far into the weeds, it is important to define what is meant by agglomeration economies. There is no single definition. The basic idea, however, is that cities form because there are productivity benefits associated with the clustering of firms, suppliers, and labor. "Agglomeration economies are the benefits that come when firms and people locate near one another in cities and industrial clusters."\textsuperscript{76} The benefits include "[l]abor market pooling, input-output linkages, and knowledge spillovers."\textsuperscript{77} A very simple example of an agglomeration benefit is the reduction in costs that a manufacturing firm enjoys by locating near its supplier of parts and raw materials.\textsuperscript{78}

There are problems, however, with using agglomeration economies either in lieu of or as a supplement to service delivery insolvency. First, there is no single theory of agglomeration economies. Professors Glaeser and Gottlieb, in a National Bureau of Economic Research working paper, examined three "core" theories of agglomeration economies.

Cities are ultimately nothing more than proximity, so the returns to urban concentration can be seen as reductions in transport costs. One set of theories about agglomeration economies emphasizes the gains that come from reduced costs of moving goods across space (Krugman, 1991a). A second set of theories emphasizes labor market pooling and the benefits of moving people across firms (Marshall, 1890). A third set argues that cities

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\textsuperscript{75} Id. at 1246. \\
\textsuperscript{76} Edward L. Glaeser, Nat’l Bureau of Econ. Research, Agglomeration Economies 1 (2010). \\
\textsuperscript{77} Kristian Behrens & Frederic Robert-Nicoud, Agglomeration Theory with Heterogenous Agents, in 5A Handbook of Regional and Urban Economics 178 (Gilles Duranton, J. Vernon Henderson & William Strange eds., 2015). \\
\textsuperscript{78} While some evidence exists that manufacturing firms still cluster near suppliers and customers, recent research suggests that agglomeration economies resulting from reduced costs of moving goods now are “relatively second order.” Glaeser, supra note 76, at 7.
\end{flushleft}
speed the flow of ideas, which creates human capital at the individual level and facilitates innovation (Jacobs, 1968). Some of these theories emphasize the benefits that come from co-location of diverse firms; others emphasize the gains from single-industry agglomerations.79

Each of these theories emphasizes a different source: transit costs, labor market pooling, and knowledge flows for the existence of agglomeration economies. Which source is most important? Least important? Notwithstanding substantial research, “the field has still not reached a consensus on the relative importance of different sources of agglomeration economies.”80 If experts in the field have not yet reached consensus on the relative importance of the “different mechanisms behind agglomeration economies,” then how is this body of research helpful to a bankruptcy court in making an insolvency determination?81

Second, even though there is no consensus on the relative importance of the sources of agglomeration economies, the research on agglomeration economies shares a common goal: to explain the reasons for the productivity gains associated with city formation. For example, Professors Glaeser and Gottlieb note that a “central question of urban economics” is why cities exist; they explain that an answer to that question requires an understanding of “why dense areas are so much more productive.”82 Professors Duranton and Kerr note that a “core topic in economic geography is agglomeration economies, where cities and clusters of activity boost the productivity of firms located within them.”83 Scholarship in the field also explains how agglomeration economies operate as one of four fundamental causes of city size, composition, and “associated productivity gains.”84

80. Glaeser & Gottlieb, supra note 79, at 4; see also W. Walker Hanlon & Antonio Miscio, Agglomeration: A Dynamic Approach 1 (Nat’l Bureau of Econ. Research, Working Paper No. 20,728, 2014) (noting that while agglomeration economies is “[o]ne of the leading answers” to the question of what drives city growth, this answer “raises further questions about the nature of these agglomeration economies”).
82. Glaeser & Gottlieb, supra note 79, at 2.
84. See Behrens & Robert-Nicoud, supra note 77, at 3.
While explaining why cities are productive is useful general knowledge, this general knowledge tells us nothing about when cities are in such fiscal distress as to merit relief under Chapter 9. Professor Gillette, however, contends that “understanding the potential of agglomeration for the economic development of localities also reveals the converse.” But, is that really the case? Professor Gillette offers several examples from the literature to support this contention. He notes that Professor Hanlon and Antonio Miscio found that local suppliers are critical to city growth. From this finding, Professor Gillette explains that the loss of local suppliers may signal more strongly than the loss of other firms that a city is in financial distress. While perhaps true, it is important not to confuse the finding of a positive relationship between local suppliers and city growth with a negative one between loss of local suppliers and fiscal instability, in particular when Hanlon and Miscio did not look at fiscal distress in their study.

Hanlon and Miscio did find that a “one standard deviation increase in the presence of local suppliers increases city-industry growth by 14.4%,” but how does this finding help a bankruptcy judge determine insolvency? Standard deviation measures distance from the mean, but it makes no sense to talk of “means” when dealing with a single city in a single case. Moreover, even if some increase in local suppliers means some increase in city-industry growth, Hanlon’s and Miscio’s study tells us nothing about the point at which the loss of local suppliers means such a decline in city-industry growth as to signal serious fiscal distress. The reason is that Hanlon’s and Miscio’s study is about the sources of city growth, not the sources of city decline or the point at which a city reaches some degree of fiscal distress.

Research by Professors Rosenthal and Strange and by Professors Combes and Gobillon also does not support Professor Gillette’s assertion that “demonstrable declines in agglomeration benefits could, more than population declines or rough measures of service delivery insolvency alone, inform judgments about the potential sources of fiscal distress.” Professors Rosenthal and Strange found that “agglomeration economies arising from spatial concentration within a given industry [ ] attenuate rapidly over the first few miles and then

85. Gillette, supra note 2, at 1243.
86. See Hanlon & Miscio, supra note 80, at 8.
87. See Gillette, supra note 2, at 1243–44.
88. Hanlon & Miscio, supra note 80, at 8.
89. Gillette, supra note 2, at 1244.
attenuate much more slowly thereafter."\textsuperscript{90} They did not find that agglomeration benefits “dissipate rapidly if a firm is located within five miles of same-industry firms.”\textsuperscript{91} Rather, they found that such benefits are strongest at the center of economic activity (identified as zip code centroids) and that the rate at which such benefits weaken is greater in moving from the areas closest to the zip code centroid than in moving between areas further from the zip code centroid.\textsuperscript{92}

Professors Combes and Gobillon note that “an accurate estimation of the magnitude of agglomeration economies is required when one tries to evaluate the need for larger or smaller cities.”\textsuperscript{93} But Combes and Gobillon do not estimate the magnitude of agglomeration economies. Their work is an exhaustive survey of the existing literature, some of which discusses the benefits and the costs of agglomeration associated with increasing city size.\textsuperscript{94}

Even if a court were to put together the findings from these various studies, how would it use the results to determine municipal insolvency? The studies do not tell us the point in time when the loss of agglomeration benefits suffices to show fiscal distress. Professor Gillette complains that the value of the service delivery insolvency test depends on the ability of judges to determine when municipal services have fallen to a level that threatens the health, safety, and welfare of city residents.\textsuperscript{95} Does this same complaint not also apply to use of agglomeration economies theory? Professor Gillette acknowledges the empirical shortcomings of the literature on agglomeration economies but explains that “the task of the court is not to measure the loss of agglomeration benefits with exactitude”; instead, “rough measures of agglomeration reductions may be sufficient.”\textsuperscript{96} What rough measures is he talking about, however? Using rough measures only works if the research establishes which measures are important.

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\textsuperscript{91} Gillette, supra note 2, at 1244.
\textsuperscript{92} See Rosenthal & Strange, supra note 90, at 15–16.
\textsuperscript{93} Combes & Gobillon, supra note 81, at 2.
\textsuperscript{94} See id. at 3 (“[M]ost positive agglomeration effects can also turn negative above some city size threshold.”); id. at 7 (“[C]ity size generates not only agglomeration economies but also dispersion forces.”); id. at 47 (discussing types of skills associated with different sized cities); id. at 48 (“Theory rather predicts that the marginal returns to agglomeration should be decreasing with city size, for instance because local congestion increases as the city grows.”).
\textsuperscript{95} See Gillette, supra note 2, at 1219.
\textsuperscript{96} Id. at 1247.
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The problem is that the research is not clear on the relative importance of the various sources of agglomeration economies.

A more fundamental problem, however, is that none of the research cited on agglomeration economies discusses fiscal distress. No connection is made in that literature—empirical or theoretical—between agglomeration benefits (or dispersion forces) and a city’s descent toward financial collapse. Professor Gillette argues that the two are connected (and intuition suggests that they very well may be), but the studies he cites do not make that connection.

Yet, Professor Gillette expresses concern about the fit between the service delivery insolvency test and the need for Chapter 9 relief. He argues that the “more relevant difficulties” with the service delivery insolvency test “emerge from the assumed connection between low levels of particular services and the propriety of designating a locality to be eligible for the process of debt adjustment.”

Does this same concern not also apply to use of agglomeration effects theory? Has Professor Gillette not assumed a connection between declines in agglomeration benefits and the need for municipal debt adjustment under Chapter 9? The literature to which he cites does not make this connection. It certainly is plausible that such a connection exists, and it is possible that in the future researchers will take up the question of whether and when significant dissipation of agglomeration benefits signals a city’s financial distress. But, in its current state, the research on agglomeration benefits and dispersion forces simply does not support using “demonstrable declines in agglomeration benefit” as a measure of municipal insolvency.

CONCLUSION

Eligibility requirements for bankruptcy serve as a barrier to entry. Changing established, even if flawed, eligibility requirements increases uncertainty, thereby increasing the cost—both in terms of time and money—of filing for relief. Therefore, any reform to an existing eligibility test for bankruptcy relief should solve a demonstrable problem with the current test and be a superior method for assessing that contested eligibility requirement.

Professor Gillette raises concerns about the service delivery insolvency test and proposes using agglomeration economies theory

97. Id. at 1227.
98. See LUPICA, supra note 16, at 8.
as a supplement to or replacement for service delivery insolvency. There are two basic problems with doing so. First, the evidence is weak, at best, for Professor Gillette’s contention that the service delivery insolvency test may create improper incentives for municipal officials to undersupply certain key city services. If there is no real evidence for improper incentives, then what problem are we solving by substituting one measure of insolvency for another?

Second, even if the service delivery insolvency test is imprecise and ill-defined, as Professor Gillette claims, the agglomeration economies test suffers from the exact same problems. The research on agglomeration economies does not identify which measures are the most important sources of agglomeration benefits; it does not discuss the point in time when the loss of agglomeration benefits signals fiscal distress. In fact, the research that Professor Gillette cites makes no connection between reductions in agglomeration benefits and fiscal distress. Thus, substituting agglomeration economies theory for the service delivery insolvency test does nothing more than create an insolvency measure that is fuzzier and less precise than the one replaced.

While the service delivery insolvency test may have its shortcomings, it is easy to understand and relatively simple for attorneys and judges to use and apply. The same cannot be said for the agglomeration economies theory.