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ocal governments spent a combined \$1.9 trillion in 2017, according to the U.S. Census Bureau. This was more than all 50 states together, when we remove money passed through to local governments. While this might seem surprising, it might be less so when you consider that there are more than 90,000 units of local government in the United States providing services such as education, public safety, public health, utilities, transportation, recreational opportunities, vital record keeping, natural resource conservation, and more.

Given the vast sums of money and the number of governments involved, it is reasonable to ask: Is there too much fragmentation—referring to the number of local governments and how power is diffused among them—in local government? Could public funds be better used if there were less fragmentation?

Consolidation—that is, combining multiple local governments into a single, larger unit—is intended as a direct

solution to government fragmentation. But there are two types of fragmentation, each of which might respond differently to consolidation:

- Horizontal fragmentation. This is when multiple governments in the same region provide a similar service when a region has multiple, separate municipal governments, for example. The implication is that horizontally fragmented governments do not usually occupy the same geographic space, although this is not always the case. Cities and their overlapping county government do sometimes provide similar services.
- Vertical fragmentation. This is when local governments provide different services, such as when several special districts serve the same community (e.g., library district, park district) as well as a general purpose municipal government. Vertical fragmentation implies some overlap in jurisdictional boundaries.

GIVEN THE VAST SUMS OF MONEY AND THE NUMBER OF **GOVERNMENTS INVOLVED.** IT IS REASONABLE TO ASK: IS THERE TOO MUCH FRAGMENTATION IN LOCAL **GOVERNMENT?**

Frequently cited in discussions about fragmented government, St. Louis (pictured above) is one of the 41 independent cities in the U.S. that does not legally belong to any county. St. Louis operates as both a city and a county and is the only city in Missouri which operates its own "county" offices.

HORIZONTAL FRAGMENTATION

The impacts of local government horizontal fragmentation have been well researched by academics, and a key finding is that "Increased horizontal fragmentation, particularly among general purpose local governments, is associated with *decreased* per capita public spending and public revenues." This implies that the consolidation of horizontally fragmented governments could be counterproductive.

This may be surprising, but there is evidence that horizontal fragmentation economizes public spending. Unfortunately, the research is not as clear about why horizontal fragmentation decreases public spending and tax levels. There are several plausible explanations, and we will focus on two that have the best support in the research:

- Economies of scale are realized at a relatively small scale; and
- Regional norms hold costs down.

With 1,550 local governments, the Chicago metropolitan area (below) is the most fragmented in the nation, relative to population and land area.

Economies of Scale Realized at a Relatively Small Scale

Relatively small governments can achieve economies of scale. For example, in the United States, studies by the Advisory Commission on intergovernmental relations in the 1970s concluded that as the population of a city increases, per capita costs generally fall for municipalities with populations of up to 25,000; remain fairly constant for those cities with more than 25,000 but fewer than 250,000; and then rise significantly. But these studies did account for the structure of production or the responsibilities of the local governments. A 2002 review of the research into economies of scale in local government concluded that:2

- Only 8 percent of studies found economies of scale
- 29 percent found U-shaped cost curves (cost declines with size for a time, but then increases)
- 39 percent found no relationship size and cost
- 24 percent found evidence of diseconomies of scale



THIS MAY BE SURPRISING, BUT THERE IS EVIDENCE THAT HORIZONTAL FRAGMENTATION ECONOMIZES PUBLIC SPENDING.

On the whole, there seem to be few economies of scale for most (but not all) services, in municipalities with a population of 20,000 to 40,000 people.³ This would mean that local governments don't have much potential for efficiency gains from scale past a relatively small population.

To understand why consolidating local governments doesn't lead to greater economies of scale, let's consider some sources of savings created by economies of scale in the private sector:

- Spreading fixed costs over a larger production volume. The classic example of a fixed cost is a capital asset. For instance, a machine that can be used to produce 100 units or 1,000 units will have a lower per-unit cost if it produces 1,000.
- Purchasing in bulk. More favorable prices can be negotiated with suppliers when purchasing in volume.
- Having a greater ability to specialize labor. Employees can specialize in tasks that add value and a competitive advantage for the business.
- Branding and marketing. For instance, it is easier to stand out in a global and hypercompetitive marketplace with a recognized name. Larger companies tend to be more widely recognized.

Many advantages that private-sector firms can realize from scale don't translate well to local government for a few reasons.



Reason #1: Local government services are often labor intensive.

Local government services are delivered mainly by people (public employees or contractors). The role of fixed costs (e.g., capital assets such as machinery) is less important than it is in many private industries. This works against economies of scale in two ways.

First, in local government, labor is often a variable cost (in the long term, at least) that scales upward with the amount of service provided. Fixed costs are less important in many government services, so there is less benefit from spreading the fixed costs over a larger population. For example, imagine two neighboring cities of 40,000 people, and each is merged to create one larger city of 80,000. The new, larger police department would have to patrol the same area. There might be an opportunity to make adjustments in patrol routes, but the new department would probably need the same number of officers, cars, etc., as before. The new department would need only one police chief, but the cost of a chief would be a fraction of the total department. Further, the salary of the new chief might need to be higher to attract applicants with the skills needed to manage the larger, more complex department. The new department might also have to add a deputy chief or middle manager. And while the department might need just one police headquarters building, it would need to be large, and/or need substations to supplement the headquarters.

Compare our hypothetical police department with companies like Amazon, Google, or Facebook. The low cost of adding a customer for these companies is close to zero. By contrast, the low cost of serving more residents is nowhere near zero for municipal governments.

In addition, purchased supplies are not as important to the local government production process as they are for many private-sector activities. For example, there are few "raw materials" associated with police or fire protection, the two largest areas of spending for most municipal governments. Hence, driving down the cost of purchasing supplies would have more limited financial benefit than for a large industrial manufacturer or large retailer, like Amazon or Walmart.

Reason #2: Local governments have a greater potential for cooperation. The day-to-day operations of local government are often characterized by significant cooperation between neighboring entities. For example, the State of Iowa requires local governments to file formal agreements for intergovernmental cooperation with the state. There are approximately 2,000 units of local government in

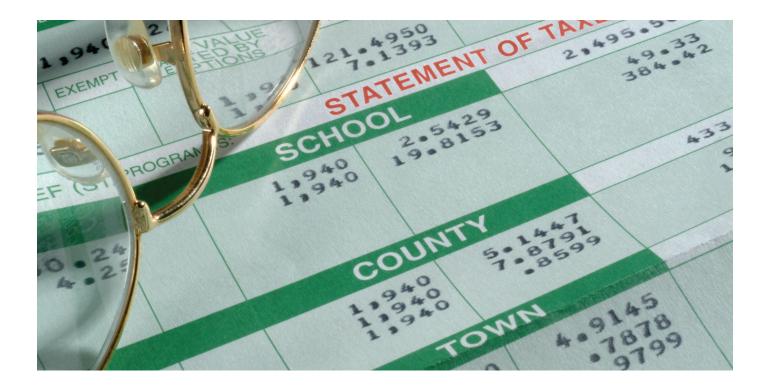
Labor intensive local government services like police and fire protection, the two largest areas of spending for most municipal governments, do not experience cost savings from economies of scale.

Iowa, and they filed more than 10,000 agreements in 10 service categories between 1993 and 2007.

This proclivity for cooperation is a significant difference from the private sector. For example, it would be unusual for local firms in a similar line of business to collectively negotiate prices with suppliers—but this is commonplace in local government, for products as diverse as office supplies, road salt, and insurance policies. It allows local governments to achieve the purchasing power of scale without consolidating.

Local cooperation among governments can achieve some benefits of specialization that are associated with scale. Local governments often set up agreements to share specialized public works or firefighting equipment, or to cooperate on technical services like 911 dispatch.

This level of cooperation may reduce or eliminate the value of specialization. In the private sector, specialization



often confers a competitive advantage or differentiator from other firms. For example, venture capitalist Peter Thiel described proprietary technology as "the most substantive advantage a company can have."4 Local governments, however, have no trade secrets to protect and gain little or nothing from having differentiated work processes or technologies. For instance, in The Nation City: Why Mayors Are Now Running the World, former Chicago Mayor Rahm Emanuel describes how he and other mayors regularly shared their most innovative ideas with mayors of other cities.5

This willingness to share and the absence of benefit from trade secrets mean local governments can outsource specialized technical tasks to a contractor without worrying about the implications for competitive advantage. Many consultants work for several local governments at the same time, so the consultant becomes the specialist, and each local government buys the consultant's services in the amount needed. Collectively, all local governments form a market large enough for consultants to develop expertise that local governments find valuable and large enough to sustain competition among consultants, which keeps prices down.

Reason #3: Local governments are local monopolies. Local governments are basically monopolies within their own borders. This means marketing and branding are not as important as they would be for private firms. It also means that differentiation from potential competitors is not as important, further reducing the benefits of gaining a distinctive specialization.

Regional Norms Hold Costs Down

Earlier, we described local governments as local monopolies. "Monopolies" are typically not associated with lower prices or improved service, but while horizontally fragmented local governments are local monopolies, they are not monopolies within their region. Though local governments do not "compete" with others in the region in the same sense that private firms do, there are other forces in play that serve to hold down the price of government. 6

Members of the public and elected officials generally agree that higher taxes are undesirable. Public approval is often a key motivator for elected officials. Elected officials can show that they are being responsible with taxpayer money by keeping tax rates and spending in their community in line with that of other local governments in the region. The willingness of local governments

Regional norms often influence the average levels of taxing and spending amongst local governments in a given region. Consolidation could theoretically contribute to an increase in tax rates by eliminating these norms.

to cooperate with each other and the existence of legal standards for transparency in public finance mean that local governments are able to access information about the taxes, fees, and service levels in nearby communities.

The average levels of taxing and spending across local governments in the region may then create a "norm" that local officials are hesitant to stray from. The power of shared norms to enforce standards is associated with the Nobel Prize-winning work on which GFOA's Financial Foundations for Thriving Communities is based.\(^7\)
A larger, consolidated local government might start to become a regional monopoly as well as a local monopoly. In this case, norms to keep taxes in line with other nearby local governments may start to lose their power.

VERTICAL FRAGMENTATION

There isn't as much research on vertical fragmentation as there is on horizontal fragmentation, so the conclusions we can reach are not as strong. But the balance of evidence suggests that vertical fragmentation leads to greater inefficiency in local government.8 Again, because the research is not as rich on this topic, it is harder to say why this might be. There are some plausible explanations, though.

The role of regional norms for taxes and service levels in holding down the cost of local government might arise more easily and be stronger among general purpose local governments (e.g., cities), which are more closely associated with horizontal fragmentation. For example, the public thinks of the mayor as being "in charge" of the city and thinks of city hall as the seat of local government. Therefore, municipal officials can expect more public attention, and we might expect municipal officials to be more interested in benchmarking their taxes, fees, and service levels against other municipalities to avoid getting out of line with their neighbors.

Special districts, which are more closely associated with vertical fragmentation, are usually not subject to the same level of public scrutiny as municipal governments. For instance, if we were to compare citizens' knowledge of their city government with what they know about their special districts, it's pretty likely that far fewer citizens know who the lead officials are for the special districts

or where the districts' main offices are. Many citizens probably don't even know that the district is a separate legal entity from city government. Because the operations of special districts get less attention, we might assume that, in general, officials in special districts would take less interest in benchmarking taxes and fees and be less concerned with keeping taxes and fees in line with those of other districts. This is also consistent with research suggesting that special purpose governments are more easily dominated by special interest groups, which leads to cost increases that benefit the special interest at the expense of the general public.9

A second explanation might be found in how local government services are budgeted. By definition, special districts offer one type of service, so this service does not need to compete with any other service in the budget process. For example, imagine that a community is served by a city government, a special district for recreation, and a special district for libraries, and each has its own tax rate. At no point during the normal budgeting process would the public have the chance to give input into how much library versus recreation versus police/fire services they want. Rather, the amounts of money dedicated to recreation, the library, and the city government are largely treated as a given. If a member of the public wanted their voice heard regarding the budget



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for local services, they would need to participate in three separate budget processes. This kind of fragmentation would work against public influence on the budget and the public ability to decide to spend less on one service than another.10 This explanation aligns with the aforementioned research that special purpose governments are more easily dominated by special interest groups.

Finally, we saw earlier that economies of scale may not hold as much potential for local governments as they do for private sector firms. The same limitations of scale are probably not much different for vertically fragmented governments (e.g., special districts). Nevertheless, there could be some costs such as duplication of "back office" services like payroll, accounting, etc. It could also be that special districts are less motivated to participate in local agreements that duplicate the benefits of scale, perhaps because of the lesser motivations to hold down costs.

These explanations concern efficiency but not economization. There is evidence that vertical fragmentation increases total local government spending11—however, if the services provided by special districts are demanded by the public, then it would be hard to say that public spending is too high. There is some evidence that special districts proliferate when municipal governments with functional autonomy have their fiscal autonomy limited by the state. 12 Local political actors may encourage the formation of special districts to get around the restrictions.

Ranging from school districts to transit authorities, there are over 50,000 special districts in the United States, making them the most common type of local government.

THE EFFECT OF CONSOLIDATION ON PUBLIC FINANCE

To conclude, let's summarize the effects of consolidation as a model for positively influencing efficiency, economies, and value in local government.

Consolidation of horizontally fragmented governments probably offers little net economization or efficiency benefits. The research suggests that consolidation of horizontally fragmented local governments has little potential to reduce costs. Horizontally fragmented governments are associated with lower total spending (economization). We also saw that the benefits of economies of scale are probably achieved at a relatively small size for local government, so there is little opportunity to reduce costs per unit (increase efficiency) with consolidation.

To illustrate, consider city-county consolidations. Cities and counties offer similar services but also serve the same geographic area. One might think that this would offer potential for efficiencies from consolidation. One study examined the history of city-county consolidations and all prior studies on the subject. The study found little support for the argument that these consolidations improved efficiency and found that gains fell short of the initial promises. ¹³

When considering the potential for consolidation, one must consider the costs. The technical costs to perform a consolidation are considerable. For example, there are legal fees and the time required of public managers to merge organizational structures and practices. Also, some research suggests that the wage scales of public employees in merged organizations tend to be at the higher wage scales from old organizations (no one wants a pay cut). 14

The political and opportunity costs might be even greater than the technical costs. Consolidations are often controversial. Local residents are often not willing to give up local control, the distinction of having their own community, etc. For example, the City of Toronto, in Ontario, was amalgamated from six smaller cities in 1997. The effort was contentious and resisted "tooth and nail" by groups from

across the region¹⁵ who saw the move as potentially anti-democratic. One might question if the political capital used to push through a consolidation could be better spent on opportunities to make local government more costeffective (which we will describe in the subsequent parts of this series). In fact, Toronto was part of a larger effort of local government consolidation in Ontario. A study by the Fraser Institute suggests that these consolidations, in general, created higher local government costs, higher property taxes, and deeper debt loads.¹⁶

Finally, we should note that our research should not be interpreted as consolidation never has efficiency or economization benefits. For example, very small governments might realize gains from consolidation because they would be below the threshold for economies of scale for many services. Or a government might simply face a unique set of conditions where consolidation could deliver benefits in that particular case.

The effect of consolidation on value is not clear. The research provides no clear answers as to whether consolidation produces more benefit per dollar. Working against value is that a larger, consolidated government might be less responsive to the needs of the communities within its borders. For example, special interest groups are more likely to dominate public participation in larger governments.¹⁷ In favor of value is that greater, consolidated government might be able to provide more equitable services to the different populations within its borders. For example, if governments are consolidated, then a small local government couldn't capture a relatively "lucrative" commercial land use in its border and use the revenues to subsidize public services for its residents if the costs of commerce (traffic, etc.) affect the wider region. The bottom line is that there is no conclusive evidence that improved value would be a persuasive argument in favor of consolidation.

THE BOTTOM LINE IS THAT THERE IS NO CONCLUSIVE EVIDENCE THAT IMPROVED VALUE WOULD BE A PERSUASIVE ARGUMENT IN FAVOR OF CONSOLIDATION.

Accentuate what works in horizontal fragmentation. Earlier, we reviewed the reasons why horizontal fragmentation holds down costs. Rather than incurring the costs of horizontal consolidation for dubious gains, policymakers would be better off accentuating the conditions associated with horizontal fragmentation that help hold down costs. For example, we have seen that local governments commonly develop local agreements to share resources. There is a lot more potential for local governments to engage in this kind of service sharing.

Beware of the real cost of horizontal fragmentation. Horizontal fragmentation is not free of problems. A real cost is urban sprawl. Urban planning policies are beyond the scope of this paper, but policymakers should recognize that spreading population out over a wider area increases the cost of public services. ¹⁸

Remove the conditions that encourage vertical fragmentation. Though vertical fragmentation seems inefficient, it is difficult to recommend the consolidation of vertically fragmented governments as a cost-beneficial strategy because there isn't much research on the effects of this kind of consolidation. This isn't to say that it could not work, but that the research is not conclusive. It seems safe to say that increasing numbers of vertically fragmented governments is not good for the overall efficiency of local government.

But local officials are often encouraged to create special districts to meet local demand for public services that can't be met by the municipal government. This is because taxing, spending, or debt limitations imposed by state government inspire municipal officials to encourage the creation of special districts to get around the limitations. These state limits merely have the effect of shifting spending to vertically fragmented local governments that are not subject to the same forces that favor restraint in spending in municipal governments.19 These one-size-fits-all taxing and/or spending limitations are, in many ways, contrary to GFOA's Financial Foundations for Thriving Communities recommendation that local communities have sufficient autonomy to determine the tax and spending strategies that best fit local conditions.

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Financial Foundations for Thriving Communities

This article looks for solutions to the problem of fragmentation through the lens of GFOA's Financial Foundations for Thriving Communities, which is based on a Nobel Prize-winning body of work about how to solve shared resource problems-like local government budgets.* One of the insights from this work is that, in general, the local users of a commonly owned resource are in the best position to decide how to allocate the responsibilities for maintaining and then allocating the resource among its users. This is because local users have a sense of what their needs are and who is best positioned to take on the responsibilities to meet those needs. The implication is that because local government is closest to the citizen, it will be positioned to allocate public resources with the greatest efficiency, accountability, and responsiveness (it doesn't imply that doing so is easy, of course.) This will be especially true when there are local differences in citizens' demand for public services and the willingness to pay for them.

This insight is sometimes called the "principle of subsidiary." It suggests that strategies like centralizing services with a larger central government, for example, would not provide better outcomes. However, Financial Foundations for Thriving Communities does not call for atomization either. It shows that there are substantial gains available from wide-scale cooperation and that coordination is in fact needed for the best use of shared resources.

In examining consolidation—defined here as combining multiple local governments into a single, larger unit—as a way to improve coordination of resources among local government, we need to define our goals. If we are interested in using these models to improve the use of resources, this improvement could happen along three dimensions:

- **Economize:** Spending less money in total (assuming that too much was being spent before).
- Efficiency: Bringing down the "per unit" cost of public services.
- Value: Increasing the benefit created by each dollar of public money.

- ¹ Christopher B. Goodman, "Local Government Fragmentation: What Do We Know?" State and Local Government Review 51 (2).
- $^{2}\,$ Joel Byrnes and Brian Dollery, "Do economies of scale exist in Australian local government? A review of the research evidence," Urban Policy and Research 20 (4).
- ³ Enid Slack and Richard Bird, "Merging Municipalities: Is Bigger Better?" Part of Institute of Municipal Finance and Governance series of papers on municipal finance and governance, co-published with the Munk School of Global Affairs. No 14, 2003. Examples of services where economies of scale continue to exist at higher population include water supply and certain types of public works and transportation services
- ⁴ Peter Thiel, Zero to One: Notes on Startups, or How to Build the Future (Crown Business, 2014).
- ⁵ Rahm Emanuel, The Nation City: Why Mayors Are Now Running the World (Alfred. A. Knopf. 2020).
- ⁶ It has been theorized that local governments actually do compete with each other in a manner akin to private firms, where the "perfectly mobile consumer voter" will choose the municipality that best matches his or her preferences for taxes and services. This argument is called "tiebout competition" and was first articulated in the 1950s. However, we have chosen to omit this argument because more recent, evidencebased economic research renders the assumption of "perfect mobility" implausible. For example, one of the primary arguments made by 2019 Nobel Prize winners Abhiiit Baneriee and Esther Duflo is that economies are "sticky" and that labor, capital, etc., are not very mobile
- 7 2019 Nobel Prize winners Abhijit Banerjee and Esther Duflo give a modern take on this phenomenon and relates it to Ostrom's work in: Abhijit V. Banerjee and Esther Duflo, Good Economics for Hard Times (Public Affairs, 2019). An Ostrom-inspired perspective on this issue in local government is available in: Spencer T. Brien, "Strategic Interaction Among Overlapping Local Jurisdictions," American Review of Public Administration, Vol 48 (6).
- 8 Goodman, "Local Government Fragmentation: What Do We Know?
- ⁹ Christopher R. Berry, Imperfect Union: Representation and Taxation in Multilevel Governments (Cambridge University Press, 2009).
- 10 Ibid
- 11 Ibid
- ¹² Christopher B. Goodman and Suzanne M. Leland, "Do Cities and Counties Attempt to Circumvent Changes in the Autonomy by Creating Special Districts? American Review of Public Administration, 2018.
- 13 Lawrence L. Martin and Jeannie Hock Schiff, City-County Consolidations: Promise Versus Performance," State and Local Government Review. Vol 43, No 2 (August 2011).
- 14 Slack and Bird.
- ¹⁵ Mike Lapointe, "Sizing Up Amalgamation, 20 Years On," Torontist, January 2, 2018.
- 16 Lydia Miljan and Zachary Spicer, "Municipal Amalgamation in Ontario," Fraser Institute, May 2015.
- 17 Robert Bish, "Local Government Amalgamations: Discredited 19th Century Ideals Alive in the 21st" (C.D. Howe Institute. 2001).
- 18 Christopher B. Goodman, "The Fiscal Impacts of Urban Sprawl: Evidence from U.S. County Areas," Public Budgeting and Finance, summer 2019.
- ¹⁹ The research suggests that proliferation of special districts is related to fiscal constraints imposed on functionally autonomous city government, but not county government, See: Christopher B. Goodman and Suzanne M. Leland. "Do Cities and Counties Attempt to Circumvent Changes in the Autonomy by Creating Special Districts? American Review of Public Administration. 2018.
- ²⁰ Shayne Kavanagh and Vincent Reitano, *Financial* Foundations for Thriving Communities (GFOA, 2019).