



Kernan-Shepard Commission and Local Government Expenditures

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Introduction

The December 2007 Kernan-Shepard report (formally entitled *Streamlining Local Government*) is a remarkable public document. Its recommendations contain broad and far reaching changes to the administration of local government in Indiana. It is also surprisingly easy to read and embodies both fact and perceptions by residents into a clear call for change. We judge it one of the better commission reports we have seen in our combined 50 years of government and academic service. However, like any such report it generated several important questions to regarding the potential costs or savings of implementation.

This study attempts to address the potential impact of the reports implementation on the costs of local government. This is a narrow undertaking, and leaves other

important elements of the commissions' report for another day. We begin our analysis by estimating both scale economies and efficiency gains from the proposed reforms. We begin with a discussion of the literature on local government consolidation.

Earlier Findings

Academic research on local government consolidation lacks the broad empirical studies that are common on many other fiscal matters. This absence is even more apparent when discussing intra-county consolidation, since the more recent trend has been towards consolidating city/county government in larger cities. Simply, the type of consolidation that is proposed for Indiana largely occurred elsewhere before the development of modern economic analysis. In lieu of a detailed recounting of existing studies we briefly summarize the findings of consolidation studies and discuss the results.

We believe the bulk of academic literature on consolidation has focused on case studies of specific communities. These have occurred as a result of local inefficiencies resulting in high local costs or poor quality of local public services. Better results for government gather few calls for reform, so case studies and specific regional analysis occur in locations where either quality or cost are severely imbalanced. We believe the evidence suggests that in many Indiana counties that is also true (see *Hicks, Michael J. "Why Keep Indiana's Property Tax, Bureau of Business Research, Ball State University, November, 2007*). Here are a few stylized findings from earlier studies.

First, studies of local government consolidation that focus on individual expenditure units such as fire and police services, find that scale economies exist, but are modest, especially in larger communities. That is, the cost of providing services declines on a per capita basis as population served increases. However, we know of no study that extrapolates these findings to total operations.

Second, since many local governments are consolidated due to poor performance, many studies do not find cost savings, but rather increased quality of services. So, any comparison of studies will find mixed results regarding cost savings since that is often not the goal of consolidation.

Third, measuring local government quality is difficult. While it is possible to construct models that control for a variety of factors when estimating quality, mixing of cost savings and quality adjustments present special challenges. It is relatively straightforward, for example, to measure the impact of consolidation on school performance. It is quite another matter to perform the same estimate when significant changes in school spending (say to improve quality) accompany the consolidation.

So, we believe that existing consolidation literature, though important to consolidation in general offers limited insight into the potential cost savings of any

particular plan. Consolidation of government is highly idiosyncratic both in its intent and application to derive broad empirical evidence from where it has occurred.¹

Instead of relying on existing models, we will attempt to offer an explanation of potential savings, using two very tried and true economic concepts. We apply these models in Indiana, using their results to simulate the impact of the Kernan-Shepard report on costs of government. The impacts we estimate are the increase of population served by individual taxing units through the elimination of between one third and a half of total taxing authorities in Indiana. We end by detailing the political economy of consolidation.

Estimating Cost Savings from Kernan-Shepard

As the reviews of existing studies suggest, projecting cost savings from government consolidation presents significant technical challenges. In order to circumvent some of these challenges we offer a three pronged approach to estimating the potential savings of local government consolidation in Indiana.

The first method we employ is an estimate of the savings due to economies of scale in producing local government goods and services. The second method is an efficiency model of local government. The final effort is a simple accounting of activities that could be eliminated due to redundancies. We then summarize these impacts, and explain in some detail why these findings only offer “potential savings” for local government.

At the outset it may be helpful to explain in some detail the differences in the concepts between scale economies and the efficiency model. Scale economies arise simply from the presence of fixed production costs (such as overhead). In applying this to local government, the presence of costs that do not vary with the size of the municipality will, all else being equal, be higher in smaller communities. For technical reasons we do not estimate what is the optimal (or least cost) size of government. Instead, we simply measure whether or not observed costs in Indiana vary with the quantity of public services provided.²

¹ For readers who would like to see a fuller treatment of the academic literature (for municipal consolidation), we recommend Staley, Samuel, Dagny Faulk, Suzanne Leland and Eric Schaunsberg’s “The Effects of City-County Consolidation: A Review of the Recent Academic Literature” Indiana Policy Review Foundation, November 2005. For a broader view of consolidation, we recommend Kent, Cal and Kent Sowards “Local Government Consolidation: Lessons for West Virginia” Center for Business and Economic Research, Marshall University, 2205.

² Since government is not a profit maximizing entity we cannot know from the observed data whether or not any particular set of local government costs are optimal. This also prevents us from employing duality theory to estimate the efficient set of government inputs. Thus, at best, we are able only to compare any observed level against the “best” set of government inputs. Happily we seek a far more limited set of findings here. From a practical standpoint we would be happy not with the potentially lowest expenditures that are optimal, but simply if all Indiana counties were as efficient at the single most efficient locale.

The efficiency of local government is necessarily measured differently from the presence of economies of scale. In this process, we are attempting to measure what economists have long labeled X-inefficiency (See Leibenstein, Harvey "Allocative efficiency v. "x-efficiency" in *American Economic Review* 1966). This type of inefficiency arises when the mechanisms for making appropriate managerial decisions are absent. We quote Leibenstein:

"X-efficiency is not the same thing as what is frequently referred to as technical efficiency, since X-efficiency may arise for reasons outside the knowledge or capability of management attempting to do the managing . . . In other words, it is not only a matter of techniques of management, or anything else "technical" in carrying out decisions, that is involved in X-efficiency" (Leibenstein, 1980, pg 27-28).

Extrapolating this argument to local government in Indiana we would suggest that X-inefficiency occurs because some key factors that would control costs or improve quality are not present in the structure of government. While this is hardly a challenging argument to make, there are also empirical findings to support the argument. Reporting the results of a meta-analysis of X-efficiency studies in the *American Economic Review*, Dr.'s Ken Button and Thomas Weyman-Jones find:

"bureaucratic or publicly administered industries are on average less efficient, have lower extremes of efficiency, and show a wider dispersion of efficiency than privately owned, competitive, or weakly regulated industries." [1990, pg 444].

This is the empirical economic research into the factors that motivated the Kernan-Shepard Commission report. The magnitude of these effects – scale economies and x-inefficiency are the purpose of this study. We begin with scale economies.

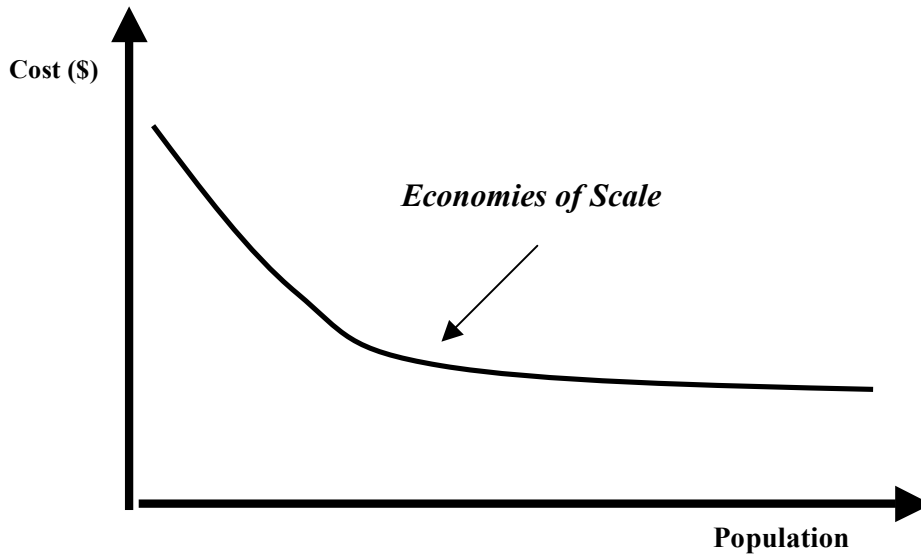
Economies of Scale in Local Government

The studies we discussed earlier outline the potential presence of economies of scale in local government services. This is an extrapolation of the relatively straightforward economic concept of scale economies, which deserves a restatement in the context of government services.

Scale economies exist in the private sector when a firm that optimizes its production costs in the face of some fixed costs (e.g. plant and equipment, office space, or insurance coverage) enjoys lower per unit production costs as production grows. This idea is among the first economic phenomenon to be discussed by scholars (as early as Thomas Aquinas), and is as applicable to government as well as the private sector, though we might relax the assumption that government is attempting to minimize costs. There is an extensive literature which estimates the presence of economies of scale in government activities ranging from public safety to schools.

The traditional picture of scale economies presents the cost of an activity across the range of production.³ See Figure 1.

Figure 1



For government production, we use the price of government services (tax rates) and the number of residents served (population) as the quantity measure. This is a common approach, and our model appears as:

$$T_{i,t} = f(\gamma_i, P_{i,t}, P_{i,t}^2, \varepsilon_{i,t})$$

Where the average tax rates (T) in county i, in year t, are a function of a county fixed effects term (γ), population (P) in county i, year t, and its square (which I'll shortly explain) and a random error term which captures unexplained variation. This specification is common, and applied on county level data for Indiana's counties from 1988 through 2003. For a description of these data see *Hicks, Michael "Transportation Infrastructure, Retail Clustering and Local Public Finance: Evidence from Wal-Mart's Expansion" Regional Economic Development, Vol 2(2) Winter 2006.*

³ Economies of scale, and scale economies are synonymous and are mathematically $\frac{\partial C_i}{\partial Q_i} \leq 0$ where the cost of producing good I, declines as output (Q) increases).

The inclusion of the squared population term in the estimation is to provide an estimate of the non-linear range of scale economies that appear in Figure 1. This quadratic term permits us to isolate whether or not the specific range of estimates we have made occur across a nonlinear range.

The long history economists have with the notion of scale economies provides us with sufficient clarity to appreciate that non-linearities likely exist across the range of government size in our sample. For our purposes, it is not sufficient to simply note their size, but also to ultimately simulate savings from the changes proposed in the Kernan-Shepard report. To accomplish this, we estimate the scale economies in two samples: Indiana counties within and outside Metropolitan Statistical Areas. Results of both estimates appear in Table 1.

Table 1, Local Government Scale Economies in Indiana, 1988-2003⁴

	MSA Counties	Non-MSA Counties
Intercept	12.87296***	16.48543***
Population	-0.0000487**	-0.000228***
Population Squared	1.18E-11	-1.3E-11
Autoregressive Element	AR-3	AR-2
Fixed Effects	yes	yes
EGLS	yes	yes
Adjusted R-squared	0.40	0.58
Panel Durbin-Watson	1.44	2.14

These results strongly confirm the presence of scale economies in the local provision of government in Indiana. The coefficient for population being both statistically meaningful, of economically consequential magnitude and negative means there is a decline in tax rates, at population rises in a county, holding other factors constant. This is the most critical finding of this initial estimate.

We note, but do not report that for the full sample of all 92 Indiana counties experienced scale economies that were non-linear (they decreased as the county size increased), which in part motivated the dual sample approach. In the two samples we observe that scale economies exist in both the MSA and non-MSA counties, but are roughly three times as pronounced in the smaller counties. This means that for the smaller counties, the cost savings benefits of Kernan-Shepard are likely to be significantly greater than for the larger counties. This result is heartening since it is exactly what economic theory predicts, and earlier empirical studies have confirmed.

In order to evaluate the potential impact of cost savings across local governments we construct a simulation model from these results. In the estimate presented above, we have a very statistically strong, inverse relationship between the price of government (average county tax rates) and the population of the county. Extrapolating this relationship to the recommendations of the Kernan-Shepard report, we can estimate the impact of changing the size of the average taxing unit from its current level to that under

⁴ The model is an EGLS panel, with fixed effects, with white-washed standard errors.

Kernan-Shepard. We have side stepped the greatest concern arising from this approach by separating the sample into MSA and non-MSA samples, which is the presence of a non-linear relationship between population and average property tax rates. Our simulation model then applies the rate change due to consolidation of government size to the property tax base to estimate total saving.

We have chosen to include only local savings resulting from the Kernan-Shepard recommendations, due to recently passed legislation which transfer local school district operating expenses to the State level. This legislation passed subsequent to the Kernan-Shepard report, so we will not estimate savings associated with consolidation of school districts, but note that they do exist. Results of the simulations appear in Table 2, where we report the mean, and one standard deviation error (two-tailed).

Table 2, Estimated Savings from Kernan-Shepard through Scale Economies		
	<u>MSA Counties</u>	<u>Non-MSA Counties</u>
High estimate	\$42,997,000	\$195,448,000
Expected Savings	\$35,371,000	\$165,597,000
Low estimate	\$27,774,000	\$135,746,000

Thus we predict, for all Indiana counties that roughly \$200 million in savings may be available due to economies of scale in local government services due to the proposed consolidation in non-school taxing districts. However, the scale economy savings will be concentrated in the smallest counties, with only about 20 percent of the savings occurring in the largest counties.

These results align remarkably well with economic theory, and are based upon a well known modeling approach. However, we are also interested in the X-inefficiency that may occur in local government, and it is to this issue we now turn our analysis.

X-Inefficiency in Local Government

The Kernan-Shepard report is significant in both its breadth and detail. Though it was not designed as an academic study, the anecdotal comments so carefully drawn into the document detail the notion of X-efficiency which we have already explained.⁵

Without further arguing what most readers will accept as self evident – that government is often less efficient than the private sector—we offer a model of X-inefficiency in local government.

Employing a cross sectional model of Indiana Counties in 2003 we estimate the relationship between the price of government (local average property tax rates) and the number of local taxing agencies. This relationship follows work on hierarchies initially suggested by Oliver Williamson (see "Markets and Hierarchies: Some Elementary

⁵ In particular, we note the comments by citizens, the media and local government officials on pages 19 and 22.

Considerations," *American Economic Review*, May 1973, 63, 316-25.). ⁶ Simple empirical models of this relationship are also available in Hicks (1998, 2007). Our model then takes the form:

$$T_i = f(Z_i, G_i, G_i^2, \varepsilon_i)$$

where the average tax rate (T) in county i, is a function of control variables Z for each county, and the number of local taxing districts G, and its squared value. We also include a white noise error term.

In this specification, we have little guidance on what appropriate control variables may be employed. We considered population density, educational achievement (percentage of residents with both bachelors and HS degrees), per capita income, presence of an interstate highway, the GINI coefficient for 2000, which measures local income inequality, the presence of a state or private university and median house values from the 2000 census.

In order to determine which variables mattered most, we combined them into a single regression, and subjected them to a number of specification tests (including stepwise regressions and a Hausman test). The variables which emerged as meaningful (both in magnitude and statistical significance) across different combinations of variables were the number of taxing authorities, population density and the GINI coefficient which measured income inequality (most likely apparent very urban counties with very poor and affluent regions alike).

In the entire sample, we observe no nonlinearities that rise to statistical meaning. However, when we separate the sample by size (with either the median of 33,000 residents or mean of 67,000) we repeatedly find that the largest counties experience the largest coefficients for X-inefficiency. An example of one estimate appears in Table 3.

⁶Simple empirical models of this relationship are also available in Hicks, Michael J. (2007) "Hierarchical Delays as a Source of Nominal Price Rigidities: Evidence from the Microcomputer Industry." *Managerial and Decision Economics*, October 2007. and Hicks, Michael J. (1998) *Hierarchical Delays as a Source of Sticky Prices: Evidence From Two Workably Competitive Industries*, P.D. Dissertation, University of Tennessee.

Table 3, X-Inefficiency Model, 26 largest Counties

Variable	Coefficient
Intercept	-4.674945
Taxing Districts	0.094557*
Taxing Districts Squared	-0.001365*
GINI Index (income inequality)	0.160166***
Proportion of Adults with BA Degree	-0.04178*
Proportion of Adults with HS Diploma	0.029365
Population Density	0.001175*
Per Capita Income	-0.040086
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R-squared	0.42
Adjusted R-squared	0.32
S.E. of regression	0.676
Sum squared resid	19.23
Log likelihood	-47.06
F-statistic	4.34
Prob(F-statistic)	0.001
Durbin-Watson stat	2.29

This model tells us that there is a strong positive relationship between the number of taxing districts in a county and the county mean tax rate. Also a significant proportion of the variations in tax rates across counties are explained by these data. The significance of the squared population variable suggests that there is not a linear relationship between taxing districts and tax rates.

From these results we construct a simulation model similar to that employed in the scale economies estimate and simulation above. In this case, the simulation is performed entirely within the range of the estimates since we simply reduce the number of taxing authorities in each county by that proposed by Kernan-Shepard. Thus this is a far more reliable test than the scale economies measure.

By varying the size of the district in our sample (to counter the non-linearity we observe) we get obtain very interesting results. We find that the bulk of savings occurs in the largest counties. Indeed, we find savings due to X-inefficiency in counties beneath the median size of roughly 33,000 residents to comprise less than \$10 million. For counties above the median of 33,000 residents, we find, in our smallest total estimate, savings of \$422 million that could be realized due to consolidation and its associated reductions in X-inefficiency. Of this \$422 million in savings more than \$371 million of potential total savings occur in counties with populations greater than 50,000 residents.

So, in our first two estimates we find that, for small counties considerable cost savings could be realized by spreading out the cost of government over more residents (consolidating), which would result in increased economies of scale. In our X-efficiency model, we find that efficiency in local government is worse in counties with an abundance of taxing authorities. These are primarily the larger counties. Further, the

magnitude of these impacts is in the few hundred million dollars range. We would also like to compare these results to an accounting of costs associated with local government.

A Quick Accounting of Local Government Costs

A third method of estimating the potential savings from implementing the Kernan-Shepard report involves simply reducing the number of elected officials by the total discussed in the report. Like other methods, this is imperfect because it is unclear how many of these elected officials duties will have to be undertaken by other officials (a potentially more costly activity). Still, it is clear that the bulk of sub-county elected officials serve decision making roles that could be executed at a more consolidated level of government (more efficiently). Also, the total compensation (and other associated costs) of these locally elected leaders is not immediately apparent, even from a detailed examination of township budgets and other reports released by the Department of Local Government Finance. However, if we are to compare the magnitude of the potential savings potentially achieved by implementing the Kernan-Shepard report, an estimate of this is useful.

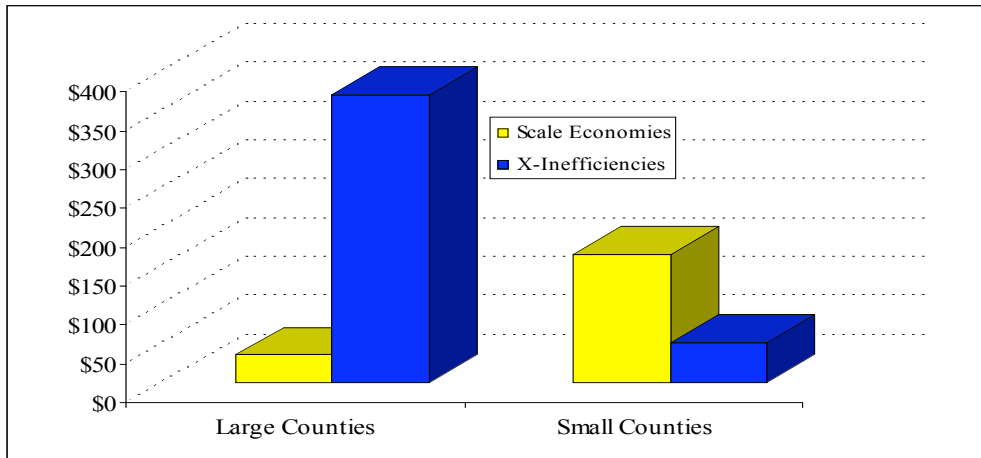
Assuming that across the roughly 5,800 elected officials eliminated through implementation of the Kernan-Shepard report, total support costs are \$35,000 annually. This includes salary and benefits, office expenditures, travel and other costs not transferred to other administrative or elected bodies, then the savings from Kernan-Shepard implementation exceed \$200 million. This is remarkably consistent with the scale economy estimates produced above. If the costs are double the \$35,000 (and we believe this is likely, even for the low cost, part time officials) the savings appear very similar to our X-efficiency gains from consolidation.

Summary of Empirical Findings

In the preceding section we estimated the impact of implementation of the primary recommendations of the Kernan-Shepard report. We first estimated potential savings due to the realization of increased economies of scale in local government. Second, we estimated the efficiency losses occurring due to the multiplicity of local taxing authorities in Indiana. Finally, we compare these findings to a conservative estimate of the savings due to elimination of the roughly 5,800 elected positions made redundant by implementing Kernan-Shepard.

The results offer important potential savings to taxpayers, with the type of savings varying across the size of counties. In Figure 2 we summarize the savings, labeling the counties as large and small counties as we did in our estimates. Our definitions across counties are roughly equivalent, as MSA counties tend to have 50,000 or more residents, but not exactly comparable.

Figure 2, Kernan-Shepard Savings



In deriving these estimates we have attempted to be as conservative as possible, and chosen to report the smallest of the estimates which display good statistical properties. However, even with the smaller estimates, we offer three important cautions. The first is that while it is certainly possible that the savings from both economies of scale and X-efficiency improvements are additive, our data do not clearly distinguish between the two. So, whatever changes are inherent in Kernan-Shepard implementation, we believe it prudent to accept the larger of the two estimates for each set of counties, not sum the impacts. Second, both scale economies and improvements in X-efficiency may result in one of two outcomes. Taxpayers may choose the same quality of government services at the lower cost, they may choose to improve the quality of local services with the same level of tax revenues, or more likely they may choose better local services at a somewhat lower cost. Thus, these actual savings may not be realized, but quality of local services (which we have not chosen to deal with in detail) should increase. The value to taxpayers in any of these three instances should be the same.

Finally, we caution that the savings we estimate here are only potential savings from the Kernan-Shepard report. It is to this we now turn our attention.

The Political Economy of Local Government Consolidation

The previous section provided both theory and evidence indicating consolidation of local government functions as envisioned by the S-K plan could generate cost savings for Indiana taxpayers. However, as the old saying goes: “many a slip between the cup and the lip.” The theoretical possibility of costs saving does not necessarily transfer into the reality of cost savings. Indeed, this section will outline a theoretical argument as to why cost savings may not be generated by consolidation.

Perhaps the closest analog to government consolidation in the private sector is the merger of two or more firms. Efficiency gains similar to those outlined above (that is, economies-of-scale) are the oft-stated reason for mergers between firms. Although many private mergers are successful there are any number of mergers of private firms have failed to generate the hoped for efficiency gains. The causes of these failures have included such diverse elements as clashing cultures between the merged firms, an overestimate of economies-of-scale, failure of top management to make appropriate cuts in staffing, and top management making more reductions in staffing than prudent. Corporate executives have not always been able to generate merger gains for their shareholders and we would suspect the best intentioned local government manager to run into similar problems.

However, in a public enterprise the goal of garnering gains for taxpayers through improved efficiency via consolidation-mergers are even more problematic. The incentives facing the manager of a private firm are quite different from the incentives faced by the manager of a publicly operated firm. A private firm is a for-profit enterprise putatively run for the benefit of its owners; while a public firm is a not-for-profit enterprise putatively run for the benefit of the taxpayer citizens. Private firm managers are ultimately accountable to their shareholders, while publicly operated firms are ultimately accountable to their taxpayers. In both cases there is a principle-agent problem. What prevents the manager (agent) of an operation from running the enterprise for her interests, compared to the interest of the shareholder or taxpayer (principle)? What recourse does the principle have if the agent does not perform?

In a private enterprise shareholders can always vote the underperforming manager out of office. In private firms with relatively few owners this option is likely quite effective. When the number of owners in a firm is small and each owner has a great deal of personal wealth at stake, the incentives are in place to ensure the owners take the time and acquire the expertise to effectively monitor the manager. However, even in a private firm where ownership is widely dispersed, so that small shareholders have neither the time, expertise, nor incentive to effectively monitor the firm's managers, another mechanism leads to constraining managers. Disgruntled shareholders simply sell their shares of underperforming stocks. A financial entrepreneur sensing a profit opportunity from the depressed price of the stock can and will buy up a large portion of the company stock. Having an interest and expertise similar to the case of the few owners this entrepreneur can exert pressure on current management to improve its performance or fire the current management and replace them with new managers. The market price of the firm's shares reflects a continuous and rather transparent referendum on the performance of agents, which provides discipline, albeit imperfect, on the managerial agents in a private firm.

In a publicly operated enterprise there are no tradable shares of ownership. At best each taxpayer has a single share (his vote) that is a theoretical method of disciplining the manager. Votes cannot be bought up, or sold—so that each taxpayer voters "voice" is diluted, especially as the number of functions of government increase or the size of the voting population rises. Although voting does exert some discipline on public managers it

is likely weaker and more attenuated than the discipline exerted in private markets. Most voters have neither the time, the incentive nor the expertise to monitor government effectively. We would therefore expect more inefficiency in government operation, more focus on the interests of the employees and managers than on the interests of the taxpayers.

It is important to note that this proposition is NOT meant as a disparagement of the character of employees in public sector enterprises. There are surely rouse and miscreant managers and workers in all enterprises both public and private. There are surely dedicated and altruistic managers and workers in all enterprises both public and private. Yet economic theory predicts that managers and workers respond to differences in incentives, and there is a well established empirical literature indicating public and private enterprises face different incentives leading to different outcomes. We now turn to how that may work out in consolidation in Indiana.

Envision a typical Indiana county where the provision of a local public service is organized at a township level. In order to avoid any “finger pointing” let us assume the service is one not provided by township government; but one that could be provided by township government: autumn leaf raking. Suppose that there is in each township an office of leaf raking financed by a small property tax levy. In the fall the Commissioner of Leaf Raking hires a crew of local youth (and others) to rake up the leaves at all residences, businesses and public areas. She also buys or leases all the necessary supplies and equipment to do the job in her township. Let the hypothetical county contain five townships each with 1,000 sites. Each township Leaf Raking Office obtains a budget of \$10,000 and is able to do an adequate job of providing the service.

What are the incentives facing the Commissioner of Leaf Raking? The Commissioner has a budget for buying or renting materials and equipment, maintaining an office, paying the work crews. She also receives a fixed modest personal stipend for her effort. In addition, to the stipend the Commissioner obtains certain prestige in the community and is also able to confer particular benefits on households in the township, such as making sure a job is available for Mr. & Mrs. Jones’ boy or ensuring Mrs. Mayes lawn gets yard raked first.

But now let us suppose that some technological innovation emerges that lowers the costs of leaf raking that would employ fewer numbers of workers. What incentive does an elected Commissioner of Leaf Raking have to adopt the innovation? If leaf raking were a private activity we know the typical firm owner would be forgoing profits if the cost saving innovation is not adopted. However, this is not apparent in the public case. If leaf raking is a small part of each household’s property tax bill, and the benefits received by the employees is large then the incentives to keep the crews employed may outweigh the benefit to taxpayers from mechanization. The enthusiastic teens that get a nice fall-time job may well become the campaign machine for the incumbent Commissioners of Leaf Raking’s re-election and their efforts will overwhelm any taxpayer dissatisfaction from their implicitly paying a few excess dollars a year for clean lawns.

What is described above is analogous if not identical to the X-inefficiency discussed in the previous section of the paper. Incentives in the public sector are simply different from those in the private sector; implying opportunity cost is generally higher in public enterprises than in private enterprises. But now envision a consolidation of the leaf-raking from the township level to the county level. Let us suppose the five township offices are consolidated to a single office and a single Commissioner is now elected to administer county-wide leaf-raking functions. The analysis in the previous section suggests that there are likely “economies-of-scale” to be reaped by the consolidation. Indeed, the cost of the one “super office” is unlikely to be five times the costs of the township office, the new Commissioner may well be able to negotiate more cost-effective deals on materials and equipment rentals; etc. Suppose these could translate into a lower average cost of providing leaf raking services per household from \$10 to \$8; that is the countywide budget could decline from its current \$50,000 to \$40,000.

Although there is a potential for these economies-of-scale savings to be passed on to the taxpayers one should note the new consolidated leaf raking office is larger in importance and size than its township counterpart. The value of the office has increased, and its ability to confer favors has also increased. Put another way, the X-inefficiency has not changed and in fact may be augmented. It is an open question as to whether incentives are in place to ensure cost-savings from consolidation get passed on to taxpayers. One could argue that the bulk of the savings might be used to employ more workers, to confer more benefits, to expand the agencies mission, etc. Note again this is NOT to imply anything about the character of the newly minted county level administrator. It is simply to say the elected official will implicitly calculate the benefits he receives politically from channeling the cost savings to taxpayers compared to political benefits he receives from channeling cost savings to increased employment, expanded mission etc.

The actual capturing of gains from consolidation is, therefore, a matter of speculation. Yes, there is evidence from cross-sectional county data that gain is potentially there. Yet there may be reason to believe that whether they translate into lower costs government may be crucially dependent on factors of local political culture, citizen participation and monitoring of elected officials and the actual process of government reorganization.