MUNICIPAL CONSOLIDATION An Analysis of the Financial Benefits for Fiscally Distressed Small Municipalities

BEVERLY S. BUNCH Texas Bond Review Board, Austin ROBERT P. STRAUSS Carnegie-Mellon University

The authors analyze the expenditures and revenues associated with the potential consolidation of nine small, fiscally distressed municipalities in western Pennsylvania that have lost substantial portions of their tax base as a result of the closing of steel mills and related heavy industry. The analysis includes the collection of consistent financial information, the creation of forecasted base-case 1989 revenue-and-expenditure scenarios, and their juxtaposition for the nine jurisdictions against consolidation scenarios that might provide cost savings while maintaining critical service levels. Consolidation may provide a method for eliminating chronic operating deficits; economies of scale could be realized for small municipalities should they consolidate.

Consolidation has been periodically proposed as a means for local governments to cope with sluggish or declining revenues. Opponents of consolidation often argue that the presence of many governments provides competitive pressures to keep taxes low and that a variety of governments provides citizens with choices of different levels of public services that may more accurately reflect varying preferences for public goods. In some instances, the local debate over consolidation versus nonconsolidation can involve

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other issues such as the possible stratification of communities by wealth and race.¹

Although there will always be a debate between those who favor larger units to achieve presumed economies of scale and those who favor choice and competition as ways to ensure local accountability and low taxes, there remains the outstanding empirical question of whether or not jointure can lead to economies of scale in some situations. Many of the empirical and case studies in the literature on government consolidation do not support the conjecture that consolidation of governments results in lower costs. Empirical studies generally have concluded that larger governments do not provide non-capital-intensive governmental services at lower per capita costs than smaller governments do.² Case studies of governments that have consolidated also suggest that total expenditures will not decrease following consolidation (Grant 1965; Hester 1970; Wilken 1976; Horan and Taylor 1977).

The empirical studies do not seem to reveal successful realizations of presumed economies of scale; however, most of these studies have focused on relatively large communities. On the other hand, there are virtually thousands of communities with populations under 20,000, and the question arises whether very small communities—that is, with populations under 2,500—can benefit from jointure. This question has become increasingly important in those parts of the United States where traditional manufacturing tax bases were seriously eroded in the early 1980s.

We report in this study the results of a detailed analysis of the expenditures and revenues associated with the potential consolidation of nine small municipalities in western Pennsylvania that have experienced decreases in their population and tax bases as a result of the severe decline in the primary metals and related industries. Detailed analysis includes the collection of consistent financial information on the subject jurisdictions, the creation of predicted base-case 1989 revenue-and-expenditure scenarios, and the juxta-position of this base case for the nine subject jurisdictions against consolidation scenarios that might provide cost savings while maintaining critical service levels.

In most previous case studies, researchers have observed changes in revenue and/or expenditure levels following consolidation but have not provided numerical estimates of what would have happened without consolidation (Grant 1965; Horan and Taylor 1977; Hester 1970). Our approach differs from previous case studies in that we compare the predicted condition of these jurisdictions if they were to consolidate to their predicted condition if they were not to consolidate. Alternatively, one may view our estimates of the cost savings potentially available from consolidation as evidence, from a cost-analysis perspective, of potential economies of scale for small juris-

dictions. Two sorts of results are provided: projected financial implications for the governments and predicted tax burdens for median home owners in the nine jurisdictions.

By way of summary, the analysis indicates that under consolidation, the nine jurisdictions could overcome their predicted operating deficits and meet impending liabilities. Also, the analysis indicates that median home owners in seven of the nine small jurisdictions addressed in this study would have lower revenue burdens if the governments were to consolidate. Under consolidation, the revenue burdens for the median home owner in these seven communities would be 4% to 32% lower than if the governments were to remain separate. The numerical estimates also suggest that two of these governments, in the absence of policy changes, may not have the financial resources to provide basic governmental services unless the governments consolidate.

MUNICIPALITIES IN THE STEEL VALLEY COUNCIL OF GOVERNMENTS

We studied nine small jurisdictions (ranging in population from 800 to 14,000) in the Pittsburgh metropolitan area. Most of the jurisdictions lost population between 1970 and 1980 (in many cases in excess of 10%), have higher poverty rates and concentration of elderly population than does the overall county, and have relatively fewer college graduates and lower per capita income than does the overall county.

None of the governments has a full-time professional manager, and only one of the governments has a full-time finance director. Three of the municipalities rely totally or primarily on part-time employees. In general, these municipalities provide police services, fire protection (generally with the assistance of volunteer fire fighters), refuse collection, street maintenance, general government services, and, in a few cases, water. Police services account for the largest category of expenditures, on average equaling 29% of total expenditures.

Most of these jurisdictions have been directly affected by the closing of steel mills. Of the nine communities, five had a steel mill in operation in 1980; however, only one of these mills was in operation at the time of this study. As a consequence, the assessed tax base has substantially declined, and employment has dropped as well. The economic dislocation from these major changes in heavy metals has had a devastating effect on the private and public economies of the other four jurisdictions in the study, since their residents have lost jobs directly and indirectly from the decline in steel.

Estimated employment levels indicate that these nine communities experienced a decrease of approximately 6,400 jobs, a decrease of 56%, during a four-year period in the mid-1980s. Data on the earned income tax base show average, real, *annual* decreases of 7.4% to 11.5% during the first five years of the 1980s.

Assessed valuation data indicate that the property tax base of these communities decreased by 8% during the past 10 years, compared to a 21% increase in assessed valuation for the county during the same period. Property-value decreases exceeding 30% occurred in three communities during this period, largely as a result of decreases in the assessed valuation of steel mill property. These economic problems were exacerbated by the loss of federal revenue-sharing funds in 1987.

Homestead Borough provides a particularly poignant example of the life cycle of a mill town. The Homestead Works was one of the original integrated steel facilities that were merged together by Andrew Carnegie and others in the partnership that became the U.S. Steel Corporation (now USX) and was the focal point of U.S. Steel's investment in new technology. In 1941, 15,000 residents of Homestead were forced to give up their homes under the War Production Act; the federal government used its power of eminent domain to take over residents' homes in order to double the size of the Homestead Works to provide the necessary steel plate to build the Liberty Ships. Upon completion, the Homestead Works was the largest integrated steel facility in the world. Today, steel is no longer produced at the Homestead Works, the property has been sold by USX to a local development company, and the central works are scheduled to be torn down when agreement can be reached on the next use of the land.

At the height of steel production in 1944, the Pittsburgh Steel Region produced 95 million tons of finished steel; today, *total* U.S. steel production, nationwide, is about 99 million tons, and the Pittsburgh Steel Region accounts for less than 10% of the national total.

In response to these economic and financial problems, most of the governments have made major changes. The governments have established garbage fees, increased property tax rates, and laid off a substantial number of city employees. Clairton laid off its entire police force and is currently relying on state police services. This particular city and one other have also resorted to borrowing for the financing of current operating expenditures.

Of the nine communities, seven have reached the state-imposed legal limit for the general-purpose tax rate, and four of these governments have obtained court approval for an additional five mills (the maximum amount allowed under Pennsylvania local tax law). In addition to facing a declining tax base,

two of the communities face large, unfunded accrued pension liabilities (more than 20% of their operating expenditures). Three others also have unfunded pension obligations, but they are a more manageable size.

EXANTE ANALYSIS OF CONSOLIDATION

The purpose of this analysis is to compare the general financial position and the residential revenue burdens that would be expected if the governments were to consolidate versus those that would be expected if the governments were to remain separate. The analysis begins with an overview of the predicted financial needs of the municipalities.

PREDICTED DEFICITS

Predicted revenues and expenditures for 1989 for each of these municipalities were developed based on past trends and assumptions regarding increases in prices and salaries. Adjustments were made for anticipated or known future changes in the tax base or service provisions. These forecasts indicate that each of the communities was projected to have an operating deficit in 1989, with the size of the deficits ranging from 2% to 34% of estimated revenues (see Table 1).

A projected operating deficit understates the financial difficulties of the governments, since future principal payments on existing debt are not taken into account. Also, such projections understate future problems, because positive policies needed to amortize unfunded accrued pension liabilities in accordance with state pension laws are not considered. Revised figures that incorporate these needs result in total deficit figures that range from 4% to 57% of estimated revenues. For the nine communities taken as a whole, the projected deficits equal 31% of total revenues.

SEPARATE GOVERNMENTS

Given the projected deficits, each of the governments will need to take action to avoid a shortfall. The general approach in this *ex ante* analysis is to identify the incremental revenues that could be obtained by raising taxes to the maximum level allowed by state law and to identify the amount of expenditures that could be cut if the governments were to decrease services to the minimum level necessary for basic service provision. The most severely distressed governments would need to utilize both revenue increases

TABLE 1: Predicted 1989 Deficits

| Municipality | Predicted Operating Deficit | Percentage of Revenues | Predicted Total Financing Needs | Percentage of Revenues |
|----------------|-----------------------------|------------------------|------------------------------------|---------------------------|
| Braddock Hills | \$ 33,000 | 6.5% | \$ 48,000 | 9.4% |
| Clairton | 604,000 | 27.2 | 1,270,000 | 57.2 |
| Duquesne | 573,000 | 25.1 | 1,197,093 | 52.4 |
| Homestead | 421,000 | 28.9 | 471,303 | 32.4 |
| Munhall | 541,000 | 21.5 | 571,000 | 22.7 |
| Swissvale | 39,000 | 1.8 | 84,000 | 4.0 |
| West Elizabeth | 23,000 | 34.3 | 23,000 | 34.3 |
| West Homestead | 74,000 | 10.1 | 74,000 | 10.1 |
| Whitaker | 31,000 | 15.2 | 31,000 | 15.2 |
| Total | \$2,339,000 | 19.3% | \$3,769,396 | 31.1% |

and expenditure reductions to balance their budgets. For the municipalities that have more flexibility, this approach allows trade-offs to be made between increasing taxes and fees or decreasing service and employment levels.

Table 2 shows the amount of additional revenue that could be generated and the amount of expenditures that could be cut by each of the nine municipalities if the governments were to remain separate entities. The revenue figures incorporate the following policies: increasing the general property tax rate to the maximum level allowed by state law (including the 5 mills that require court approval), increasing the special property tax rates (street lighting and pension) to the maximum level allowed to match revenues with the appropriate expenditures, improving tax-collection practices to the best level obtained by a jurisdiction within the same council of governments, and establishing a garbage fee to cover the direct costs associated with garbage collection. The expenditures figures address the following policy changes: police patrol staffing in accordance with guidelines suggested by the International Association of Chiefs of Police, conversion from paid fire fighters to volunteer fire fighters, the reduction of street crews to a minimal crew, and contracting for refuse collection.

For seven of the nine municipalities, the fiscal alternatives outlined in Table 2 would result in more savings or revenue than is necessary to avoid the 1989 predicted deficit. Therefore, these governments would have some flexibility in deciding which alternatives to implement to avoid a deficit. Two of the jurisdictions would need to implement each of the alternatives, and one of these governments would have a \$300,000 deficit even if each of the alternatives identified were implemented. This analysis suggests that this

TABLE 2: Alternatives for Individual Governments

| Municipality | Revenue Increases | Expenditure Decreases | Total Adjustments | Excess (Shortage) Compared to Financing Needs | |
|----------------|----------------------|--------------------------|----------------------|---|--|
| Braddock Hills | \$ 147,793 | \$ 31,459 | \$ 179,252 | \$ 131,252 | |
| Clairton | 1,281,322 | 562,611 | 1,843,933 | 573,933 | |
| Duquesne | 896,255 | 433,462 | 1,329,717 | 132,623 | |
| Homestead | 103,272 | 56,351 | 159,623 | (311,680) | |
| Munhall | 450,948 | 422,751 | 873,699 | 302,699 | |
| Swissvale | 212,470 | 420,128 | 632,598 | 548,598 | |
| West Elizabeth | 20,612 | 0 | 20,612 | (2,388) | |
| West Homestead | 71,312 | 21,450 | 92,762 | 18,762 | |
| Whitaker | 73,127 | 20,841 | 93,968 | 62,968 | |

latter jurisdiction will not have the financial capability needed to provide local government services in 1989. (It is assumed that West Elizabeth would be able to find a way to avoid a projected \$2,388 deficit.)

CONSOLIDATED GOVERNMENTS

We now analyze the financial impacts of consolidation of the nine local governments. Three small-group consolidations, consisting of two to four communities, are considered, as is a total consolidation of all nine municipalities. (The small groups are based on geographical proximity.) The approach taken here is similar to the one that was used for analyzing what would happen if the governments were to remain separate.

Table 3 shows the total revenues that could be obtained from utilizing the maximum general property tax rate possible without having to obtain special approval from the courts, the maximum special property tax rates that would be needed to cover the associated costs of street lighting expenditures, a garbage fee that would cover the direct costs of garbage collection, an improvement in tax-collection procedures, and maintenance of existing revenue levels for other miscellaneous revenue sources.

The expenditure listing in Table 3 begins with the combined total of the predicted 1989 operating expenditures and is adjusted for savings associated with consolidation and service changes. The nature of the service changes are comparable to the reductions that were discussed in the analysis of what would happen if the governments were to remain separate. The main difference is that the consolidation figures include funds to restore local police services in Clairton, which is relying on state police services. The identification of savings that could be obtained through consolidation involves a

TABLE 3: Consolidation Scenarios

| | Braddock Hills Swissvale | Clairton Duquesne West Elizabeth | Homestead Munhall West Homestead Whitaker | Total Consolidation |
|---|--------------------------------|---|--|------------------------|
| Consolidated revenue | | | | |
| Property tax | \$1,532,513 | \$1,983,653 | \$2,513,595 | \$ 6,019,646 |
| Garbage fee | 294,436 | 363,654 | 406,494 | 1,063,934 |
| Other | 957,716 | 2,508,045 | 1,946,895 | 5,412,291 |
| Total revenues | \$2,784,665 | | \$4,866,984 | \$12,495,871 |
| Consolidated expenditures | | | | |
| Combined predicted | | | | |
| 1989 expenditures (A) | \$2,704,374 | \$5,514,765 | \$5,920,621 | \$14,196,111 |
| Consolidated adjustments Elimination of duplicate | | | | |
| personnel | (44,066) | (168,904) | (203,470) | (624,022) |
| Closing facilities | (30,343) | (56,351) | (48,874) | (281,757) |
| Leveling up salaries | 13,739 | 8,261 | 105,117 | 140,879 |
| Total adjustments (B) | (\$60,670) | (\$216,994) | (\$147,227) | (\$764,900) |
| Service changes (C) | (\$462,532) | (\$819,014) | (\$563,523) | (\$2,070,734) |
| Total expenditures | | | | |
| (A+B+C) | \$2,181,172 | \$4,478,757 | \$5,209,871 | \$11,360,477 |
| Revenues – expenditures | \$603,493 | \$376,595 | (\$342,887) | \$ 1,135,394 |

certain amount of judgment because of the uncertainties associated with the discretionary decisions by government officials. We take a conservative approach to the savings associated with consolidation in this analysis; we assume that duplicative positions could be eliminated in the areas of general government, professional services, and dispatch, but we do not assume that personnel or other expenditures could be decreased in most of the functional service areas. We also assume that following consolidation, salaries would be leveled up to the highest salary level for a particular job classification that existed prior to consolidation. For example, if patrol officers in one jurisdiction were paid \$24,000 and patrol officers in another jurisdiction were paid \$20,000, all patrol officers would be paid \$24,000 if the governments were to consolidate.

We also take into account the savings that would occur as a result of closing extra municipal facilities, but because of the uncertainties in the real estate market, we do not assume that these buildings could be sold. (If the buildings could be sold, this would result in an increase in the property tax base and a one-time inflow of cash from the sale.)

Another consolidation issue that has to be addressed is what happens to the liabilities of the jurisdictions that existed prior to consolidation. State law on this matter is flexible in the case of debt (the debt can be repaid jointly, separately, or in defined proportions) and unclear in the case of unfunded pension liabilities. Since it is unlikely that one community would be willing to repay the debt of another community, we assume that the existing liabilities will be paid off by a debt and/or pension tax rate levied solely on the taxpayers of the community that originally incurred the liability. (The revenues and expenditures associated with pensions and debt repayment are not shown in Table 3; however, they are included in the cost-comparison figures in the following section.)

The revenue and expenditure alternatives outlined in Table 3 would result in a surplus for all but one of the consolidation groupings. Therefore, those groupings would have some flexibility in deciding which alternatives to undertake. The group that has a deficit could avoid the predicted deficit by receiving court approval for an additional 5 mill general property tax.

COST COMPARISONS

In Table 4 the actual 1987 revenue burden (the sum of the garbage fee and the property tax for the median residential property owner) is compared to the 1989 estimated burdens that would occur for separate governments and consolidated governments. An effort was made to keep the 1989 service levels comparable under each of the options. When the service levels differed, the higher level of service in all cases except one (Swissvale) was associated with the option that resulted in the lowest revenue burden for the residents.

For communities that would have some flexibility about which alternatives to implement, the figures labeled "most likely" indicate the combination of revenue and expenditure alternatives that appear to be acceptable based on past decisions and discussions with local officials. The lower part of the range indicates an assumption that municipal officials would focus on keeping revenue burdens as low as possible, and the upper part indicates an assumption that the focus is on maintaining existing service levels.

For eight of nine municipalities, the 1989 most likely revenue burdens will be higher than the levels existing in 1987 regardless of whether the government were to remain separate or to consolidate with other governments. These results demonstrate that one should be cautious in drawing

TABLE 4: Comparison of Policy Alternatives: Property Tax and Fees for Median Home Owner

| Braddock Hills Swissvale Clairton | Current Law (1987) \$216 \$333 \$259 | Separate Government (1989) Most Likely Range \$244 (\$227-\$22 \$333 \$410 ^b (\$389-\$5 | (\$389-\$511) | Group Consolidation (1989) Most Likely Range \$279 (\$224-\$31 \$284 (\$228-\$33) \$367 (\$367-\$39) | (\$224-\$312) (\$228-\$315) (\$367-\$395) | W | onsc 198 198 | Range (\$302-\$353) (\$36-\$399) |
|---|--|---|---------------|---|---|---|--------------------|--|
| Duquesne West Elizabeth Homestead | \$247 \$142 \$216 | \$414 \$192 c | (\$414-\$441) | \$385 \$182 \$256 \$411 | (\$182-\$205) | | | (\$181-\$207) (\$181-\$207) (\$210-\$239) (\$321-\$375) |
| West Homestead Whitaker | \$432 | \$477 \$233 | (\$200-\$233) | \$415 | | | \$326 | (\$320-\$377) |

a. The numbers in parentheses show the potential range in revenue burdens if different plausible revenue and expenditure options were implemented.

b. Funding is not included to restore Clairton's local police force.

c. If Homestead were to remain a separate government, in 1989 the borough would not have the financial capability to be able to provide local government services. conclusions about the impact of consolidation based on the observation that revenue burdens increase following consolidation. As the table suggests, the important issue is what happens to revenue burdens and service levels with consolidation compared to what would have happened without consolidation.

Two of the smaller jurisdictions (Braddock Hills and Whitaker) would have lower revenue burdens as separate governments, but the other seven communities would have lower revenue burdens under one of the consolidation options. The savings from total consolidation are quite large for several communities—for example, 21% in the case of Munhall and 32% in the case of West Homestead. This analysis suggests that two communities (Clairton, which currently does not have a local police force, and Homestead, which would face a \$300,000 deficit even if each of the alternatives were implemented) would not be able to provide basic local government services if they were to remain separate.

An analysis based on the range of revenue burden figures is generally consistent with the results based on the most likely figures. If one compares the lowest burden in the range across options, the results remain the same, except for one community. Comparison of the upper figure in the range reinforces the relative attractiveness of the options for eight of the nine jurisdictions. The results are less robust if one compares the highest burden for one alternative to the lowest burden for another alternative. However, even in that case, the preference for consolidation versus remaining separate would not change for four of the jurisdictions.

JURISDICTIONAL GAINS AND LOSSES FROM CONSOLIDATION

Given that some communities would benefit from consolidation and others would not, we now turn to identifying factors that influence which communities gain and which lose from consolidation. We find that size alone is not sufficient for predicting which communities would find it cost advantageous to consolidate. In particular, we find that the government that would gain the most from total consolidation (West Homestead) is a community with a population of 3,100 and that the government that would be hurt the most by consolidation (Braddock Hills) is a jurisdiction with a population of 2,500. Although both of these governments have volunteer fire fighters, the community that would be better off as a separate government has part-time police officers, contracts for dispatch, and pays lower wages and fringe benefits than most of the other municipalities in this study. This community's tax base also has been less adversely affected by the closing of steel mills.

Also, we find that communities with relatively low overhead costs, low property tax needs relative to the government's tax base, and a labor force characterized by volunteers, part-time employees, and relatively low wages and fringe benefits are less likely to find it advantageous to consolidate. These governments have the least to gain from elimination of duplication and the most to lose from equalization of wages and taxes.

As an overall indicator of which communities will benefit the most from consolidation, we have developed a ratio that we call the *property tax needs index*. This index was calculated as follows: (1) The projected operating deficit was added to the estimated property tax revenues under current tax rates; (2) this figure was adjusted so that it reflects the funding of comparable services across municipalities (i.e., the cost of refuse collection was subtracted in the communities that do not have a garbage fee, the cost of paid fire fighters was subtracted, and the cost of police services in the jurisdiction that currently does not provide local police services was added); and (3) the adjusted property tax figure was divided by the assessed valuation of the jurisdiction's property (expressed in \$1,000s). This index, shown in the first column of Table 5, can be viewed as the property tax millage rate that an individual government would need to levy to generate sufficient revenues to finance basic government services.

The second column of Table 5 shows the percentage change in the median home owner's millage if each community were to consolidate. Homestead, West Homestead, and Munhall have the highest initial property tax need indices and also are the communities that would benefit the most from total consolidation. Braddock Hills and Whitaker, each with a relatively low index, have the most to lose from consolidation. Communities with a property tax needs index in the middle range (Clairton, Duquesne, and West Elizabeth) could obtain moderate savings from total consolidation.

Swissvale's figures appear problematic; however, as was previously noted, Swissvale is the only community in which the option with higher level of services is not affiliated with the lowest revenue burden. The forecasted revenue burden for Swissvale as a separate government is based on the assumption that the borough will continue to use paid fire fighters; the revenue burden with consolidation is based on an assumed reliance on volunteer fire fighters. If Swissvale's revenue burden as a separate government is revised to reflect volunteer fire fighters instead of paid fire fighters, then Swissvale would experience a 6.9% revenue burden increase from total consolidation. This percentage increase is the same as that for Whitaker, which has a comparable property tax needs index.

This analysis suggests that the property tax needs index is a quick way to gain a general idea about which communities are more likely than others are to gain from consolidation. The property tax needs index is a quantifiable

TABLE 5: The Relationship between the Property Tax Needs Index and Cost Savings from Consolidation

| | Property Tax Rate Nee to Provide Services as Separate Government | Percentage Change in Median Home Owner's Millage (Separate vs. Consolidation) |
|----------------|--|---|
| Braddock Hills | 16.6 mills | +26.2% |
| Swissvale | 25.4 | -6.7 |
| Whitaker | 25.9 | +6.9 |
| Duquesne | 28.1 | -7.2 |
| Clairton | 32.4 | -9.8 |
| West Elizabeth | 34.0 | -4.2 |
| Munhall | 39.9 | -21.4 |
| West Homestead | 42.5 | -31.7 |
| Homestead | 47.7 | _• |

a. Homestead has insufficient revenues to provide local government services if it remains a separate government.

measure that represents the concept that when one combines communities with different levels of needs, the communities with the largest needs relative to their tax base will benefit more than communities with needs that are low relative to their tax base. This is intuitive, however; prior studies have not explicitly explored this issue.

SMALL MUNICIPALITIES MAY BENEFIT FROM CONSOLIDATION

This case study indicates that consolidation may be able to decrease the revenue burdens of residents who live in small, fiscally distressed municipalities. Residents in seven of the nine jurisdictions addressed in this study would have lower revenue burdens under consolidation than if the governments were to remain separate. For two of the communities (West Homestead and Munhall), consolidation would result in significantly lower revenue burdens for the median home owner (32% and 21%, respectively), and for two other communities (Clairton and Homestead), consolidation may represent the only way that these jurisdictions would be able to provide basic local governmental services.

For some small, fiscally distressed municipalities, consolidation appears to be an option worthy of further consideration. Whether or not jointure is politically viable is beyond the scope of this note. However, the type of analysis and findings described here should provide insights to local government officials in small municipalities that are considering consolidation as a means to cope with declining tax bases.

POSTSCRIPT

After this research was completed, we examined the financial situation of Clairton and Homestead to ascertain if our predictions for fiscal distress were correct. As a means of coping in the short run, the Borough of Homestead sold its water system to a private organization. The most recent audited financial statements available for Clairton indicate that the city's general fund had a negative balance of \$431,000 at the end of 1988 (compared to a general fund budget of \$1.7 million). The city also had a \$680,000 liability titled "Due to Other Governments," which represents a low-interest loan that the city received from the Pennsylvania Department of Community Affairs. Under Act 47, which was passed in 1986, the Department of Community Affairs is able to provide financial assistance to fiscally distressed municipalities.

To date, none of the municipalities in the study has consolidated, although several have undertaken some of the cost-saving and revenue-enhancing measures that were suggested. However, the economics of a continuously declining tax base and a continuing need for services suggest that the fiscal problems will persist until rationalization of various forms takes place.

NOTES

- 1. See, for example, Phares (1989), who recently reviewed the debate about the desirability of reducing municipal fragmentation in the St. Louis metropolitan area as reflected in two competing studies of local governmental organization. One study reflects the public-choice framework favored by Parks and Oakerson (1989) and Stein (1989), among others, and the other study, developed by the Board of Freeholders, proposes a restructuring of government to address service inconsistencies and inadequacies.
 - 2. See Hirsch (1970) for a summary of empirical studies.
- 3. State law specifies that the maximum general-purpose property tax rate for boroughs is 5 mills higher than the limit for third-class cities. The two third-class cities in this study, Clairton and Duquesne, each are at the maximum general-purpose tax rate. Therefore, these two municipalities would need to convert to a borough form of government and obtain court approval for an additional 5 mills in order to increase their general-purpose tax rate.

REFERENCES

- Grant, D. R. 1965. A comparison of predictions and experience with Nashville "Metro." Urban Affairs Quarterly 1:35-54.
- Hester, L. 1970. The Jacksonville story. National Civic Review 59:76-80, 95.
- Hirsch, W. Z. 1970. The economics of state and local governments. New York: McGraw-Hill. Horan, J. F., and G. T. Taylor, Jr. 1977. Experiments in metropolitan government. New York:
 - Praeger.
- Parks, R. B., and R. J. Oakerson. 1989. Metropolitan organization and governance: A local public economy approach. Urban Affairs Quarterly 25:19-29.
- Phares, D. 1989. Bigger is better, or is it smaller? Restructuring local government in the St. Louis area. Urban Affairs Quarterly 25:5-17.
- Stein, R. M. 1989. Market maximization of individual preferences and metropolitan service responsibility. Urban Affairs Quarterly 25:86-115.
- Wilken, W. H. 1976. Comment: Evaluating municipal reform: The 1970s compared to the 1920s. In *The political economy of reform*, edited by R. W. Bahl and A. K. Campbell, 20-23. New York: Free Press.

Beverly S. Bunch is a financial analyst for the Texas Bond Review Board, Austin, Texas. Before joining the board in 1992, she was an assistant professor of public administration at American University and, earlier, at the Maxwell School of Public Administration, Syracuse University. Her current research interests include state capital budgeting and governmental accounting.

Robert P. Strauss is a professor of economics and public policy at Carnegie-Mellon University. In 1972 he received the U.S. Treasury Department's Exceptional Service Award from Treasury Secretary John Connally for his design of the General Revenue Sharing legislation. From 1975 to 1978 he served on the Staff of the Joint Committee on Taxation, U.S. Congress. His current research interests include a longitudinal study of the vertical and horizontal equity of the federal income tax, optimal consolidation schemes for municipalities in a metropolitan area, and the use of mathematical programming methods to reduce the regressivity of consumption-based taxes.