Urban Development and Revitalization of Central Cities

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THE PENNSYLVANIA TECHNICAL ASSISTANCE PROGRAM (PENNTAP), A PUBLIC SERVICE OF THE PENNSYLVANIA STATE UNIVERSITY AND THE COMMONWEALTH OF PENNSYLVANIA, UNDER A CONTRACT FROM THE U.S.SMALL BUSINESS ADMINISTRATION'S OFFICE OF ADVOCACY, HAS MANAGED THIS ECONOMIC PROJECT TO ANALYZE THE PAST AND CURRENT STATUS OF AND TO MAKE RECOMMENDATIONS FOR THE FUTURE WELFARE OF SMALL BUSINESSES IN REGION III.
"The Importance of Small Business in Urban Development and Revitalization of Central Cities"

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REGION III  
CHAPTER J  
URBAN DEVELOPMENT

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ABSTRACT

Most cities in Region III have their hard core downtowns involved in revitalization.

The extent of involvement depends on the imagination, the cohesion, and the persistence of the city’s leaders and on the depth and spread of the leadership through the public and private sectors. In fact, the success of revitalization depends on the same factors — all very much intangible.

Aside from the physical tangibles that must become a part of downtown revitalization, there are others in the category of facts and figures.

Revitalization amounts to salvation for central cities, and economic stability is the lifeline that keeps urban development moving forward. As this research effort emphasizes, revitalization will be sustained if it succeeds in creating the essential economic spiral — success breeds success breeds success...

At the pivot of that spiral is small business. It is viewed as the impetus to revitalization and economic growth. In effect, small business fills the gap among the large businesses which seem to have a natural role of dominance in central city development. Without the linkage that small business provides, urban revitalization becomes static.

For this tangible role in urban development, small business needs to be part of the planning, needs to be coordinated into the public and private sector, and needs to be visible as actual development unfolds.

The involvement of small business in central city economic growth can be focused on five essential variables: Saving and investment in central city small business; employment and productivity; revenue and the supply side of markets for goods and services; costs and expenditures and the demand for productive resources; and management and entrepreneurial capability.

Each of these five variables are then appropriate for development in each of the five sectors on the central city subeconomy: Central business district; satellite commercial district; vacant structures and open spaces; residential sector; and local public sector.

When the five variables are covered for each of the subeconomy sectors, the phenomena of center city development is more likely to become a reality and to fulfill the goals established when the spirit of the "intangible" force was harnessed to the potential of the "tangible" components.
URBAN DEVELOPMENT

REVITALIZATION OF CENTRAL CITIES IN REGION III

SECTION I

Five key variables can explain the important role of small business in the revitalization of central cities in Region III.

1. Saving and investment in small businesses
2. Employment and productivity in small businesses
3. Gross receipts of small businesses and the supply side of their markets for goods and services.
4. Small business costs and expenditures and their demand for capital, workers, energy, and other productive resources.
5. Small business management and entrepreneurial capability for a greater role in the central city revitalization and urban development process.

Financial and real, i.e., nonfinancial aspects of these variables work together toward a solution to the problem of central city decline and decay.

The various dimensions of successful small businesses are closely related to five sectors of the central city subeconomy, namely:

1. The central business district (CBD).
2. The local government (public sector) of the political jurisdiction in which the CBD is located.
3. Central city households, neighborhoods, and residential communities.
4. Satellite, shopping, commercial and industrial districts in the central city.
5. Vacant structures and open spaces in the central city.

Sectors of the central city are interrelated, and are linked with
other subeconomies in the Metropolitan economy, which is a subeconomy of Region III, which is a subeconomy of the national economy and the international economic order.

Models of the Five Variables with respect to small businesses and five sectors of the central city are applied to 12 central cities in Region III. The central cities are:

Philadelphia, Pittsburgh, Harrisburg, and Wilkes-Barre in Pennsylvania,
Richmond, Norfolk, and Roanoke in Virginia,
Charleston and Huntington in West Virginia.
Baltimore in Maryland,
Wilmington in Delaware,
Washington in the District of Columbia.

Central City revitalization is viewed as a secondary effect or as a reactive possibility in this study. Small business is considered as the primary impetus and sustaining thrust toward central city revitalization and urban development. At this point, the primary role is assigned to small business as a matter of assertion, approach, or conceptual convenience. However, analyses of available data indicate that the importance of small business in central city revitalization efforts is greater than the priority assigned to it by policy makers and urban planners.

The dominance of larger businesses appears to be greater in the central Business District; in Banking, Insurance, Utilities, Transportation, Wholesale Trade for example. Generally, such firms are older and have had more time to grow from small to large scale operations. Another reason for actual and potential dominance of larger businesses in the CBD is that the forces of centralization are greater there,
Small businesses can benefit or suffer from the "Fiscal Effect" of the local government sector via the income-saving and investment-capital accumulation function.

The Central city residential sector may utilize accumulated household saving to meet small business equity capital requirements. This source of saving and investment for central city small businesses is perhaps the most overlooked and neglected source of small business financing in today's economic climate. Yet, it has the greatest potential for small business solvency, growth, and the revitalization of the central city. A residential neighborhood small business saving and investment program would be a most essential part of genuine efforts to revitalize the central city via the small business approach.

Vacant structures and open spaces in the central city are indicative of dissaving, disinvestment, or dormant saving and investment. If vacant structures and open spaces are on the edges of growth or in paths of development, they are good prospects for the absorption of saving and investment for small business. In this sense, unoccupied structures and open spaces are as crucial for central city revitalization as the other sectors.

The following observations are pertinent for saving and investment in Small Business:

a) Small businesses operating in central cities are usually operated and managed by their owners,

b) Most of their equity capital is provided by the owner-managers and their households, hence small businesses often induce high saving and capital accumulation

c) Some of the profits are ploughed back into the business, hence
small businesses usually enjoy higher rates of growth than big business.

d) Deferred consumption is typical as owners prefer to invest in the business rather than engage in conspicuous consumption.

e) Investments lead to increased output growth and development of the central city.

f) Most small businesses are unit enterprises and all of their investments are concentrated in one business unit.

Employment of central city human resources in each of the five sectors of the central city subeconomy is equally important. In addition to the employment side, there is the productivity side. Employment and productivity then, must be linked with saving and investment, and the other functions for balanced growth and revitalization of the central city through small business. The main problem is coordination of employment and training programs with numerous independent small firms as contrasted with the relative ease and convenience of dealing with a few large employers. In addition to the problem of training and placement of workers with small firms, there is also the problem of employee retention and upward mobility with the same firm.

Saving and investment, employment and productivity, revenue and output, and small business cost and inputs are elements of small business and the central city subeconomy, that depend upon small business management and entrepreneurship in a special way,
This paper is an extension of a recent Journal article on Economic Policies for the Revitalization of U. S. Central Cities. 1/

The importance of small business in Urban Development and Central City revitalization is one of several approaches included in a comprehensive model of economic recovery, vitality and growth at the core.

Analysis of data on 12 central cities in Region III indicates that alternative economic policies for the revitalization of central cities are feasible, fiscally sound, and cost effective.

The empirical results of this paper also point to small business as a leading and major component of a successful central city revitalization program. This approach, then, is recommended as an important partner in the recent national urban policy.

SECTION II - A TECHNICAL EXAMINATION

A Central City is herein defined as a subeconomy of a Standard Metropolitan Statistical Area (SMSA), which is a subeconomy of a Region (SBA Region III), which is a subeconomy of the U.S. Economic System. As a first order subeconomy the central city is directly and indirectly interrelated with other subeconomies (Metropolitan counties) in the SMSA. Also, it is directly and indirectly interrelated with economies at the metropolitan, regional, national, and international levels.

Spatially, a central city consists of five components, namely:
(1) the main Central Business District (CBD) for the entire SMSA;
(2) the local government of the political jurisdiction(s) in which the CBD is located; (3) a residential component, including households, neighborhoods and communities; (4) a satellite component of commercial, shopping, industrial establishments and offices; and (5) unoccupied or vacant structures and open spaces all in the same geographical boundaries. The five components may be treated individually or collectively as components of the central city subeconomy.

Therefore, there are basic conditions and functional relations, both external and internal to the central city itself, that are significant for this study of Small Business in urban development in general, and the revitalization of the central city in particular. Some of the internal variables and basic conditions of the central city are related to others within this structure. Some are functionally related to those outside. (See Figure 1)

The Central City is an interesting but complex set of phenomena.
DIAGRAM OF SMALL BUSINESS IN URBAN DEVELOPMENT
AND CENTRAL CITY REVITALIZATION - LOCATION AND TIME UNSPECIFIED

FIGURE 1

SUBURBS  URBAN ECONOMY  RURAL

PUBLIC SECTOR
- FEDERAL
- STATE
- LOCAL

PRIVATE SECTOR
- NATIONAL
- REGIONAL
- LOCAL

CENTRAL CITY ECONOMY (CE)

SMALL BUSINESS (SB)

CENTRAL CITY REVITALIZATION (CR)

SAVING AND INVESTMENT (NS)  EMPLOYMENT AND PRODUCTIVITY
REVENUE, OUTPUT (RO)  COST, INPUTS (CI)

MANAGEMENT, ENTREPRENEURAL (ME)
METROPOLITAN AND REGIONAL DEVELOPMENT
However, its revitalization is viewed as a secondary effect or a reactive possibility in this study. Small business is considered as the primary impetus and sustaining thrust toward central city revitalization and urban development. At this point, the primary role is assigned to small business as a matter of assertion, approach, or conceptual convenience.

THEORTICAL CONSIDERATIONS

In defining small business as the "Prime Mover" and the central city as a first order subeconomy with five interrelated components, the scope and content of this work becomes clear. The question as to what this study is about, is answered. The task then is to decide how specific parameters, variables, and relations work together toward central city revitalization and urban development. This is the process by which small business causes movement of the subeconomy, directly; and larger aggregations of economic activity, indirectly.

There are at least five parts of the process by which small business causes waves and movements of five components of the central city, as indicated below: (See Figure 2)

(1) Small Business Saving and Investment in Five Sectors of the Central City

Each sector of the central city is affected by net saving (gross saving) minus (gross dissaving) in and by small businesses. Likewise, each of the five sectors is economically vitalized by gross investment, and economically devitalized by gross disinvestment. Saving is the difference between current income of a person, a household, or a community and current consumption. Similarly, Gross Investment is total current investment expenditures of a business firm, and net investment is the difference between gross investment and depreciation of plant, machinery
FIGURE 2

FIVE WAYS THAT SMALL BUSINESS AFFECTS FIVE SECTORS OF THE CENTRAL CITY SUBECONOMY

1. Saving and investment in small business.
2. Employment and labor productivity.
3. Revenue, profits and other income.
4. Expenditures, costs, taxes, dividends, interest.
5. Management, entrepreneurship.
and equipment, for example. Net investment also arise from increases in inventories. Dissaving and disinvestment are negative balances for a period. Net small business investment in the central city, then, is a vital organ of this subeconomy, depending on the sign and the magnitude of changes.

Taking all five sectors of the central city together, we may formulate the small business saving and investment functions, thusly:

\[ NS = GS - GD + ES, \]

where

- **NS** = net saving for and by small businesses in the central city.
- **GS** = gross saving by central city households for small businesses, and undistributed earnings for small business expansion or debt liquidation, etc.
- **GD** = gross dissaving by central city households for small business operations and distribution of current earnings by small businesses in the central city.
- **ES** = exogenous saving or dissaving for small business establishments in the central city.

Similarly, the small business investment function for central city revitalization is formulated as:

\[ NI = GI - GD + EI, \]

where

- **NI** = net investment by and for small business in the central city, i.e., net additions to inventories and to small business capacity through accretion and expansion.
- **GI** = gross investment of gross saving, as previously defined, in small business inventories and capacity.
- **GD** = gross disinvestment through small business contraction, attrition, and relocation outside the central city, and
- **EI** = exogenous investment or disinvestment for small business establishments in the central city.

When \( NI > NS \), as specified above, the central city sub-economy is boosted toward revitalization. When \( NI < NS \), revitalization of the central city through small business saving and investment is retarded and
reversed. When NI is equal to NS for small businesses located in the
central city, this subeconomy is stationary or stagnant. In order for
the central city as a whole to be economically viable through savings and
investment, the flow of saving to finance small business investment in
the central city must be greater than the outflow of such saving through
contraction, withdrawal, or disinvestment.

Theoretically, net positive saving by indigenous central city small
businesses and households is necessary to fund net positive small business
investment, which is necessary for small business expansion and revitali-
ization of each sector of the central city as well as for the revitalization
of the total subeconomy.

In other words, small business success breeds success and potential
success for others. Successful central city households save some of their
current income. If this accumulated saving is utilized to finance in-
vestment in small businesses, they are better able to pay current expenses
and to compete and grow. Successful central city households, then, con-
tribute to the success of central city small businesses; while they in
turn, provide opportunities for successful workers, owners, creditors,
investors, and customers.

Now the stage is set for some deductions and conjectures as to the
importance of small business saving and investment for each of the five
sectors of the Central City (See Figure 2). One can speculate at this
point as to the differential impact of small business saving and investment
on the Central Business District in contrast to satellite commercial dis-
tricts, shopping centers, and industrial parks within the central city.

One would expect the dominance of larger businesses to be greater
in the Central Business District. Generally, they are older, and small
businesses have had more time in which to grow from small to large scale operations. Another reason for greater and potential dominance of larger businesses in the Central City is that the forces of centralization are greater there. Intensive land use, high land values, and traffic densities all contribute to comparative advantage for large businesses and branches of large businesses in the Central Business District than in smaller satellite business developments. Urban development, according to Urban Development Theory, as the distance from the Central Business District increases, the economic forces of decentralization increase. And, the comparative advantage of high concentration and large business dominance decreases. A possible exception to these tendencies are industrial parks where capital intensive manufacturing firms are concentrated. However, this is a function of the agglomeration of firms and industries whose minimum and horizontal space requirements are high relative to the size of the average small business unit.

Saving and investment for small business are interrelated with the local public sector of the central city through sales, income, and property taxes. The difference between the total tax bite of small businesses by the Central City government, and the total expenditure by that government for small business services and assistance amount to forced saving (investment) or dissaving (disinvestment), depending upon the sign and size of the difference, if any. The point is that small businesses can benefit or suffer from the "Fiscal Effect" of the local government sector, insofar as the small business saving-investment-capital accumulation function is concerned. As indicated earlier, small businesses can benefit or suffer from the forces of CBD and satellite centralization, or decentralization, or agglomeration. In any event, saving by central city households and
firms for central city small business investment is affected differentially by the CBD, satellite, and local government sectors.

The residential sector of the central city saves and dissaves for small business purposes. Central city households may channel saving or dissaving to central city small businesses through financial institutions. Or, they may supply loans and investments directly to central-city small businesses. Or, they may sponsor and manage their own small businesses; and utilize accumulated household saving for equity capital requirements. This source of saving and investment for central city small businesses is perhaps the most overlooked and neglected source of small business financing in today's economic climate. Yet, it has the greatest potential for small business solvency, growth, and the revitalization of the central city. A residential neighborhood small business saving and investment program would be a most essential part of genuine efforts to revitalize the central city via the small business approach.

Vacant structures and open spaces in the central city do not supply saving and investment for small business or any other purpose. Rather, they are more indicative of dissaving, disinvestment, or dormant saving and investment. If vacant structures and open spaces are on edges of growth or in paths of development, they are good prospects for the absorption of saving and investment for small business. In this context, no other sector is more crucial for central city revitalization.

The following observations are pertinent for savings and investment in small business:

a) Small business operating in central cities are usually owned and operated by their managers,

b) Most of their capital is provided by the owner-managers,
hence small businesses often induce a high degree of savings and capital accumulation.

c) Profits are ploughed back into the business, hence small businesses enjoy higher rate of growth from internal investment than big businesses,

d) Deferred consumption is typical as successful owners prefer to invest in the business rather than engage in conspicuous consumption,

e) Investments lead to increased output, growth and development of the urban area,

f) Most of them are unit enterprises and all their investments are concentrated on one business unit,

EMPLOYMENT AND PRODUCTIVITY IN FIVE SECTORS OF THE CENTRAL CITY

In the preceding section the importance of saving and investment by central city households and firms, for the health and vitality of five sectors of the central city, was analyzed. Indigenous net saving and investment flows were formulated for expanding and improving the capital stock and the economic base for small business growth in the central city.

This approach to small business development and growth is critically important for small business itself, It is also vital for each sector of the central city subeconomy, individually and collectively. This prime condition provides an adequate and sound source of indigenous equity financing for small business in the central city. Also, it establishes ownership rights and interests of central city households in the central city subeconomy,

Employment of central city human resources in each of the five sectors of the central city subeconomy is equally important. In addition
to the employment side, there is the productivity side. Employment and productivity, then, must be linked with saving and investment, and the other functions, for balanced growth and revitalization of the central city by way of small business.

For the purpose of analysis, let us assume a ratio of one unit of labor (human resources) for every unit of capital saved and invested by central city households and small businesses for the revitalization of the central city subeconomy. We may define a unit of capital as a dollar saved by central city households and small businesses, and invested in small business operations in the same central city. Similarly, we may define a unit of employed human resources as one hour of human resources worked as applied in such business operations. As a point of departure, we postulate a 1:1 ratio between the employment of indigenous human resources and capital in the output and sales of the typical central city small business. Thus,

\[ A (H) + B (K) = (Q) \]

Where:

- \( H \) = employment of human resources
- \( K \) = employment of capital
- \( Q \) = units of output, sales, or revenue

\( A \) and \( B \) are assigned a value of one each, initially, their values can vary, depending upon the proportional contributions to output of the firm.

We now have a model for gauging the employment impact of a small business approach to the revitalization of the various sectors of the central city.
We hypothesize that, in terms of human resources, employment, and productivity, small businesses in the central city tend to follow the labor intensive line in Figure 3, rather than the capital intensive path. This, of course, will vary from sector to sector of the central city subeconomy, depending upon the nature and content of economic activity. Generally, it is safe to say that small business development and expansion is one of the best ways of increasing employment opportunities for central city residents, or reducing high unemployment rates in the central city. Yet, it is underrated, overlooked, and underutilized for this purpose. The main problem is coordination of employment and training programs with numerous independent small firms as contrasted with the relative ease and convenience of dealing with a few large employers. In addition to the problem of training and placement of workers with small firms, there is also the problem of retention and upward mobility with the same firm. These problems can be ameliorated and managed through various consortia and associations of small businesses, that should be assisted and funded by the local public sector. Here, the Federal-State Employment Service in cooperation with the local Manpower Revenue Sharing or Comprehensive Employment and Training Act (CETA) Program could work closely with Central City small businesses and their representatives to solve personnel and human resources problems in small businesses. Also, some of the funds of the Community Development Block Grant Program can be used for this purpose.

The observations below are supportive of the averred importance of small business in employment and productivity aspects of central city revitalization.
FIGURE 3
OUTPUT AND EMPLOYMENT OF HUMAN RESOURCES BY CENTRAL CITY SMALL BUSINESSES, WITH DIFFERENT COMBINATIONS OF INPUTS AND SCALES

Employment of Human Resources (H)
a) Some studies show that about 66% of the civilian labor force is employed in small businesses. The percentage may even be higher in central cities. The 1970 census figures of the cities in Region III indicate that about 95% of the business establishments are small in size (49 or less employees). See Table 1.

b) Labor productivity is higher in small businesses. One study found that labor is more productive in businesses that are smaller in size. This could be explained by a number of factors. 2/

   (1) More incentives and responsibility in small enterprises. Good work is easily noticed and rewarded while sloppy work, on the other hand, is punished. Chances of rising to the top are higher in small business and prize of achieving (psychic income) is also pronounced.

c) A number of inventions and innovations have come from small businesses. Small businesses are more likely to take risk and improve their operation than big business which are often tied down by procedure and bureaucracy.

d) A lot of red tape in big businesses which hinder productivity. Power struggle is also common in big business unlike small business where power is precisely defined.

e) A lot of big businesses were once small. Small businesses

grow to become big. As they grow their employment potential is increased. Despite these tendencies, small businesses are not always suited, or of the type to grow. Indeed, the owners and managers of some small businesses do not want them to grow beyond a size that they can control. Also, some small businesses do not have the organizational form or structure to grow beyond a certain size or to last for a long time.

SALES, REVENUE, AND MARKETS OF CENTRAL CITY SMALL BUSINESSES

So far, we have looked at some relations of saving and investment, and employment and productivity to the potential of small business for the revitalization of the Central City. These relations are also connected with the output side of small business firms, which is one of the principle factors that determine their revenue or sales, i.e. unit price \( P \), \( X \) Quantity of output \( Q \).

Aggregate revenues of small businesses in a central city are a crude indicator of their market share in the Gross Central City output or income. The dollar value of these aggregate transactions must be adjusted to eliminate double counting, etc. The point is that aggregate small business revenues and transactions are linked with measures of actual and potential markets in the central city. They are also small business shares of markets external to the Central City.

Symbolically, we may express this important side of small business in the Central City subeconomy as:

\[
R = PQ + S + U, \text{ where}
\]

\( PQ \) + revenues in dollars from the sale of products and services by central city small business firms in private and public sector markets, internal and external to the central city.
\[ S = \text{net cash value of subsidies and assistance from the government at all levels.} \]

\[ U = \text{net dollar value of other incomes of central city small businesses, from investments unrelated to current operating revenues, for example.} \]

Then,
\[ \sum R_1, R_2, R_3 \ldots R_n = Y_s, \]

Small business share of the central city subeconomy.

When \( Y_s > C \) (Total costs), small business is increasing its contribution to the revitalization of the central city. When \( Y_s < C \), small business' contribution to central city revitalization is decreasing. The following observations are made in support of this part of the model.

**REVENUE, PROFITS, AND OTHER INCOME**

(a) Revenue in small business is mainly derived from the sale of goods and services. Its profits is revenue less its expenditures. Because small business is more productive, its profit is higher than that of big businesses on the average.

(b) Most small businesses are one branch enterprises. Most of their activities are centered in local geographical areas. Their expenditures are revenue to other businesses operating in central cities. Costs, including wages to labor are paid to workers who live in central cities and spend their salaries for goods and services in central cities.

(c) Small businesses pay their taxes to the inner cities' local governments who use these funds for the provision of public goods. This is contrary to big businesses which have branches nationwide, and can pay taxes in jurisdictions that have lower tax rate by swapping or transferring their operations before the income is earned.
Most small businesses borrow their funds in local capital markets thereby promoting economic activities and development of central city.

By providing most of the goods and services, and tax funds in central city, they generate and revitalize not only the private sector, but also the public sector.

COSTS, EXPENDITURES, AND MARKETS. DEMAND SIDE OF CENTRAL CITY SMALL BUSINESS

Sales, revenue (money receipts) and account receivables are generated by the supply of goods and services by small business. In other words, the revenue side of the central city small businesses are linked directly to the production of goods and services demand for factors of production. Their solvency depends on how well they are able to meet these costs. We can express the cost facing a small business as:

\[ C = OP + Taxes \]

Where

\[ CS = \text{total cost of small business} \]
\[ OP = \text{total operating costs. These include all payments to the factors of production and all other costs incurred in the normal production operations.} \]
\[ Taxes = \text{payment to the government which takes the form of business income tax, sales tax, social security tax, property tax, etc.} \]

Small businesses must meet the operating costs if they are to produce goods and services. In the same token, they have to pay taxes in order to maintain the local government. The burden of costs to small businesses differ from one sector to another in the subeconomy. High rents for prime
location and space are major costs in the central business district; in satellite commercial industrial sectors, interests on borrowed funds may be the highest cost; in local public sector, taxes are dominant while in residential sectors, diseconomies of small scale operations are most prevalent.

Small businesses meet their costs from their total revenues. In section 3, we discussed the effects on the revitalization of central city when $Y_s > CS$ or $YS < CS$. The former inequality is expansionary for small business and the central city subeconomy.

SMALL BUSINESS ENTREPRENEURSHIP AND MANAGEMENT IN CENTRAL CITY REVITALIZATION

The last of the five aspects of small business that is important for central city revitalization, may be the most crucial from the standpoint of the others and the five sectors of the Central City. Small business entrepreneurship is the mobilizer and the organizer of the other participants discussed above, and management is responsible for continuous survival and growth of small business firms in the central city subeconomy. Collectively, Management and Entrepreneurship (ME), is the independent variable for saving and investment (NS), employment and productivity (EP), revenue and output (RO), and cost and inputs (CI), or

$$\text{(NS)} \ (\text{EP}) \ (\text{RO}) \ (\text{CI}) = f(\text{ME})$$

In other words, all elements of small business are interdependent, but four of the five elements depend on management and entrepreneurship (ME) in a special way.

Small business (ME) is also linked with the five sectors of the Central City subeconomy, namely, the Central Business District (CBD), the Local Public Sector (LPS), Residential Households and Neighborhoods (RHN),
vacant structures and open spaces (VSO), and satellite commercial and Industrial Districts (SCI). Together, the total relationship of small business to the central city subeconomy may be expressed as:

\[
\left( \text{ME} \right) \cdot \left( \frac{(\text{NS}) \ (\text{EP}) \ (\text{RO}) \ (\text{CI})}{(\text{CBD}) \ (\text{LPS}) \ (\text{RHN}) \ (\text{VSO}) \ (\text{SCI})} \right) =
\]

CENTRAL CITY DEVELOPMENT, GROWTH, AND REVITALIZATION

The denominator of the formula is the economic base of the central city subeconomy in which central city small businesses are rooted. The numerator of the ratio denotes the economic status and condition of the small business sector in the central city subeconomy. Small business (ME) is factored out as the coordinator and organizer of the internal elements for responding to business opportunities in the central city economic environment.

SOME IMPLIED RECOMMENDATIONS

Suppose that \( Y_s \prec C_s \) is the actual situation facing small business in the central city subeconomy and \( Y_s \succ C_s \) is the desired situation by small business operations, individually organizationally, and by public policy decision makers. What kind of measures are consistent with the conversion of the actual situation to the desired situation? Pure strategies, mixed strategies, and policy options are possible. Several of each are listed below:

Pure strategies for converting \( Y_s \prec C_s \) to \( Y_s \succ C_s \).

a. Small business managers and operators may expand the total market for their existing products and services within the central city subeconomy and outside.

b. They may increase the market shares of their existing products and services, and thereby increase revenue, \( Y_s \), relative to
This strategy can also be directed to markets within the central city subeconomy or to those outside.

c. They may introduce new products and services, and new technology; thereby expanding markets into related product lines, and acquiring dominant market shares through patents and copyrights.

Mixed strategies include any combination of (a), (b), and (c) for example.

Policy options for enhancing the role of small business in Central City Revitalization include:

a. Development of commercial and industrial parks and central city small businesses in complementary operations, emphasizing linkages and economies of scale on their cost-demand side as well as their revenue-supply side of markets.

b. Financing of commercial and industrial parks for central city small businesses operating in common markets, through municipal bonds and development loans.

c. Procurement of maximum feasible value goods and services from central city small businesses, on the part of central city, state, and federal governments; on terms of controlled costs and quality, plus a specified profit percentage.

d. Guaranteed profit margin for central city small businesses that meet predetermined standards of quality, time, and efficiency standards in their production schedules. Such guarantees by the central city government would be available to community sponsored small businesses.
e. Financial incentives could be offered to central city small businesses for selected reduced prices of goods and services, essential for the economic well-being of central city residents and for the revitalization of the central city.
SECTION III
DATA ANALYSIS

In June 1978 the U.S. Small Business Administration estimated that total U.S. business population at 10.6 million firms. The small business population amounted to 10.2 million firms, or 96.7 percent of the total.\textsuperscript{3/}

Ten percent of the total population of small businesses in the 10 SBA regions were in Region III. Thus, Region III ranked 6th, five from the top and four from the bottom, in terms of its percentage, both of small businesses and minority businesses. The numerical dominance of small businesses in Region III is about representative of its numerical dominance in the national economy.

The small business population is distributed among the states in Region III (Pennsylvania, Virginia, Maryland, West Virginia, Delaware, and the District of Columbia), roughly in proportion to the distribution of the residential population. Inferences are possible for 12 central cities in the 6th ranking region in 6 states.

Data in Table 1, although incomplete, reveal patterns of dominance of employment in manufacturing, wholesale and retail trade, and Government in the 12 central cities. From the viewpoint of employment, we may refer to these three industrial categories as primary.

### TABLE 1

CIVILIAN LABOR FORCE IN SELECTED CITIES AND INDUSTRIES IN REGION III

<table>
<thead>
<tr>
<th>Central Cities</th>
<th>Unemployment (percent)</th>
<th>Total</th>
<th>Manufacturing</th>
<th>Wholesale &amp; Retail Trade</th>
<th>Services</th>
<th>Education</th>
<th>Construction</th>
<th>Govt.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Norfolk</td>
<td>4.1</td>
<td>86,104</td>
<td>10.1</td>
<td>23.6</td>
<td>10.1</td>
<td>7.5</td>
<td>7.1</td>
<td>29.2</td>
</tr>
<tr>
<td>Richmond</td>
<td>2.8</td>
<td>104,295</td>
<td>20.7</td>
<td>19.9</td>
<td>9.8</td>
<td>8.4</td>
<td>6.1</td>
<td>21.0</td>
</tr>
<tr>
<td>Roanoke</td>
<td>2.6</td>
<td>38,745</td>
<td>19.2</td>
<td>22.8</td>
<td>10.0</td>
<td>6.0</td>
<td>5.6</td>
<td>12.5</td>
</tr>
<tr>
<td>Charleston</td>
<td>3.9</td>
<td>28,131</td>
<td>13.9</td>
<td>23.6</td>
<td>8.9</td>
<td>6.7</td>
<td>7.4</td>
<td>18.8</td>
</tr>
<tr>
<td>Philadelphia</td>
<td>4.6</td>
<td>763,520</td>
<td>28.2</td>
<td>20.1</td>
<td>8.3</td>
<td>6.1</td>
<td>4.6</td>
<td>17.0</td>
</tr>
<tr>
<td>Pittsburgh</td>
<td>5.3</td>
<td>192,565</td>
<td>20.6</td>
<td>21.9</td>
<td>8.8</td>
<td>8.6</td>
<td>5.0</td>
<td>14.9</td>
</tr>
<tr>
<td>Wilkes-Barre</td>
<td>4.2</td>
<td>23,930</td>
<td>35.0</td>
<td>20.0</td>
<td>5.6</td>
<td>6.5</td>
<td>5.6</td>
<td>13.4</td>
</tr>
<tr>
<td>Baltimore</td>
<td>4.6</td>
<td>352,700</td>
<td>25.6</td>
<td>18.6</td>
<td>8.7</td>
<td>7.1</td>
<td>5.2</td>
<td>20.1</td>
</tr>
<tr>
<td>Wilmington</td>
<td>5.6</td>
<td>31,103</td>
<td>23.7</td>
<td>18.5</td>
<td>12.9</td>
<td>6.1</td>
<td>6.6</td>
<td>15.5</td>
</tr>
<tr>
<td>Washington, D.C.</td>
<td>3.8</td>
<td>334,976</td>
<td>4.9</td>
<td>14.4</td>
<td>12.6</td>
<td>7.9</td>
<td>4.8</td>
<td>42.1</td>
</tr>
<tr>
<td>Huntington</td>
<td>5.0</td>
<td>27,146</td>
<td>23.1</td>
<td>22.9</td>
<td>7.7</td>
<td>9.2</td>
<td>6.1</td>
<td>16.2</td>
</tr>
<tr>
<td>Harrisburg</td>
<td>3.0</td>
<td>28,112</td>
<td>14.6</td>
<td>18.5</td>
<td>7.5</td>
<td>4.6</td>
<td>6.0</td>
<td>31.9</td>
</tr>
</tbody>
</table>

Source: County and City Data Book published by U.S. Department of Commerce 1972. Data is based on 1970 census.
The other three industries included in Table 1 (services, education, and construction) are considered as secondary employment industries. Washington, D.C. is a notable exception to this pattern, with a high proportion of its civilian labor force in government and a low proportion in manufacturing.

Table 1 can be juxtaposed with Figure 1 (in the conceptual section of this paper) to obtain the result that both the private sector and the public sector are extremely important to the development and revitalization of central cities in Region III. Moreover, small business is central to the central city subeconomy as the central city is to the economic development of the entire metropolitan area.

The importance of small business for the revitalization of central cities is reflected in Table 2, which is paired with Figure 2 in the conceptual section. Certainly, a 93-95 percent small business majority in all five sectors of the 12 central cities in Region III is a most important impetus for revitalization. Specifically, employment and annual payroll of small businesses are a primary source of reliable income for central city households. This, of course assumes that central city households are able to obtain a fair share of both employment and business in the central city, and outside.

Table 3 points to the revenue-market supply of products and services by central city small businesses. The numerical dominance of central city small businesses, in conjunction with high population densities, suggests that a high proportion of the markets for small business products and services in central cities are geographically concentrated. Major portions of central city small business markets are typically local, notwithstanding the importance of exports and imports for small business and the central city subeconomy.
<table>
<thead>
<tr>
<th>Central Cities</th>
<th>Number of Employees (Mar. 12, 1976)</th>
<th>Annual Payroll ($1,000)</th>
<th>Number of Business Establishments by Employment Size</th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Wilmington*</td>
<td>144,271</td>
<td>1,796,822</td>
<td>7,328</td>
<td>95</td>
<td>6,970</td>
<td>358</td>
</tr>
<tr>
<td>Washington, D.C.</td>
<td>316,386</td>
<td>3,630,274</td>
<td>15,927</td>
<td>94</td>
<td>14,983</td>
<td>1,044</td>
</tr>
<tr>
<td>Baltimore</td>
<td>300,566</td>
<td>3,259,546</td>
<td>14,670</td>
<td>94</td>
<td>13,763</td>
<td>907</td>
</tr>
<tr>
<td>Pittsburgh*</td>
<td>551,698</td>
<td>6,647,327</td>
<td>27,242</td>
<td>95</td>
<td>25,770</td>
<td>1,472</td>
</tr>
<tr>
<td>Philadelphia</td>
<td>639,183</td>
<td>7,192,600</td>
<td>28,962</td>
<td>93</td>
<td>27,063</td>
<td>1,899</td>
</tr>
<tr>
<td>Harrisburg*</td>
<td>52,382</td>
<td>505,896</td>
<td>3,114</td>
<td>95</td>
<td>2,965</td>
<td>149</td>
</tr>
<tr>
<td>Norfolk</td>
<td>92,808</td>
<td>833,969</td>
<td>5,665</td>
<td>94</td>
<td>5,345</td>
<td>320</td>
</tr>
<tr>
<td>Richmond</td>
<td>134,104</td>
<td>1,380,736</td>
<td>6,208</td>
<td>93</td>
<td>5,782</td>
<td>526</td>
</tr>
<tr>
<td>Roanoke</td>
<td>48,325</td>
<td>459,447</td>
<td>2,706</td>
<td>95</td>
<td>2,566</td>
<td>140</td>
</tr>
<tr>
<td>Wilkes-Barre</td>
<td>111,188</td>
<td>1,236,621</td>
<td>5,453</td>
<td>94</td>
<td>5,140</td>
<td>313</td>
</tr>
<tr>
<td>Charleston*</td>
<td>76,781</td>
<td>876,321</td>
<td>4,683</td>
<td>95</td>
<td>4,455</td>
<td>228</td>
</tr>
<tr>
<td>Huntington*</td>
<td>9,660</td>
<td>105,174</td>
<td>440</td>
<td>95</td>
<td>416</td>
<td>24</td>
</tr>
</tbody>
</table>

1. Defined as establishments with 49 employees or less.

* County data is used as proxy for cities.

### TABLE 3

**POPULATION AND DENSITY OF SELECTED CENTRAL CITIES IN REGION III**

<table>
<thead>
<tr>
<th>Central Cities</th>
<th>Land Area (Sq. Ml.)</th>
<th>U.S. Rank</th>
<th>Total Pop.</th>
<th>White</th>
<th>Non-White</th>
</tr>
</thead>
<tbody>
<tr>
<td>Philadelphia</td>
<td>128.5</td>
<td>4</td>
<td>1,948,609</td>
<td>1,282,215</td>
<td>666,494</td>
</tr>
<tr>
<td>Pittsburgh</td>
<td>52.6</td>
<td>24</td>
<td>520,167</td>
<td>412,243</td>
<td>107,924</td>
</tr>
<tr>
<td>Harrisburg</td>
<td>7.6</td>
<td>269</td>
<td>67,880</td>
<td>46,626</td>
<td>21,254</td>
</tr>
<tr>
<td>Richmond</td>
<td>60.3</td>
<td>57</td>
<td>249,621</td>
<td>143,842</td>
<td>106,779</td>
</tr>
<tr>
<td>Norfolk</td>
<td>52.6</td>
<td>47</td>
<td>307,951</td>
<td>215,175</td>
<td>92,776</td>
</tr>
<tr>
<td>Roanoke</td>
<td>26.6</td>
<td>168</td>
<td>92,115</td>
<td>74,235</td>
<td>17,880</td>
</tr>
<tr>
<td>Charleston</td>
<td>27.2</td>
<td>249</td>
<td>71,505</td>
<td>63,954</td>
<td>7,551</td>
</tr>
<tr>
<td>Huntington</td>
<td>14.7</td>
<td>232</td>
<td>74,322</td>
<td>69,784</td>
<td>4,538</td>
</tr>
<tr>
<td>Baltimore</td>
<td>78.3</td>
<td>7</td>
<td>905,759</td>
<td>480,377</td>
<td>425,382</td>
</tr>
<tr>
<td>Wilmington</td>
<td>12.9</td>
<td>209</td>
<td>80,386</td>
<td>44,912</td>
<td>35,474</td>
</tr>
<tr>
<td>Washington, D.C.</td>
<td>64.4</td>
<td>9</td>
<td>756,510</td>
<td>210,878</td>
<td>545,632</td>
</tr>
</tbody>
</table>

*Source: County and City Data Book, Published U.S. Department of Commerce 1972. Data is based on 1970 Census.*

*Population per square mile (density population).*
Table 4, relative to the theoretical section of this paper, is indicative of another major impetus for the revitalization of central cities. In contrast to the revenue-market supply side of central small businesses, this set of data points to the demand by central city small businesses for productive resources (capital and labor) to supply goods and services to markets. This is the cost-expenditure side of central-city small businesses, and a major source of income to central-city households. Consumer expenditures, saving, and credit are in turn derived from small business generated household income. Household saving and credit, invested in central city small businesses, is a main source of net capital accumulation for small business, and a main source of strength and expansion of the economic base of the central city subeconomy. Hence, involvement and participation of central-city households is the capital/output, small business capital accumulation, and economic base side of the central city subeconomy is as important as their involvement and participation in the labor/output, productivity, and small business revenue-supply side of markets for products and services. Such linkages of central city households with small business are essential for a greater role of small business in the revitalization of the central city, and for an expanded role of a revitalized central city in further economic development of a metropolitan area economy.
TABLE 4

INITIAL ESTIMATES OF OUTPUT/INVESTMENT AND OUTPUT/LABOR RATIOS FOR SELECTED CITIES IN REGION III

<table>
<thead>
<tr>
<th>Central Cities</th>
<th>Gross Income $(000)</th>
<th>Gross Investment $(millions)</th>
<th>Output/Capital Ratio *</th>
<th>Output/Labor Ratio **</th>
</tr>
</thead>
<tbody>
<tr>
<td>Washington, D.C.</td>
<td>3,116,821.2</td>
<td>17.0</td>
<td>$183.3:1</td>
<td>$ 9,303.94</td>
</tr>
<tr>
<td>Baltimore</td>
<td>2,604,962.9</td>
<td>79.3</td>
<td>32.85:1</td>
<td>7,385.78</td>
</tr>
<tr>
<td>Philadelphia</td>
<td>5,878,953.3</td>
<td>168.8</td>
<td>34.83</td>
<td>7,700</td>
</tr>
<tr>
<td>Pittsburgh</td>
<td>1,597,432.9</td>
<td>39.6</td>
<td>40.34</td>
<td>8,294.04</td>
</tr>
<tr>
<td>Harrisburg</td>
<td>196,241.1</td>
<td>3.8</td>
<td>51.63</td>
<td>6,983.67</td>
</tr>
<tr>
<td>Richmond</td>
<td>785,058.1</td>
<td>27.0</td>
<td>29.07</td>
<td>7,526.92</td>
</tr>
<tr>
<td>Wilmington</td>
<td>237,219.1</td>
<td>16.4</td>
<td>14.46</td>
<td>7,627.62</td>
</tr>
<tr>
<td>Norfolk</td>
<td>859,799.2</td>
<td>9.3</td>
<td>92.45</td>
<td>9,986.05</td>
</tr>
<tr>
<td>Charleston</td>
<td>237,468.1</td>
<td>2.5</td>
<td>94.96</td>
<td>8,450.82</td>
</tr>
<tr>
<td>Huntington</td>
<td>163,508.4</td>
<td>10.0</td>
<td>16.35</td>
<td>6,033.52</td>
</tr>
<tr>
<td>Wilkes-Barre</td>
<td>152,747.7</td>
<td>3.2</td>
<td>47.72</td>
<td>6,391.12</td>
</tr>
<tr>
<td>Roanoke</td>
<td>267,133.5</td>
<td>4.3</td>
<td>62.12</td>
<td>6,902.67</td>
</tr>
</tbody>
</table>


Gross Income divided by Gross Investment Output or Gross Income per Employee per Year