of small businesses. The counter-
cyclical behavior found for the
total economy is also found for
each of the major sectors, except manufacturing. In manufacturing, the small firms' share of employ-
ment gains and losses falls far be-
low their share of employment.
This is especially true during a
recession. While the ratio of small
businesses' share of change to their
share of employment is greater
than 1 (or very close to 1) for all
other sectors, manufacturing exhib-
its a ratio of 0.42 for employment
gain and 0.44 for employment loss.
If such a relationship is maintained
during the 1980 and 1981-82 reces-
sions. Small businesses (defined as
those having fewer than 100 em-
ployees) have claimed a smaller
share of the total Cleveland economy than
of the national average. Even so,
these establishments showed strong
counter cyclical behavior over the
business cycle, which may provide
some degree of stability to the
local economy. It may be premature to offer pol-
icy suggestions based only on this
brief description of the dynamics of
Cleveland's economy. Nonetheless,
the findings provide some interest-
ing insights into the mechanisms
that will shape Cleveland's future
development. Two findings are
particularly noteworthy. First, all
cities, whether growing or declin-
ing, lose establishments and gain
establishments. In many cases, the closing of businesses is deter-
mined by factors outside the control
of the local economy. Permanent
changes in the national economy and simply the natural attrition of
firms have much to do with clos-
ings. Although painful, closings of
these types must be expected.
Openings, on the other hand, can
be influenced by local policies. New
business formations, especially
in manufacturing, are character-
ized by competitive firms, whose suc-
cess comes from product innova-
tions or more efficient manage-
ment techniques. Although many
of these establishments, especially
small ones, might not survive past
five years, the ones that do sur-
vive provide a solid basis for future
development. Local policies thus
should be directed toward the for-
mation of these establishments.
Second, by exhibiting counter-
cyclical behavior, small establish-
ments have an important place
in the local economy. During a re-
cession, when larger businesses
are generally cutting back on em-
ployment, small businesses are
more likely to open establishments
and less likely to close them than
are their larger counterparts. In
the case of Cleveland, encouraging
such behavior would help to reduce
the problems of cyclical employ-
ment.

Dimensions of Change in Cleveland's
Economy
by Randall W. Eberts

In the past two decades, Cleveland
has shared in the plight of many
heavy industrialized cities in the
northern United States. Unable
to match the attractions of climate
and business environment of the
Sunbelt, these metropolitan areas
have experienced a slow but steady
migration of population and employ-
ment opportunities away from the
North and into the South and South-
west. In most cases, the shift in
activity is a response to fundamen-
tal social and economic changes in
the United States and not to spe-
cific conditions in particular met-
ropolitan areas. Nonetheless, this
trend has placed cities such as
Cleveland in an uneasy period of
transition. Once a great success
story in the industrialization of this
country, Cleveland is now grappling with declining popula-
tion, an employment growth rate
that is below the national average,
and a shift away from manufactur-
ing to other types of employment.
The Cleveland of tomorrow will be
dramatically different from the
Cleveland of two decades ago.

When assessing the vitality of
the local economy, there is a ten-
dency to concentrate on one or two
dimensions of employment change.
The closing of existing businesses,
for instance, is usually associated
with decline, and the opening of
new ones is associated with growth.
No one can dispute that the forma-
tion of new businesses stimulates
the economy. But economic health
does not preclude the closing of
plants. In fact, recent studies show
that the fastest growing regions
are associated with the highest rate
of business failures. Thus, one sign
of a community's vitality is the abso-
lute number of formations of new
businesses and closings or existing
ones. To dwell on a single dimen-
sion of the dynamic process of
regional change, therefore, may
misrepresent the forces that con-
tinually transform a local economy.
Instead of concentrating on net
change of employment, many
studies have done, we compared
employment activity in four basic
components of change. These four
components are (1) the formation
of new businesses; (2) the expansion
of existing businesses; (3) the con-
traction of existing businesses; and
(4) the closing of existing busi-
nesses. Recently released data from
the Small Business Administration
record the four components of
employment change for individual
firms and make such an analysis
possible? A comprehensive under-
standing of these dynamics can help
answer important questions that
arise when shaping local
development policies.

Business Activity in Cleveland
The level of activity within a
local economy can be viewed in two
ways, both of which are considered
here. One is to consider the number
of establishments that exhibited no
change in employment; the other is
to examine the number of businesses
that reported a change in employ-
ment. Since businesses may behave
differently over various portions of
a business cycle, we compared their
performance over an entire cycle.
To do this, we chose two peri-
ods—1976-78 and 1980-82. The
1976-78 period marks a recovery,
while the 1980-82 period spans
two recessions (as defined by the
National Bureau of Economic
Research). Charting the performance
of businesses over both periods
helps to distinguish businesses that
are susceptible to downturns from
those that are resilient to them.
It also helps to separate structural,
or permanent, changes from cy-
clical changes. Although many of
the cyclical effects are outside local
control, the structural effects are
certainly within local control.
In both the 1976–78 and 1980–82 periods, nearly half of the businesses in the Cleveland SMSA reported having the same number of employees (within a 2 percent margin) in each year. More businesses remained stable in the recessions than in the recovery. Nationally, nearly 60 percent of the businesses reported no change in employment between 1978 and 1980. Tabulating the amount of employment change within Cleveland reveals that its economy may be considered more dynamic than one might think. Thirty-five percent of the businesses in existence in both years registered a net employment change of more than 2 percent of their 1976 employment.

Components of Change

The components of employment change—openings, closings, expansions, and contractions—are shown in Table 1 for the total Cleveland economy, broken down by sector. Overall, employment increased by 2.4 percent as a result of openings and expansions during the 1976–78 period. Of the 200,000 jobs that were lost, 54 percent came from closings and 46 percent from contractions. The more recent period presents a slightly different overall picture. From 1980 to 1982, openings and expansions increased employment by 19.1 percent, while closings and contractions reduced employment by 24.8 percent. The combination resulted in a net decline in employment of 6.0 percent.

A comparison of the four components of change over the business cycle provides a somewhat surprising comparison of the machinery of change. The percentage of employment loss because of closings remained at 12 percent over the entire business cycle. Con- tractorions and expansions were also very similar, with slightly more layoffs and slightly fewer hirings during the recessions than during the recovery. The striking difference between the two periods is in the component of openings. As is evident from Table 1, the share of employment generated by openings increased by 19.1 percent during the recovery, whereas openings accounted for almost the entire reversal in the net change in employment—from a positive 2.4 percent during the recovery to a negative 4.6 percent during the recessions. Upon examining the components of employment change for the seven major sectors shown in table 1, we find a pattern of firm behavior that parallels the business cycle. Closings and contractions generally are higher in a recession than in a recovery, whereas openings and expansions occur at a higher rate in a recession. The interesting exceptions to this behavior are in the two sectors that expanded during both the recovery and the recessions. Financial and other services exhibited more openings than closings and more expansions than contractions in both periods. Thus, services show a strong resiliency throughout the entire business cycle.

In contrast, 55 percent of the labor force in the United States is engaged in the small-business sector. This sector, although it accounts for only 8 percent of all establishments, is characterized by low fixed costs. The small-business sector is less likely to abandon plants; they are more likely to abandon plants than to abandon the region when economic conditions are poor.

The contribution of small businesses to the components of employment change is evident from the data in Table 1. A comparison of the four components of change over the business cycle provides a somewhat surprising comparison of the machinery of change. Employment thus fell below the national average, exhibiting a relatively high rate of participation in local economic activity.

### Table 1 Employment Change in Cleveland’s Economy

<table>
<thead>
<tr>
<th>Sectors</th>
<th>Openings</th>
<th>Closings</th>
<th>Expansions</th>
<th>Contractions</th>
<th>Net</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total</td>
<td>150,000</td>
<td>72,000</td>
<td>37,000</td>
<td>28,000</td>
<td>81,000</td>
</tr>
<tr>
<td>Manuf.</td>
<td>33,000</td>
<td>17,000</td>
<td>10,000</td>
<td>8,000</td>
<td>8,000</td>
</tr>
<tr>
<td>Con.</td>
<td>22,000</td>
<td>13,000</td>
<td>11,000</td>
<td>8,000</td>
<td>8,000</td>
</tr>
<tr>
<td>Trans.</td>
<td>25,000</td>
<td>12,000</td>
<td>10,000</td>
<td>8,000</td>
<td>8,000</td>
</tr>
<tr>
<td>Retail</td>
<td>30,000</td>
<td>14,000</td>
<td>11,000</td>
<td>8,000</td>
<td>8,000</td>
</tr>
<tr>
<td>Service</td>
<td>40,000</td>
<td>18,000</td>
<td>10,000</td>
<td>8,000</td>
<td>8,000</td>
</tr>
</tbody>
</table>


In both the 1976–78 and 1980–82 periods, nearly half of the businesses in the Cleveland SMSA reported having the same number of employees (within a 2 percent margin) in each year. More businesses remained stable in the recessions than in the recovery. Nationally, nearly 60 percent of the businesses reported no change in employment between 1978 and 1980. Tabulating the amount of employment change within Cleveland reveals that its economy may be considerably more dynamic than one might initially suppose. Business failures in 1980–82 marked a slightly less active local economy than during the earlier recovery, showing a slightly lower turnover rate compared with the earlier 50 percent rate.

Even so, Cleveland's economy was considerably more active in both periods than the nation's economy, exhibiting a 35 percent turnover rate.

### Components of Change

The components of employment change—openings, closings, expansions, and contractions—are shown in Table 1 in the form of percentage change for each component. During the recessions and contractions, the more significant source of employment change was the conversion of employment from one business to another.

<table>
<thead>
<tr>
<th>Sectors</th>
<th>Openings</th>
<th>Closings</th>
<th>Expansions</th>
<th>Contractions</th>
<th>Net</th>
</tr>
</thead>
<tbody>
<tr>
<td>1976–78</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>15.0</td>
<td>12.2</td>
<td>10.3</td>
<td>10.6</td>
<td>+2.5</td>
</tr>
<tr>
<td>Manufacturing</td>
<td>20.2</td>
<td>17.9</td>
<td>9.7</td>
<td>8.6</td>
<td>+3.8</td>
</tr>
<tr>
<td>Construction</td>
<td>9.6</td>
<td>9.3</td>
<td>14.2</td>
<td>17.0</td>
<td>-2.8</td>
</tr>
<tr>
<td>Transportation</td>
<td>7.6</td>
<td>8.7</td>
<td>7.0</td>
<td>41.3</td>
<td>-34.3</td>
</tr>
<tr>
<td>Retail</td>
<td>9.1</td>
<td>5.8</td>
<td>6.8</td>
<td>13.5</td>
<td>-6.7</td>
</tr>
<tr>
<td>Wholesale</td>
<td>16.7</td>
<td>8.6</td>
<td>11.6</td>
<td>9.7</td>
<td>+10.0</td>
</tr>
<tr>
<td>Financial services</td>
<td>4.5</td>
<td>6.2</td>
<td>6.8</td>
<td>13.5</td>
<td>-6.7</td>
</tr>
<tr>
<td>Services</td>
<td>12.3</td>
<td>10.1</td>
<td>10.8</td>
<td>9.8</td>
<td>+1.2</td>
</tr>
<tr>
<td>1980–82</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>25.3</td>
<td>52.1</td>
<td>25.6</td>
<td>62.3</td>
<td>-36.7</td>
</tr>
<tr>
<td>Manufacturing</td>
<td>24.8</td>
<td>49.9</td>
<td>49.6</td>
<td>34.1</td>
<td>-15.5</td>
</tr>
<tr>
<td>Construction</td>
<td>77.0</td>
<td>87.4</td>
<td>70.7</td>
<td>41.3</td>
<td>-29.3</td>
</tr>
<tr>
<td>Transportation</td>
<td>9.1</td>
<td>24.0</td>
<td>37.0</td>
<td>9.0</td>
<td>-28.0</td>
</tr>
<tr>
<td>Retail</td>
<td>16.8</td>
<td>14.4</td>
<td>9.9</td>
<td>9.5</td>
<td>+2.8</td>
</tr>
<tr>
<td>Wholesale</td>
<td>18.8</td>
<td>24.0</td>
<td>37.0</td>
<td>9.0</td>
<td>+28.3</td>
</tr>
<tr>
<td>Financial services</td>
<td>10.9</td>
<td>7.2</td>
<td>13.5</td>
<td>12.4</td>
<td>+0.4</td>
</tr>
<tr>
<td>Services</td>
<td>24.3</td>
<td>23.5</td>
<td>34.4</td>
<td>67.5</td>
<td>-33.1</td>
</tr>
</tbody>
</table>

Table 1: Employment Change in Cleveland's Economy

In the 1976–78 and 1980–82 recessions, the percentage of employment change for each component was as follows:

- **Total Employment**: 25.3 percent
- **Manufacturing**: 24.8 percent
- **Construction**: 77.0 percent
- **Transportation**: 9.1 percent
- **Retail**: 16.8 percent
- **Wholesale**: 18.8 percent
- **Financial Services**: 10.9 percent
- **Services**: 24.3 percent

During the recessions, the amount of employment change was due to the conversion of employment from one business to another. The more recent period presents a slightly different overall pattern. From 1980 to 1982, openings and expansions increased employment by 19.1 percent, while closings and contractions reduced employment by 23.7 percent. The combination resulted in a net decline in employment of 4.6 percent. A comparison of the four components of change over the business cycle provides a somewhat different picture overall.

### Employment Changes

- **Openings**: Sometimes called "new births," openings are a result of new businesses and are a positive change. The largest share of employment change during the recessions was due to openings.
- **Closings**: Sometimes called "mortalities," closings are a result of failures and are a negative change. The largest share of employment change during the recessions was due to closings.
- **Contractions**: Sometimes called "layoffs," contractions are a result of decreases in employment and are a negative change.
- **Expansions**: Sometimes called "hoisings," expansions are a result of increases in employment and are a positive change.

In all, a little less than half of the jobs in the Cleveland area changed hands (or were abolished or created) in the 1976–78 recession. Employment fell by 25.3 percent above the base-year level as a result of openings and contractions. Together these changes produced a net increase in employment of 2.5 percent. Of the more than 220,000 jobs added to the local economy, the formation of new businesses accounted for 60 percent of the gain, while expansions of existing establishments contributed the remaining 40 percent. Of the 200,000 jobs that were lost, 54 percent came from closings and 46 percent from contractions. The more recent period presents a slightly different picture overall. From 1980 to 1982, openings and expansions increased employment by 19.1 percent, while closings and contractions reduced employment by 23.7 percent. The combination resulted in a net decline in employment of 4.6 percent. A comparison of the four components of change over the business cycle provides a somewhat different picture overall.

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### The Role of Small Firms

Small businesses recently have been heralded as the primary sources of job creation in the U.S. economy. Birch (1979) estimated that the contribution of small businesses to job creation is as high as 78 percent of new jobs. There is a widely held belief that the small-business sector is a powerful force for technological innovation and entrepreneurial ingenuity that can stimulate development of severely depressed regions. In addition, small businesses are believed to be more sensitive to the local economy than are large corporate plants; they are less likely to abandon a region when economic conditions are poor.

The share of small businesses in Cleveland's economy is lower than in the nation. In 1976, small businesses employed only 32 percent of the private-sector labor force. In 1980, the establishments in the Cleveland SMSA employed only 37 percent of the private-sector labor force. In contrast, 55 percent of the labor force was employed by establishments affiliated with a large firm. In 1980, 55 percent of the labor force was employed by establishments affiliated with a large firm.

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### Summary

The role of small businesses in the economy of Cleveland is significant. In the 1976–78 recession, 44 percent of the jobs in Cleveland were created by small businesses. In the 1980–82 recession, 55 percent of the jobs in Cleveland were created by small businesses. This suggests that small businesses are more sensitive to the local economy than are large businesses. In addition, small businesses are more likely to be involved in the slower-growing areas, in spite of having lower shares of employment in these areas. A large proportion of small businesses in Cleveland are concentrated in the weakest economies and are characterized by low fixed costs. The wholesale and retail sectors have the highest shares of small businesses, followed by the service sectors. Manufacturing, although below the local average, exhibits a relatively high rate of participation.
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When assessing the vitality of the local economy, there is a tendency to concentrate on one or two dimensions of employment change. The closing of existing businesses, for instance, is usually associated with decline, and the opening of new ones is associated with growth. No one can dispute that the formation of new businesses stimulates an economy. But economic health does not preclude the closing of plants. In fact, recent studies show that the fastest growing regions are associated with the highest rate of business failures. Thus, one sign of a community's vitality is the absolute number of formations of new businesses and closings of existing ones. To dwell on a single dimension of the dynamic process of regional change, therefore, may misrepresent the forces that continue to transform a local economy.

Instead of concentrating on net change of employment, as many studies have done, we compared employment activity in four basic components of change. These four components are (1) the formation of new businesses; (2) the expansion of existing businesses; (3) the contraction of existing businesses; and (4) the closing of existing businesses. Recently released data from the Small Business Administration record the four components of employment change for individual firms and make such an analysis possible.

A comprehensive understanding of these dynamics can help answer important questions that arise when shaping local development policies.

Business Activity in Cleveland
The level of activity within a local economy can be viewed in two ways, both of which are considered here. One is to consider the number of establishments that exhibited no change in employment; the other is to examine the number of businesses that reported a change in employment. Since businesses may behave differently over various portions of a business cycle, we compared their performance over an entire cycle.

To do this, we chose two time periods—1976-78 and 1980-82. The 1976-78 period marks a recovery, while the 1980-82 period spans two recessions (as defined by the National Bureau of Economic Research). Charting the performance of businesses over both periods helps to distinguish businesses that are susceptible to downturns from those that are resilient during economic cycles. It also helps to separate structural, or permanent, changes from cyclical changes. The local economic climate is thus considered in light of both long-term and short-term factors.