

PITTSBURGH ECONOMIC QUARTERLY

University Center for Social and Urban Research

INSIDE THIS ISSUE:

Population Change in Pittsburgh Region 4

THE PITTSBURGH CLUSTER OF SUPPLIERS TO THE STEEL INDUSTRY: A CLUSTER UNDER A BUSHEL BASKET

By Carey Durkin Treado

Industrial development typically focuses on companies that are grouped by what they make. Regional industrial development often attempts to encourage product-based clusters—such as biotechnology, robotics, and electro-optics—to flourish locally. One of the central advantages of focusing on such product-based clusters is simply that their cluster is easily defined by government statistics. Thus, the relative success of product-based clusters can be measured and tracked, both locally and nationally.

However, there are other industrial clusters that can prove vitally important to regional development, but are not easily identifiable with government data. Hidden clusters often consist of firms who share a common customer or downstream industry, rather than a common product-line. The Pittsburgh region has a successful customer-based cluster, whose light has been hidden from view—specifically, a cluster of suppliers to the steel industry. The basket that hides the importance of this cluster to our region has been largely formed by the limitations of government codes and statistics, but is

partially the result of mistaken assumptions about the current relevance of the steel industry to our economy.

When the steel industry restructured in the 1980s, Pittsburgh suffered an economic setback that has few historical parallels among major American metropolitan regions. However, many of the firms that were located in Pittsburgh to supply the steel industry have remained a vibrant industrial cluster, providing high-wage jobs and attracting new firms. In short, the steel supplier cluster has been a source of economic resilience for the region, even if it is a relatively unrecognized source.

Pennsylvania currently has less than 6 percent of operational steel-making capacity, but the state retains one-fourth of the companies that identify themselves as suppliers to the steel industry and nearly one-half of the raw material and machinery and equipment suppliers to the steel industry. The majority of these firms are located in and around the Pittsburgh metropolitan region, with many local supplier firms representing national headquarters for large corporations. The variety of goods and services provided by these firms is substantial, ranging

continued on page 2

RETAIL TRADE IN PITTSBURGH

By Christopher Briem

The Economic Census compiled by the U.S. Census Bureau profiles business establishments in the United States every five years. In May 2005, the Economic Census released its report on the retail trade industry in Pennsylvania for 2002. A perennial question in recent decades has been whether there are adequate levels of

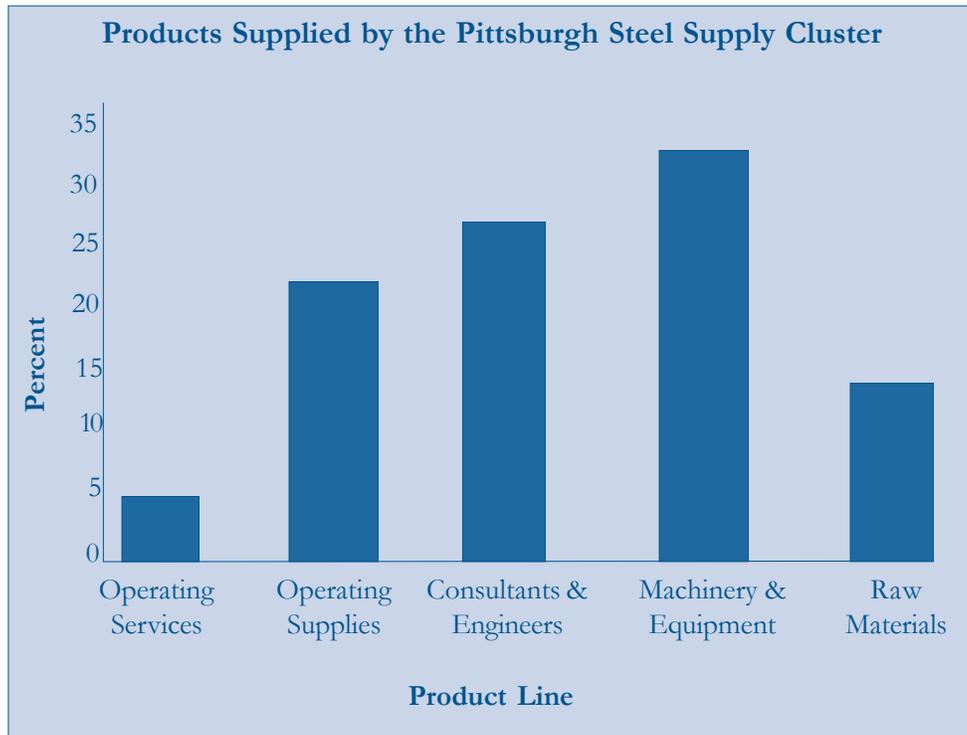
retail trade activity in the region, and in particular the city of Pittsburgh. The Economic Census provides data on the number of establishments and sales that can be used to follow trends in the retail trade industry within the region.

Total retail sales within the city of Pittsburgh increased from \$3.1 billion in 1997 to \$3.6 billion in 2002 after

adjusting for inflation. The city of Pittsburgh's 16% increase in total sales occurred while population decreased by 5% over that time. The per capita increase in sales within the city increased 22% from \$8,873 in 1997 to \$10,858 in 2002. Comparable change in retail sales per capita over the same period was 1.4% for Allegheny County,

continued on page 6

THE PITTSBURGH CLUSTER OF SUPPLIERS TO THE STEEL INDUSTRY (CONT.)



continued from page 1

from basic materials to cutting edge technologies in systems engineering, process controls, and metals casting and rolling. The figure above identifies the central product lines of regional suppliers to the steel industry.

This industry cluster is “lost” to policymakers because the firms involved do not share an identifying industry code that links them in national statistics to steel production or to each other, but they have not been lost to our economy. In order to learn more about the structure of this cluster and its ties to our region, the Center for Industry Studies has worked with the Association of Iron and Steel Technology (AIST) and with UCSUR to survey regional steel suppliers.

The University of Pittsburgh’s Center for Industry Studies (www.industrystudies.pitt.edu) was profiled in the September 2004 issue of *PEQ* (Frank Giarratani, “Research in Industry Studies”).

We report on the preliminary findings of that survey in this article. In future reports, we will explain what

these firms do and why they do it in the Pittsburgh region. We also will recommend how policymakers can take advantage of our findings to help support this valuable foundation for economic activity in the region.

The AIST identified 289 regional firms in the steel supplier industry. The survey respondents include 77, or 27%, of these firms. These firms range from small, recently-formed suppliers to large, multinational enterprises. About two-thirds of the survey respondents are single-plant firms, and over half of those plants have fewer than 20 employees. Using the employment ranges provided by the respondents, the single plant firms represent roughly 2,000 employees, with the multi-plant firms adding at least another 2,000 employees in the Pittsburgh region.

Using separate data derived from the Quarterly Census of Employment and Wages (ES202), the total employment in the steel supplier industry in the Pittsburgh region is estimated to have been 12,121 workers in 2003 with a combined total

payroll of \$687 million. The average annual wage for these workers is \$56,669, which is 58% above the average wage and salary disbursements in the region of \$35,976 in 2003.

Although steel-related industry in the region has the reputation of being comprised of older, more established firms, one-third of the survey respondents started operations in the Pittsburgh region after 1990. Nearly one-half of the smallest firms (less than 20 employees) have start dates after 1990. These data indicate an important dynamic element of entrepreneurial start-ups within the cluster.

In addition to the entrepreneurial element, Pittsburgh remains an important national and international headquarters for many large, multinational steel suppliers. Of the multi-plant firms, about 60% have their U.S. headquarters in the Pittsburgh region and 30% have their international headquarters in the region.

Over two-thirds of respondents focus the majority of their sales efforts on the steel industry, with nearly all of the respondents having made a sale to the steel industry within the last six months (see figure). This also demonstrates that, although the cluster firms concentrate on the steel industry, they are not captive suppliers and also sell to non-steel markets.

Of course, with the regional decline in steel capacity, Pittsburgh-based suppliers cannot afford to have a regional marketing focus either. Over half of the respondents focus their sales effort on national markets and about one-third on global markets. In addition, nearly half of the respondents report that total sales to the steel industry are increasing, even though steel sales are declining as a proportion of their overall sales.

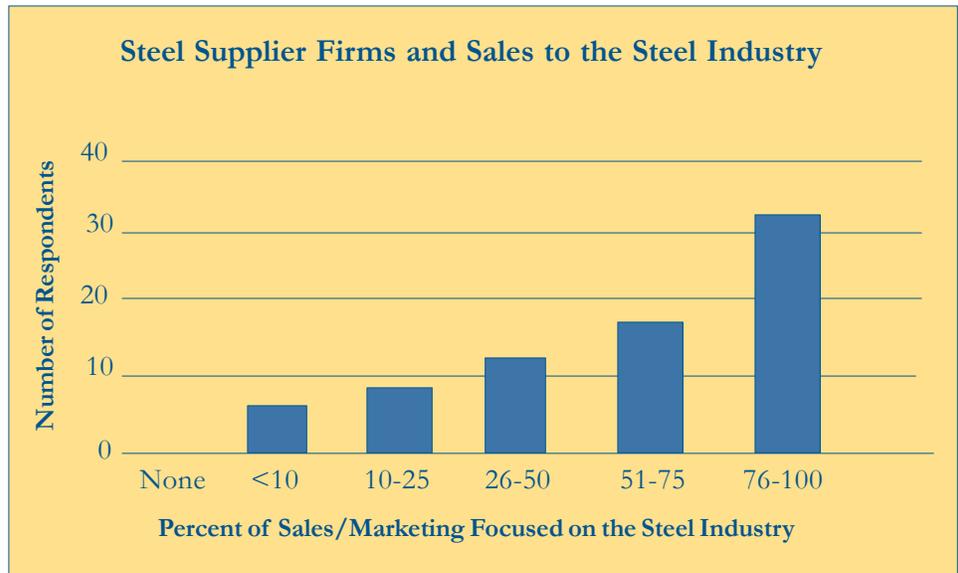
Although the sales and marketing efforts are focused on broader geographic regions, many of the respondents report that their location in Pittsburgh is an important source of

key partners, suppliers, and industry networks. About 38% of the respondents reported that one or more of these key business factors were Pittsburgh-based. This issue is important for further study, since several of the respondents have indicated that the Pittsburgh region has a reputation as “one-stop shopping” for the steel industry, where steelmakers can readily find, for example, a partnership that combines engineering design and high-tech equipment supply.

Preliminary survey results also indicate that the regional labor supply is an important source of stability for the steel supplier cluster. Three-fourths of the respondents report that the majority of their workforce is recruited locally, with nearly 40% reporting that their entire workforce was recruited locally. Thus, it is not surprising that 60% of the respondents report that their location in the Pittsburgh region is a positive or critical factor in labor retention.

Not only is the local labor supply important to the firms individually, it appears to be an important factor in creating the cluster as well. Over two-thirds of respondents have either recruited an employee from, or lost an employee to, another Pittsburgh-area steel supplier. Labor movement between firms in a regional cluster is an indicator of a cluster’s cohesiveness and can be an important method for shared information and technology development.

This brief synopsis clearly points to the vitality of the Pittsburgh cluster of suppliers to the steel industry. The cluster includes both small plants and national headquarters of larger firms, many of which started up *after* the region had lost most of its traditional steel base. The participants in the cluster report strong and growing sales of a diverse array of products and services to the steel industry, both nationally and globally. In addition, regional steel suppliers identify the benefits of being in the cluster—access to customers, suppliers, networks, and



labor—as the most important benefits of locating in the area.

We expect our final results to further clarify the vitality and importance of this cluster to the Pittsburgh economy and to provide more detailed descriptions of the regional market conditions faced by the firms within the cluster. Our results should enable regional policymakers, development experts, and university administrators to shape specific policies that would support the further development of the cluster.

Regional analysis and historical experience teach us that every major region should expect decline in some of its key industries over time, but what sets some regions apart from others is their ability to rebound from such loss and find rejuvenation in new activities. Nearly 50 years ago, a major study of the Pittsburgh region, sponsored by the

Pittsburgh Regional Planning Association, speculated that the scale of steel manufacturing in this region would limit the region’s ability to respond. The reasoning was sound: firms linked to steel production as suppliers had a strong local market, but little experience exporting their services beyond our regional boundaries.

However, survey respondents in Pittsburgh’s cluster of steel suppliers demonstrate that today’s firms export very well, indeed. Today, the resilience of the Pittsburgh economy continues to be evident, and Pittsburgh’s historically signature industry — steel — remains an important contributing factor to the region’s vitality.

Carey Durkin Treado is a Research Associate at the Center for Industry Studies, University of Pittsburgh.

2003 Steel Supplier Industry, Pittsburgh MSA

Average employment	12,121
Total wages	\$686,895,304
Average annual wage	\$56,669

Source: compiled from ES 202 employment data

UCSUR
University of Pittsburgh
 121 University Place
 Pittsburgh, PA 15260
 Phone: 412-624-5442
 Fax: 412-624-4810
 Email: ucsur@pitt.edu

On the Web
www.ucsur.pitt.edu

Pittsburgh Economic Quarterly

Editor
 Sabina Deitrick

Assistant Editors
 Anna Aivaliotis
 Monique Constance-Huggins

University Center for Social and Urban Research

Director
 Richard Schulz

Urban and Regional Analysis

Co-Directors
 Ralph Bangs
 Sabina Deitrick

TO:

PITTSBURGH ECONOMIC QUARTERLY

Recent Publications by the Center for Social and Urban Research

Disabilities in Southwestern Pennsylvania (10/04)

Women's Benchmarks Reports (4/04)

Black-White Benchmarks Reports (3/04)

Diversity Within and Among Nonprofit Boards in Allegheny County (10/03)

The State of Aging and Health in Pittsburgh and Allegheny County (05/03)

2002 User Survey for the Pennsylvania Allegheny Trail Alliance (3/03)

Diversity Among Elected Officials in the Pittsburgh Region in 2002 (2/03)

Socio-Economic Data and Rankings for City of Pittsburgh Neighborhoods and Allegheny County Municipalities (2002)

Black Papers on African American Health in Allegheny County (9/02)

African American and Women Board Members in the Pittsburgh Region (11/01)

The State of the Environment in Allegheny County: Land, Water and Air (3/01)

Subscription Form

Please send me the Pittsburgh Economic Quarterly

Name _____

Address _____

E-mail _____

Mail to: **PEQ**

c/o UCSUR

121 University Place
 Pittsburgh, PA 15260

Or Fax: 412-624-4810