

CURRENT ISSUES

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Second District highlights

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New York City's New-Media Boom: Real or Virtual?

New York City journalists have heralded new media as the local economy's new growth engine. In both the financial and the popular press, accounts of the rise of such new-media businesses as on-line magazine publishing, web-site design, and Internet advertising have emphasized the contributions these businesses are making to employment and earnings in New York City.¹ However, while many observers contend that the city is a new-media hub and lower Manhattan's "Silicon Alley" is flourishing, new media's actual size and growth are open to debate.

In this edition of *Second District Highlights*, we investigate the extent to which a boom in new media—an industry that can be broadly defined as the merging of computer and telecommunications technologies—is influencing the New York City economy. Our analysis of local industry association figures and U.S. government data indicates that new media is having a significant effect on employment growth. However, the government data also suggest that new media's share of the New York City economy is not much different from the national average and is well below new media's share of the San Francisco area economy. These latter findings imply that new media's economic effects are not sufficiently strong to justify the characterization of New York City as a hub. An important part of the city's new-media growth, however, may not be fully evident from an analysis of government data.

DEFINING AND MEASURING NEW MEDIA

Although new media has been featured often in the press, many newspaper accounts fail to provide a precise definition of the term. Perhaps the most authoritative definition comes from a study by a leading local industry association: "The new media industry combines elements of computing technology, telecommuni-

cations, and content—information, entertainment, personal/group communications, and transactions—to create products and services which can be used 'interactively' by consumers and business users" (New York New Media Association and Coopers & Lybrand 1996).

The New York New Media Association (NYNMA) uses this broad definition when it calculates new media's size and growth in the city.² The definition captures the eclectic nature of new-media enterprises. New media is not a traditional sector; rather, it comprises a range of interactive multimedia products and services offered largely over the Internet. The new-media industry draws its workers from a number of professional fields, such as computer programming, web-site design, systems development, and journalism.

For our assessment of the importance of new media, we use the NYNMA's figures along with a second measure derived from the U.S. Department of Labor's Bureau of Labor Statistics (BLS). The BLS, which measures industry employment and earnings, has no official new-media classification. However, we can use the Bureau's "computer services" classification as a rough proxy for capturing the size and growth of core new-media activity.³

By using two different measures of new media, we can take advantage of each data set's benefits. For example, the NYNMA figures enable us to gauge new media's influence on the New York City economy, while the BLS data allow us to put this influence in a national and regional context. However, the BLS figures are not as well suited for measuring emerging, technology-based sectors because they are based on an industry classification system established in the 1930s and last revised in 1987.

AN ENGINE OF GROWTH

NYNMA employment figures indicate that new media has been a rapidly increasing contributor to New York City's economy over the past two years. According to the NYNMA, the city had 27,000 new-media-related jobs at year-end 1995, accounting for 0.8 percent of employment. By 1997, these jobs—mainly in computer services but also in publishing, broadcasting, advertising, and motion pictures—had doubled, to 56,000, or 1.7 percent of city employment. We calculate that this 29,000-job increase accounted for an impressive 38 percent of the city's net job creation between year-end 1995 and 1997.

Earnings figures from the NYNMA confirm the increasing importance of new media: In terms of wage income, new-media payrolls in the city rose sharply between late 1995 and mid-1997—going from \$1.4 billion to \$2.7 billion, or from 1.0 percent to 1.7 percent of payroll income. Our calculations reveal that this rise represented about 7.8 percent of the total increase in city payroll income over that period; however, the rate was well below the 38 percent job-creation rate.

A NATIONAL PERSPECTIVE

BLS job and earnings figures also support new media's growing contribution to the New York City economy, although to a lesser extent than the NYNMA figures do.⁴ Jobs in computer services—our proxy for new media—increased from 0.6 percent of city employment in 1995 to 0.9 percent in 1997, according to the BLS. Over the same period, payroll income from computer services rose from 1.0 percent to 1.3 percent of city earnings.

The BLS figures add particular value by enabling us to compare estimates of new-media employment and earnings for New York City with the corresponding estimates for other regions and the nation as a whole. These comparisons are key because they help us determine whether new media's growth in the city is in fact a local phenomenon—a finding that would support the notion of the city as a hub—or merely part of a larger trend being experienced by the nation.

The BLS figures point to the national-trend theory. They reveal that 1997 computer services activity in the city was somewhat below the U.S. average. Computer services in the United States that year accounted for 1.1 percent of jobs and 1.8 percent of earnings.⁵

These results are reinforced when we compare the city's new-media activity with that of the San Francisco

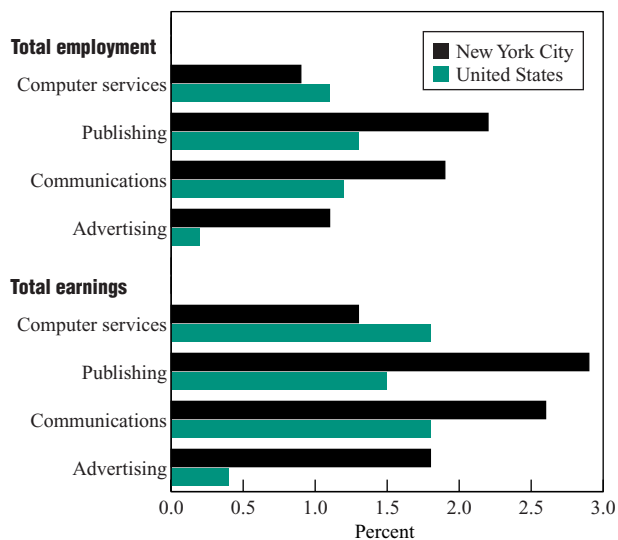
area—an area that encompasses Silicon Valley and so is regarded as the country's premier computer services hub. According to the BLS, the San Francisco area's computer services activity represented 3.0 percent of employment and 5.5 percent of earnings in 1995—shares that dwarfed the comparable New York City percentages recorded that year.

In terms of growth, the BLS describes an important role for new media in the city economy, yet that role is much more modest than the NYNMA suggests. According to the BLS, computer services employment in New York City grew 43 percent between 1995 and 1997—a figure that is far below the 104 percent gain reported by the NYNMA. Over that period, the BLS indicates that growth in computer services earnings for the city was 55 percent—an increase that falls well short of the NYNMA's reported rise of 93 percent.

THE ROLE OF TRADITIONAL MEDIA

Our BLS comparisons cast doubt on New York City's identity as a new-media hub. However, an important part of the city's new-media growth may be occurring outside the computer services industry, and that growth may in turn be understated by our proxy.

Chart 1
1997 Shares of Computer Services and Selected Traditional Media in the New York City and U.S. Economies



Source: U.S. Department of Labor, Bureau of Labor Statistics.

To clarify this issue, we consider the prominence of traditional media industries in New York City. For example, the city has long been a center of publishing, communications, and advertising, enjoying a concentration of firms in these industries that is well above the U.S. average (Chart 1). This high concentration of traditional media is clearly yielding benefits to the city's economy relative to the nation's.

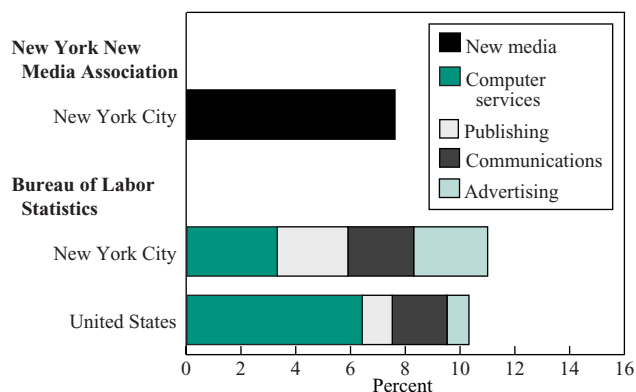
However, some of these benefits could be tied to new media. Unfortunately, this theory is difficult to test because the way in which firms are classified affects our computer services proxy. When registering with the BLS, firms tend to classify themselves under a single BLS industry code that describes the general nature of their business. For example, AGENCY.COM and DoubleClick—two widely recognized new-media companies—classify themselves as advertising firms. Moreover, other traditional media firms have separate new-media divisions that function like core new-media businesses, yet the divisions are classified according to their firm's main area of business. For instance, the Hearst Corporation's new-media division—Hearst New Media & Technology—is classified under publishing.

Because of these inconsistencies, our computer services proxy fails to capture the potentially sizable employment and earnings of these and other de facto new-media firms and new-media divisions within firms. The proxy is therefore likely understating new media's contribution to the New York City economy—in terms of both the level and the growth of jobs and earnings.

To give a broad sense of that understatement, we note selected contributions to New York City earnings growth between 1995 and 1997 (Chart 2). According to the BLS, computer services contributed 3.3 percent to the city's total net increase in payroll earnings. Significantly, publishing, communications, and advertising contributed an additional 8.0 percent—some of which can reasonably be attributed to new media. Thus, we suggest that new media is influencing the city economy through the city's traditional media industries. Moreover, this "hidden" influence could account for some of the difference between the 3.3 percent computer services contribution rate reported by the BLS and the 7.8 percent new-media contribution rate calculated from the NYNMA figures (Chart 2).

Apart from traditional media, a growing number of other sectors—notably financial services, real estate, and retail trade—are expanding their strategic use of

Chart 2
Industry Contributions to Total Earnings Growth



Sources: The figure for the top bar is based on an NYNMA/Coopers & Lybrand estimate of new-media payrolls and is calculated by the authors as a percentage of a BLS tabulation of total payrolls of insured employees. The bottom bars are derived from U.S. Department of Labor, Bureau of Labor Statistics.

Note: Figures reflect the increase in payroll earnings between 1995 and 1997 as a percentage of the total increase in payroll earnings.

Internet technologies. Like traditional media, these three sectors play a key role in the New York City economy, contributing 52 percent to the total net increase in payroll earnings between 1995 and 1997. If these sectors continue to make greater use of Internet technologies, new media's importance to the city's service-oriented economy has tremendous potential to rise.

CONCLUSION

Although new media has been a fairly strong contributor to growth in the New York City economy, it seems premature to declare the city a new-media hub. In terms of employment and earnings, our findings suggest that new media's influence on the city is not as great as its impact on the United States as a whole. And when we compare the city with a recognized computer services center like the San Francisco area, New York's status as a new-media hub seems even more questionable.

Nevertheless, New York City's *traditional* media industries could be accounting for new-media activity in ways that are not entirely evident from our examination of government statistics. Accordingly, one could argue that New York City's new-media boom essentially reflects an Internet-technology-driven boom in the city's traditional media industries—industries that represent a large share of the city's economy.

—Jason Bram and Mike De Mott

NOTES

1. For instance, see *New York Daily News* (1997), *New York Times* (1997, 1998), and *Crain's New York Business* (1997).
2. NYNMA data were produced with Coopers & Lybrand L.L.P.
3. "Computer services" refers to various data-processing businesses. Certainly not all new-media activity qualifies as computer services, nor does all computer services activity represent new media. However, there is substantial overlap between the two groups—a fact that makes the BLS' computer services classification a reasonable proxy for new media.
4. BLS figures for New York City were produced in conjunction with the New York State Department of Labor.
5. Note that the BLS figures are based on a tabulation of *insured* employment. Such a tabulation may understate the true share of computer services employment in New York City because the city attracts a large number of self-employed workers—such as freelance programmers—many of whom carry no unemployment insurance. Therefore, for comparison we also look at the U.S. Census Bureau's *County Business Patterns* tabulation, which does not base

its figures only on insured employment. Although its data are available only through 1995, *County Business Patterns* indicates a somewhat higher share of city employment in computer services than the BLS does (0.8 percent, as compared with 0.6 percent). However, that share was still below the 1995 national average of 0.9 percent, as reported by both the BLS and *County Business Patterns*.

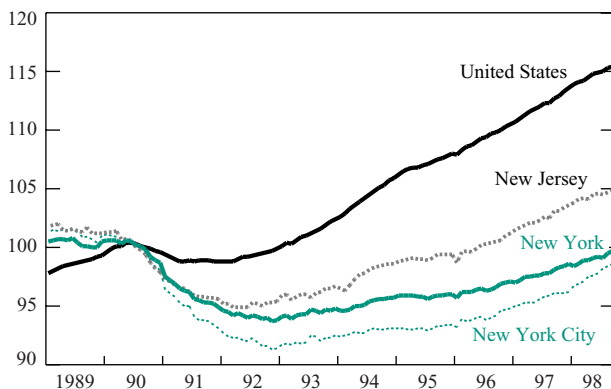
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Economic Trends in the Second District

Payroll Employment

Index: 1990 = 100 (seasonally adjusted)

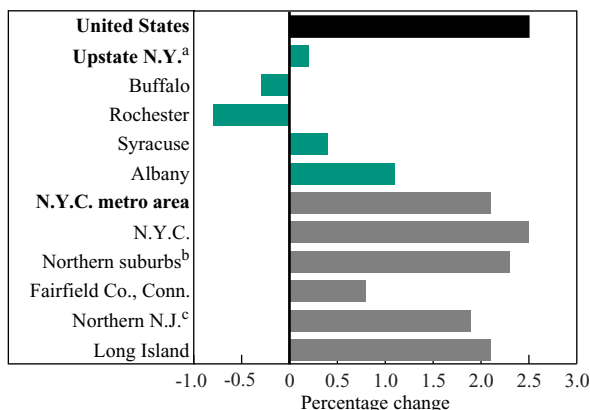


Sources: New York, New Jersey, and Connecticut Departments of Labor; U.S. Department of Labor, Bureau of Labor Statistics; U.S. Department of Commerce, Bureau of the Census; Federal Reserve Bank of New York.

^aUpstate N.Y. comprises the four metropolitan areas listed as well as Binghamton, Elmira, Glens Falls, Jamestown, and Utica-Rome.

Job Growth in the Nation and Selected Metropolitan Areas

July-September 1997 to July-September 1998



^bThe northern suburbs of N.Y.C. comprise Dutchess, Orange, Putnam, Rockland, and Westchester Counties, N.Y., and Pike County, Pa.

^cNorthern N.J. comprises Bergen, Essex, Hudson, Hunterdon, Mercer, Middlesex, Monmouth, Morris, Ocean, Passaic, Somerset, Sussex, Union, and Warren Counties.

The views expressed in this article are those of the authors and do not necessarily reflect the position of the Federal Reserve Bank of New York or the Federal Reserve System.

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