

## Job and Business Growth Among New Migrants: Rising Self-Employment in New York City

by Jonathan A. Schwabish and Jane E. Lynch

Over the past three decades, the number of manufacturing and other industrial-based jobs in New York City has declined markedly, yielding to growth in the city's high-skill sectors. Roughly 250,000 new high-skill jobs were added to the city's economy between 1990 and 2000 alone. These jobs—in industries such as finance, insurance, education, communications, and healthcare—are on average more human capital intensive than industrial-sector jobs, requiring higher levels of educational attainment and sophisticated English-language skills. For the hundreds of thousands who migrate to the city each year from abroad and from other regions of the country, these changes in New York City's labor market have a direct impact on the opportunities for mobility and success.

New York City remains the leading destination for international and domestic migrants in the United States. Its dual international and national orientation has helped to make the city a prime beneficiary of the forces that have defined globalization, i.e., the increased mobility of capital and the power of emerging information technologies.<sup>1</sup> The density and diversity of New York City's population, as well as the multiplicity of sectors represented in its market attract businesses, workers, and entrepreneurs from around the world.

As the structure of the city's economy changes, the characteristics of the migrants it attracts both from abroad and from other regions of the United States shift. In light of the most recent recession and the overall shifts in labor market composition over the past three decades, it will be important to distinguish the cyclical from the structural adjustments.<sup>2</sup> The changing dynamics of New York City's economy, as well as of the migrant population it attracts, have important effects on the city's development and competitiveness.

The vast majority of migrants who enter the New York City labor market are employed in private sector wage and

salary positions. However, New York City's self-employed population represents a sizeable and growing percentage of the city's labor force. Unlike a random sample of the labor force, the self-employed have unique socioeconomic and demographic characteristics, which distinguish them from the city's population of wage and salary employees. As the composition of New York City's labor market continues to move away from its industrial base, the self-employed population is demonstrating significant changes in its socioeconomic characteristics, particularly in terms of sector-specialization. How the various sub-groups of the self-employed—as distinguished by demographic characteristics such as gender, region of origin, and educational attainment—experience these changes is critical to the future of the city's development.

Understanding how migrants can influence a city's labor market and resulting public goods provisions is essential to the discussion of sustainable economies. As this paper shows, programs and policies aimed at facilitating the further growth of the self-employed sector should be tailored to support the socioeconomic mobility of the city's labor pool as well as the shape of the overall economy. These may include policies and programs that:

- Foster convenient and affordable higher education programs and business/entrepreneurial trainings, as educational attainment becomes increasingly important to recent migrants in enhancing their income levels;
- Increase access to capital for recent migrants who are without credit or face other obstacles posed by traditional avenues of entrepreneurship; and
- Investigate the human and financial capital obstacles faced by recent migrants, with the aim of informing efforts to encourage the further growth and diversity of the self-employed sector.

Using 5-year mobility data from the 1990 and 2000 Censuses, we focus on the changing role of self-employ-

ment within the context of New York City's shifting labor market. Drawing upon the demographic and socioeconomic characteristics of recent migrants, we identify trends among different groups and consider the implications such trends will have on the city's labor market and their potential effects on the city's short- and long-term economy.

## Migration & Upward Mobility

Migration patterns are intimately tied to regional development and economic growth. Individuals are motivated to migrate by changing conditions in their current locations and by incentives in potential destination locations. These two factors are often referred to, respectively, as "push" and "pull," and include a wide array of potential stimuli including, but not limited to, family and ethnic concentrations,<sup>3</sup> welfare benefits and other social transfer programs,<sup>4</sup> and changes in demand for other goods and services, such as housing.<sup>5</sup>

The strength of the market for and variety of opportunities to engage in self-employment in New York City may serve as one of these "pull" factors. Self-employment has long been considered a vehicle for enhancing individual and collective economic mobility, particularly among ethnic minorities and the foreign born.<sup>6</sup> Upward mobility is a motivation for many migrants to move to New York City, as demonstrated by the number of young and single individuals flowing into the city and the number of individuals with children and higher incomes flowing out.<sup>7</sup>

The importance of recognizing the dichotomy between "people" and "place" perspectives on urban change is well established. The finding that increased focus on the "people" perspective allows researchers to account for the strong impact of "demographic dynamism" (i.e., the fluidity of demographic status) on the prevalence of the upward mobility dynamic in the urban context.<sup>8</sup> This agent-oriented perspective on urban development encourages an emphasis on policies that foster the innovation, ambition, and interests of city residents themselves as they shape the city around them through their own goals and successes.

New York City offers a unique environment in which to explore entrepreneurial opportunities for both foreign and domestic migrants. Due to the density and diversity of its population, as well as the multiplicity of sectors repre-

sented in its market, New York City attracts businesses, workers, and entrepreneurs from around the world. The city is also home to a vast array of migration networks, which can be vital to the entrepreneurial success of recent arrivals.<sup>9</sup> Migration networks are relationships formed in the interest of reducing the social, economic, and emotional costs of migration.<sup>10</sup> These relationships, which include ethnic concentrations and enclaves, are often formed within the context of residential concentrations of co-national migrants. Because these relationships allow recent migrants to tap into human and financial capital that might not otherwise be available to them, they are a particularly lucrative resource for the self-employed.<sup>11</sup>

Although 42% of immigrants to the United States arrive with significant financial capital and twelve or more years of formal education, another third of immigrants enter the country as unskilled labor.<sup>12</sup> For those who arrive with relatively little education and few financial assets, self-employment can play an invaluable role in creating broader economic opportunities by helping individuals to overcome labor force disadvantages, including exclusion from professional networks, lack of American diplomas, and limited English proficiency. Within the context of enclaves, in which a relatively high number of co-nationals reside, self-employment provides international migrants with the opportunity to provide certain goods or services to their co-nationals at a comparative advantage relative to natives or other migrants.<sup>13</sup>

Self-employment does not always function equally as a form of upward mobility however; recent research demonstrates that the experience varies by group.<sup>14</sup> In examining self-employment rates by immigrant status and gender, the finding that the self-employment rate among immigrant females (7.7%) is higher than U.S.-born females (6.1%) suggests a higher rate of success in entrepreneurship among foreign-born women.<sup>15</sup> However, both immigrant males (10.3%) and U.S.-born males (10.5%) demonstrate higher self-employment rates than their female counterparts. While the self-employment sector continues to be dominated by men, both in terms of the number of male entrepreneurs and the levels of income they are able to earn, the rate of growth among female entrepreneurs is gaining pace. In fact, female entrepreneurs now comprise the fastest growing segment of the small business population, with the rate of women-owned business creation two times that of businesses owned by men.<sup>16</sup> The number of

self-employed women in the United States increased from 1.6 million to 3.9 million between 1974 and 1994. However, an examination of earnings data from 1994 found that self-employed women continued to earn much less than their wage and salary counterparts.<sup>17</sup> Women entrepreneurs still face difficulties accessing capital, gaining high levels of management experience and entering non-traditional sectors.

Levels of English-language ability and educational attainment are increasingly important in determining the extent to which self-employment may provide individuals with opportunities for socioeconomic mobility. Over the previous census period, English-proficiency premiums increased significantly for both male and female entrepreneurs and groups (based on national origin) who displayed an improvement of relative earnings also exhibited overall increases in education.<sup>18</sup> However, while the gap between self-employed and wage/salary natives decreased during the 1980s, the educational attainment gap between self-employed and wage/salary immigrants increased. Thus, while some immigrant entrepreneurs, like their U.S.-born counterparts, exhibited high education levels, others demonstrated very low levels of educational attainment and English-proficiency. This may be the result of certain types of discrimination faced by less-educated, limited-English-proficiency international migrants, which have disproportionately pushed these individuals into self-employment.<sup>19</sup>

Rates of self-employment have also been found to vary between ethno-racial groups. Because enclaves—and the resources they provide—have been shown to play a critical role in the success of many immigrant entrepreneurs, variable experiences along ethno-racial lines may indicate some groups have been more successful than others in taking advantage of the resources generated by enclaves. Certain groups—including Chinese, Iranians, Koreans, and Israelis—have demonstrated particularly high self-employment rates.<sup>20</sup> Additional research has found Cubans and Koreans experienced an improvement in annual earnings tied to self-employment, while no such improvement was experienced by Chinese or Blacks.<sup>21</sup> However, when compared to native-born persons of any particular ethno-racial group, foreign-born persons of the same group tend to display higher self-employment rates.<sup>22-23</sup>

On a national level, immigrants who arrived during the 1990s remained concentrated in wage and salary positions.

While these new immigrants were found in every private sector industry, they were most highly concentrated in three sectors: construction and manufacturing, leisure/hospitality/other service industries, and health/education/professional/business services. It is interesting to note that “nearly 320,00 new immigrants obtained employment in the nation’s manufacturing industries at a time when total wage and salary employment in these industries declined by more than 2.7 million positions.” Sectoral concentration among international migrants is equally strong among entrepreneurs as wage and salary workers, as demonstrated in the analysis below.

These dynamic trends highlight the importance of looking at self-employment on a more detailed level. The role of self-employment in the occupational behavior of New York City’s international and domestic migrants is affected by both the broader forces of restructuring in the metropolitan economy, as well as by changes in the demographic characteristics of any particular migrant group. Other contextual factors—including the make up of the local labor market, the availability of public transportation, and social infrastructure—will also differentiate the effectiveness of self-employment for a particular individual or group.<sup>25</sup>

This paper, which examines the interplay between patterns of migration and patterns of self-employment, affords a unique opportunity to strike a balance between “people” and “place” perspectives on urban change. We can expect structural changes in the local and regional economies, which affect the labor opportunities available to recent migrants and the kinds of skills and services that will be in demand, to have an impact on the demographic and economic characteristics of incoming populations. However, the demographic dynamism of recent migrant populations and the patterns of variation between those who arrived between 1985 and 1990 and those who arrived ten years later will have critical effects not only on the shape of the city’s economy but also on the shape of the lives of those considered within this study as well.

## Data & Definitions

For our empirical analysis, we examined data from the 1% sample of the 1990 and 2000 censuses, which contain a full range of economic and demographic information on 1 of

every 100 people in the full U.S. population.<sup>26</sup> In addition, and most importantly for the purposes of this study, the data sets include several migration variables that permit the identification of an individual's location five years prior (in this case, 1985 and 1995). Combining this with the individual's current location, we can map a respondent's move from one location to another. The geographic variables identify countries, U.S. states and metropolitan areas with populations larger than 100,000 people. The data set enables a comparison of different types of jobs and incomes of current residents and migrants.

The raw estimates will miss two sets of individuals. First, because the data set is a representative sample of the U.S. Census, the estimates will miss people who emigrated from the U.S. Thus, in any comparison of net migration, outmigration estimates will be underestimated. Second, the estimates will not capture anyone who moved twice during the five-year periods, which should not bias the estimates in any systematic way. Although one might be concerned about immigrants' entry point to the U.S., we do not expect this to overtly bias the results, given that New York City is still the major port of entry. The self-employed group includes all self-employed workers, regardless of incorporation status, as delineated by IPUMS. We also make no further categorization based on income level or source (i.e., wage and salary versus self-employment income, etc.). The general nature of these criteria enables larger sample sizes, which allow us to make conclusions about economic outcomes that are significant both conceptually and statistically. As a final caveat, because these are representative samples from the Census, the final estimates may vary from the actual values found in the full Census because of sampling variation or other issues.<sup>27-28</sup>

The estimates found below are weighted by IPUMS person-level weights. Tables 2 through 8 also include a statistical check for the equality of reported medians between 1990 and 2000; nearly all the results are statistically significant at the 1% level. In Table 1, a two-tailed proportion test is included to check the statistical significance of the 1990 to 2000 percent change, the results from which show that all of these changes are all statistically significant.<sup>29</sup>

Since in particular we want to examine the city's labor force, the sample is also restricted to the population eighteen years of age and older. The income variable is the total income the

respondent received in the previous calendar year. This includes pre-tax wage and salary income, in addition to income gains or losses from other sources, including Social Security, Supplementary Security Income (SSI), welfare (public assistance), and other retirement and investment income. This income measure has two advantages over the basic wage and salary income measure. One, we expect migrants—especially international migrants—to have income from a variety of sources other than their wages and salaries making the more comprehensive total income measure preferable. Two, because total income captures a wide range of taxes and transfers, it may be a better measure of income for self-employed workers whose incomes often include significant revenues from capital investments.<sup>30</sup> Of course, Census respondents are answering questions about their current income status. Thus, an individual who moved from Atlanta to New York City is reporting the income she earned in New York City, not Atlanta. Since incomes are on average higher in New York City than many other places in the country and world (partly due to New York City's higher costs of living) one would expect a priori that income estimates for New York City's in-migrants will be biased upwards, although this may be less true for people migrating from overseas. Hence, the income estimates may capture the higher wages paid in New York City in addition to job shifting and experience effects borne by people who move from one location to another.

For employment, the Census records seven levels of employment status, including "at work," "has job, not working," "armed forces, at work," "armed forces, not at work but with job," "unemployed," "not in labor force," or "not available (N/A)." We define "workers" as those who fall within the first four categories; the two not-working categories in that group may be affected by seasonal variation.

One of the potential weaknesses of this study is the choice of examining New York City as the geographic region as opposed to the larger metropolitan area. Economic change is largely regional, especially for a major urban center like New York. New York City draws on workers from surrounding areas and thus their contribution to the city's economic health cannot be underemphasized. One of the major reasons for looking at the city proper, as opposed to the larger metropolitan area, is because this allows us to make inferences about the city's fiscal situation, including its potential tax base and the goods and services it may have to provide.



## Main Findings

Between 1990 and 2000, the number of self-employed workers in New York City grew by 2.9%. In the first period of analysis—between 1985 and 1990—over 28,000 of workers moving to New York City were self-employed, accounting for 6% of migrants to the city. A decade later, between 1995 and 2000, this number had risen to almost 32,000: a 13% increase. The expansion of the self-employed sector will have a direct impact on such issues as the demand for public services, the growth of small business, and the dynamics of community development. In this section, we focus on the characteristics of self-employed workers who moved to New York City in the periods between 1985 and 1990 and between 1995 and 2000. In order to focus on the characteristics of those who moved to the city over the last ten years we do not analyze the existing stock of self-employed workers in the city. The results underscore the growth and changing dynamics of the self-employment sector and demonstrate trends that policy makers should be aware of as the New York City economy readies for a new and different wave of migration. While the extent to which demographic change is integrated into broader forces of economic restructuring is still not well understood, attention to the dynamics of this relationship is critical if we are to judge the desirability of economic change through the consequences it has for people.<sup>31</sup>

In order to provide an overview of the trends in migration to and from New York City over the past decade, Table 1 shows the number of people who lived in New York City in 2000 and the two migration classes: those who moved from the city and those who moved to the city. Those who migrated into the city are further decomposed into domestic and international migrant groups.<sup>32</sup> The city's in-migration exceeded the city's outmigration by about 36,000 people in 2000, a pace that had slowed since the 1985-1990 period (see Table 1, bottom panel).<sup>33</sup> The table also shows the large number of foreign-born migrants who moved to the city (469,632), especially relative to the number of foreign-born people who moved out of the city (294,737). The 13% growth rate in immigrant self-employment status between 1990 and 2000 exceeds the 2.9% growth rate of self-employment among current residents by more than four times (see also Figure 1). The slight difference between domestic and international migrants (12.9% and 13.3%) who were self-employed is not tremendous; yet it suggests a greater likelihood of international migrants who work for themselves when they arrive in New York City.

We distinguish between four general sectors in the economy: Industry, High Skill, Government, and Services. The Industry category includes the construction, manufacturing, wholesale trade, transportation, and warehousing and utilities sectors. The High Skill category includes workers from the information and communications, finance, insurance and real estate (FIRE), professional and technical services, and educational and health services sectors. The Services category includes those in retail trade and personal service jobs, while the Government category includes those in the armed forces and public administration.<sup>34</sup>

These sector distinctions permit an analysis of migration trends first by self-employment status and then within the self-employment sector itself. Table 2 presents median incomes by self-employment status for the worker sample. As expected, workers in the High Skill sector have the highest incomes while workers in the Services sector have the lowest. Over time, the income gap between these two sectors has grown markedly. In 1990, self-employed High Skill workers earned 1.3 times as much as those in the Services sector; by 2000, this ratio had grown to 2.2. As incomes for self-employed workers in the High Skill sector grew by 54%, wage and salary workers saw their incomes fall by 2%, resulting in a substantial shift in the relative rankings of the two median income levels.<sup>35</sup> Within the Services sector, the combination of the 5% decline in median incomes for self-employed workers and the 3% decline in median incomes for wage and salary workers, reduced the \$3,700 income gap that existed in 1990 by over \$500.

Table 1. Migrants to NYC, by Nativity & Self-employment, 1990-2000

Category	Adult Population, 2000				
	Current NYers <sup>†</sup>	To NYC			
		All	Domestic	Int'l	From NYC
Foreign Born	2,430,916	469,632	102,782	366,850	294,737
U.S. Born	2,767,918	363,873	312,629	51,244	502,549
Total	5,198,834	833,505	415,411	418,094	797,286
Self-Employed <sup>††</sup>	253,592	31,745	17,296	14,449	40,246
Wage & Salary <sup>††</sup>	2,482,759	473,427	276,284	197,143	452,967
Total <sup>††</sup>	2,736,351	505,172	293,580	211,592	493,213

Category	Percent Change from 1990				
	Current NYers <sup>†</sup>	To NYC			
		All	Domestic	Int'l	From NYC
Foreign Born	31.4%**	9.1%**	32.8%**	3.9%**	23.4%**
U.S. Born	-9.3%**	29.5%**	21.1%**	125.0%**	-10.2%**
Total	6.1%	17.1%	23.8%	11.2%	-0.2%
Self-Employed <sup>††</sup>	2.9%**	13.1%**	12.9%**	13.3%**	-13.4%**
Wage & Salary <sup>††</sup>	-0.3%**	7.1%**	21.2%**	-7.8%**	4.7%**
Total <sup>††</sup>	0.0%	7.5%	20.7%	-6.7%	3.0%

<sup>†</sup> The "Current NYers" column does not include those who moved to New York City (in column 2).

<sup>††</sup> Worker sample only.

\*\* Percent change statistically different at 1% level.

Source: Author's calculations from 2000 and 1990 IPUMS.

**Table 2. Median Income for NYC Migrant Self-Employment Status by Sector**

	2000		1990		Percent Change	
	Self-Employed	Wage & Salary	Self-Employed	Wage & Salary	Self-Employed	Wage & Salary
Industry	\$27,611	\$22,089	\$30,419	\$24,187	-9%**	-9%**
High Skill	\$44,178	\$36,447	\$28,731	\$37,097	54%**	-2%
Government	n.a.	\$44,178	n.a.	\$37,638	n.a.	17%**
Services	\$20,432	\$17,229	\$21,516	\$17,806	-5%**	-3%**
Total	\$30,924	\$28,715	\$25,086	\$27,452	23%**	5%**
<b>Income Ratio</b>						
Industry:High Skill	0.6**	0.6**	1.1**	0.7**	-41%	-7%
High Skill:Services	2.2**	2.1**	1.3**	2.1**	62%	2%

\* Medians statistically different at 5% level; \*\* Medians statistically different at 1% level.

Source: Author's calculations from 2000 and 1990 IPUMS.

In the Industry sector, incomes for both groups fell by 9% with self-employed workers maintaining their relative income advantage. Overall, these findings illustrate the relative income advantage the self-employed had over wage and salary workers in the Industry and Services sectors in 2000. Returns to self-employment in the High Skill sector, in particular, significantly outpaced income increases for wage and salary workers. While incomes for the self-employed still exceed the incomes of wage/salary workers, there is wider variation in incomes among this self-employed group.<sup>36</sup>

Focusing directly on self-employed migrants, the differences in income by origin (i.e. international or domestic) are demonstrated in Table 3. Domestic migrants hold a distinct advantage over international migrants for all three sectors in the table with the largest difference found in the High Skill sector. However, the ratio of median incomes in the High Skill sector grew only slightly, from 2.5 to 2.6 over the period. Incomes in the Industry sector were effectively equal in both sets of years. In the Services sector, domestic migrants saw their incomes decline by 8% as international

migrants experienced an 18% income increase over the period, resulting in a decline of the income ratio from 2.1 to 1.7. Whether these trends reflect labor supply or labor demand effects is difficult to disentangle yet the change in relative income levels does suggest changes in both the structure of the economy and in migrants' expectations for future income growth.

New York City's self-employed population is emblematic of the city's considerable diversity. In 2000, the only year for which specific country-origin data is available, 14% of all migrants to New York City originated in Central or South America (Figure 2). Migrants from Europe accounted for 11% of the total, while over half of the city's migrants moved from other parts of the United States. Median incomes varied significantly by country of origin, ranging from \$9,830 for those who originated in Mexico to \$55,443 for migrants coming from Canada. The median income levels of all groups differed statistically from the U.S. median income level of \$42,068. Hence the observation that the higher incomes of domestic migrants overall (Table 3) masks the considerable variation among international

**Table 3. Median Income for NYC Self-Employed Migrants by Sector and Origin**

	2000				1990				Percent Change			
	Industry	High Skill	Services	Total	Industry	High Skill	Services	Total	Industry	High Skill	Services	Total
Domestic	\$27,611	\$57,431	\$28,715	\$42,068	\$32,645	\$40,806	\$31,161	\$35,613	-15%**	41%**	-8%	18%**
International	\$27,059	\$22,089	\$16,567	\$22,089	\$29,682	\$16,323	\$14,839	\$17,806	-9%**	35%**	12%**	24%**
Total	\$27,611	\$44,178	\$20,432	\$30,924	\$30,419	\$28,731	\$21,516	\$25,086	-9%**	54%**	-5%**	23%**
<b>Income Ratio</b>												
Domestic:Int'l.	1.0**	2.6**	1.7**	1.9**	1.1**	2.5**	2.1**	2.0**	-7%	4%	-17%	-5%

\* Medians statistically different at 5% level; \*\* Medians statistically different at 1% level.

Source: Author's calculations from 2000 and 1990 IPUMS.

migrant groups when broken down by country of origin. In particular, Canada, Australia, and the European countries exhibit substantially higher median incomes than other areas around the globe.

Changes in the relative education levels of the city's latest migrants play a critical role in the trends presented thus far. The estimates in Table 4 illustrate the growth in the median incomes of New York City's highly educated self-employed migrants. Higher aggregate levels of education are the result of both a 38% increase in the number of self-employed migrants with four or more years of education (from 12,530 to 17,317) and a 50% decline in the number of workers with less than a high school education (from 4,116 to 2,066).<sup>37</sup> This sharp increase in the number of highly educated migrants was accompanied by a 60% increase in median incomes to over \$47,000 for those with four or more years of college. Clearly, returns to education—as has been documented elsewhere<sup>38</sup>—are being borne out in the latest wave of migration to New York City.

This finding is further demonstrated in Table 5, which breaks down by sector, the changes in education levels between 1990 and 2000. In both 1990 and 2000, workers with 4 or more years of college in the High Skill sector had the highest median income. Over the decade, their income levels grew by 49%. The returns for education were greatest in the Industry sector where the highest median incomes shifted from the Grade 12 category in 1990 to workers with four or more years in 2000. In the Services sector, workers with 1 to 3 years of college continued to be the highest earners, with median incomes that increased by 30% over the decade. The income growth for workers in the Services sector with 1 to 3 years of college outpaced the income growth for those with four or more years of education, as demonstrated by the slight decline in the income ratio from 0.8 to 0.6 (bottom panel).

The distribution of education is decomposed further by migration origin in Table 6. The gap in income between domestic and international migrants with 1 to 3 years of college shrunk over the period, as incomes among domestic migrants decreased by 8% and those among international migrants increased by 13%. This trend was consistent for those who had attained a Grade 12-level education as well, with median income levels dropping 11% among domestic migrants and rising 4% among international

migrants. Among the most highly educated however, the income gap widened, although both domestic and international migrants saw an increase in income level returns for education attained (37% and 33%, respectively). At the same time, as the number of highly educated domestic migrants increased from 8,512 to 12,042 (a 41% increase) the number of international migrants increased to 5,275 in 2000 or less than half the total number of their domestic migrant counterparts. These trends indicate that while domestic migrants still dominate the self-employment sector, both in terms of number of workers and levels of income attained the importance of international migrants to the self-employment sector and the demographic and economic characteristics of these international migrants are shifting.

Tables 7 and 8 further elucidate these shifts in the composition of the self-employed workforce and emphasize the changing dynamics of gender. In Table 7, which tabulates incomes by sector and gender, female migrants are making significant advancements in the New York City economy. In both the Industry and High Skill sectors, women are seeing substantial income increases, 20% in the former and an astounding 131% in the latter. In fact, income increases for both international and domestic migrants in the High Skill sector appear to be driven predominantly by women (Table 7). These observations of the women's advancements are reinforced by the (statistically significant) differences between men's and women's median incomes.

In the Services sector, women's median incomes fell by nearly two-fifths. Although beyond the scope of this paper, the small increase in the total number of workers (a 4% increase) and the decline in total incomes in this sector may reflect a crowding-out by New York City's current resident workforce. The observed trends for men in the Services sector are exactly opposite those for women—higher incomes (+24%) but a smaller labor force (-19%).

For men, median incomes in the Industry sector fell by a fifth even as the number of workers in the sector grew by over 20%. This decrease in median incomes among men is in contrast to the 20% increase for women in this sector. Thus, the decline in the median income levels for international and domestic migrants in this sector, observed in Table 3, is driven by men. The number of men in the High Skill sector rose from 4,984 to 6,701 (a 34% increase) over

**Table 4. Median Income for NYC Self-Employed Migrants by Education**

	2000	1990	Percent Change
Less than Grade 12	\$13,540	\$15,877	-15%**
Grade 12	\$16,567	\$19,290	-14%**
1 to 3 years of college	\$27,611	\$28,045	-2%**
4+ years of college	\$47,381	\$29,677	60%**
<b>Income Ratio</b>			
4+:Grade 12	2.9**	1.5**	86%
4+:1-3 years of college	1.7**	1.1**	62%
4+:Less than Grade 12	3.5**	1.9**	87%

\*\* Medians statistically different at 1% level.

Source: Author's calculations from 2000 and 1990 IPUMS.

**Table 5. Median Income for NYC Self-Employed Migrants by Sector and Education**

	2000			1990			Percent Change		
	Industry	High Skill	Services	Industry	High Skill	Services	Industry	High Skill	Services
Less than Grade 12	\$11,486	\$29,820	\$11,265	\$25,819	\$16,323	\$13,355	-56%**	83%**	-16%**
Grade 12	\$28,274	\$10,603	\$15,462	\$32,645	\$6,677	\$19,290	-13%**	59%**	-20%**
1 to 3 years of college	\$27,611	\$22,089	\$38,655	\$29,677	\$22,357	\$29,677	-7%**	-1%	30%**
4+ years of college	\$97,191	\$55,222	\$23,193	\$30,419	\$37,097	\$23,000	220%**	49%**	-1%**
<b>Income Ratio</b>									
4+:Grade 12	3.4**	5.2**	1.5**	0.9**	5.6**	1.2**	269%	-6%	26%
4+:1-3 years of college	3.5**	2.5**	0.6**	1.0**	1.7**	0.8**	243%	51%	-23%
4+:Less than Grade 12	8.5**	1.9**	2.1**	1.2**	2.3**	1.7**	618%	-19%	20%

\* Medians statistically different at 5% level; \*\* Medians statistically different at 1% level.

Source: Author's calculations from 2000 and 1990 IPUMS.

**Table 6. Median Income for NYC Self-Employed Migrants by Origin and Education**

	2000		1990		Percent Change	
	Domestic	International	Domestic	International	Domestic	International
Less than Grade 12	\$15,462	\$13,540	\$22,258	\$14,168	-31%**	-4%**
Grade 12	\$28,274	\$15,462	\$31,903	\$14,839	-11%**	4%**
1 to 3 years of college	\$28,715	\$22,310	\$31,161	\$19,676	-8%**	13%**
4+ years of college	\$50,804	\$33,244	\$37,097	\$25,086	37%**	33%**
<b>Income Ratio</b>						
4+:Grade 12	1.8**	2.2**	1.2**	1.7**	55%	27%
4+:1-3 years of college	1.8**	1.5**	1.2**	1.3**	49%	17%
4+:Less than Grade 12	3.3**	2.5**	1.7**	1.8**	97%	39%

\* Medians statistically different at 5% level; \*\* Medians statistically different at 1% level.

Source: Author's calculations from 2000 and 1990 IPUMS.



**Table 7. Median Income for NYC Self-Employed Migrants by Sector and Gender**

	2000			1990			Percent Change		
	Industry	High Skill	Services	Industry	High Skill	Services	Industry	High Skill	Services
Female	\$30,924	\$38,655	\$14,247	\$25,819	\$16,765	\$21,516	20%**	131%**	-34%**
Male	\$27,059	\$55,222	\$25,789	\$30,419	\$46,445	\$20,774	-11%**	19%**	24%**
Total	\$27,611	\$44,178	\$20,432	\$30,419	\$28,731	\$21,516	-9%**	54%**	-5%*
<b>Income Ratio</b>									
Female:Male	1.1**	0.7**	0.6**	0.8**	0.4**	1.0	35%	94%	-47%

\* Medians statistically different at 5% level; \*\* Medians statistically different at 1% level.

Source: Author's calculations from 2000 and 1990 IPUMS.

**Table 8. Median Income for NYC Self-Employed Migrants by Gender and Origin**

	2000		1990		Percent Change	
	Female	Male	Female	Male	Female	Male
Domestic	\$38,655	\$44,178	\$28,731	\$37,097	35%**	19%**
International	\$13,253	\$25,789	\$13,355	\$22,258	-1%	16%**
Total	\$28,715	\$33,133	\$19,661	\$29,682	46%**	12%**
<b>Income Ratio</b>						
Domestic:Int'l.	2.9**	1.7**	2.2**	1.7**	36%	3%

\* Medians statistically different at 5% level; \*\* Medians statistically different at 1% level.

Source: Author's calculations from 2000 and 1990 IPUMS.

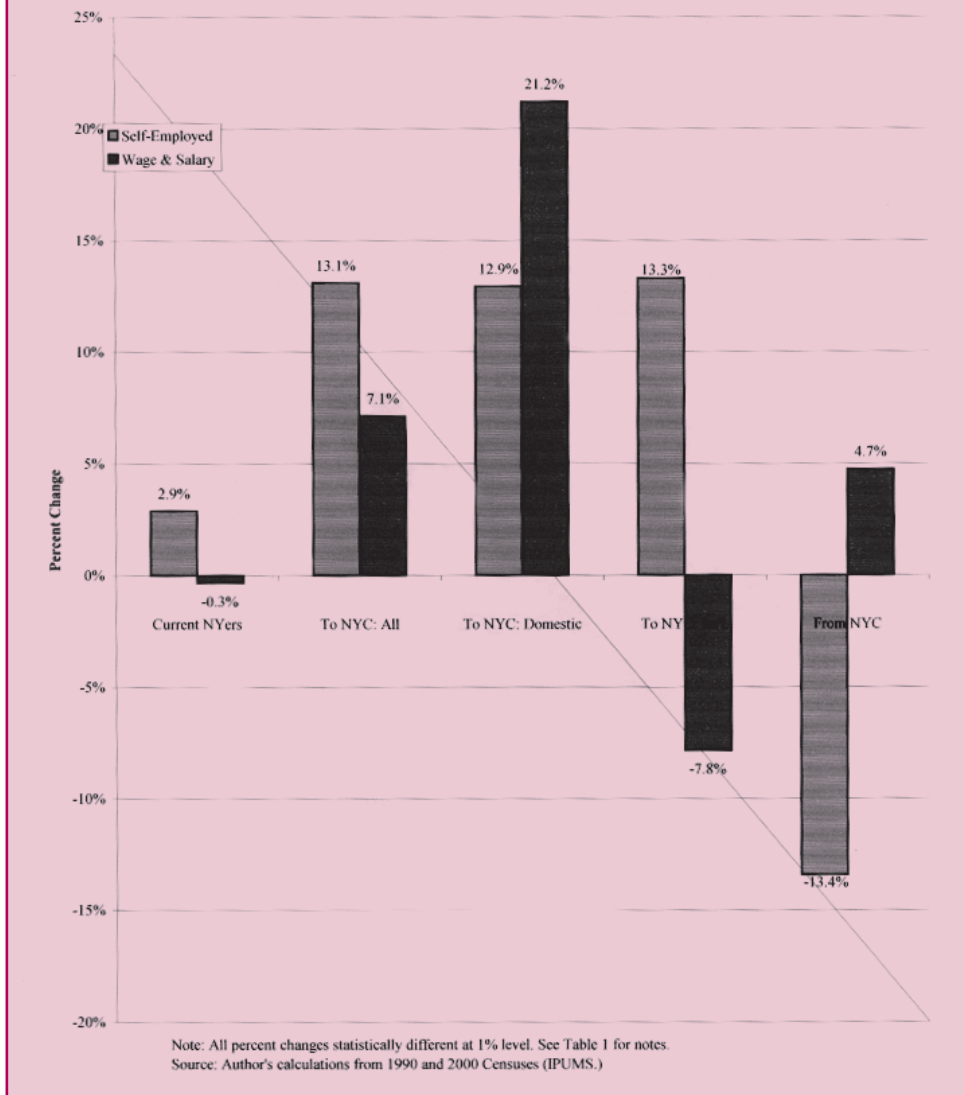
the decade and incomes grew at about half the rate (19%), which serves to not only maintain men's income advantage over women but to extend it—the ratio of median incomes almost doubled from 0.4 to 0.7. We also observe an increase in the female-male median income ratio in the Industry sector, but a decline in the ratio—from 1.0 to .06—in the Services sector.

Trends in gender labor market status can be further decomposed by origin (Table 8). As in Table 3, domestic migrants have significantly higher incomes than their international counterparts—in 2000, domestic female migrants attained almost three times the total income of women from overseas. Differences between men, on the other hand, actually fell between 1990 and 2000, although domestic male

migrants still earned more than one-and-a-half times the incomes of international male migrants.

The estimates in these tables demonstrate significant changes in the characteristics of New York City's self-employed migrants. They are much more likely to have high levels of education and earn higher incomes. They are more likely to be in High Skill sector industries. The premiums afforded to those with four or more years of college working in the High Skill and Industry sectors rose substantially, particularly in the Industry sector where incomes increased by 220% from 1990 (see Table 5). With respect to gender, the growth rate in the number of self-employed women migrating to the city is nearly twice that of men while the growth in female incomes is four times as fast as men's.

Figure 1. Percent Change in Self-Employed and Wage & Salary Workers, 1990-2000



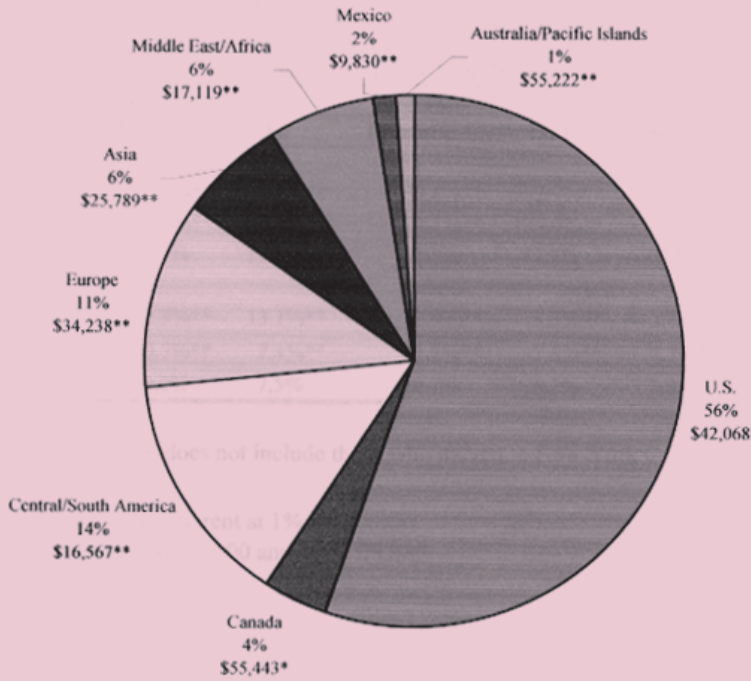
However, these trends are affecting migrant groups in different ways. For example, while domestic migrants outperform international migrants in terms of median income levels achieved, when examined by specific region of origin, we find that certain international migrant groups—including those from Europe, Canada & Mexico, and Central/South America—are achieving significantly higher median incomes than others, including domestic migrants. The increasing importance of international migrants to New York City’s self-employment sector will undoubtedly afford opportunities for certain regional groups to make greater inroads into the city’s economy, particularly as female migrants—both domestic and international—are

increasingly participating in the self-employment sector. This will affect not only the structure of the city’s labor market and small business industry, but also the shape of New York City’s communities and the role of social structures such as enclaves within the self-employment sector.

## Conclusion

As New York City’s economy has changed in nature over the past three decades, it has become increasingly reliant upon High Skill industries and the highly educated and talented labor pool that sustain them. The heightened importance of the High Skill sector—among the self-employed as well as wage and salary

Figure 2. Self-Employed Migrants to NYC by Country of Origin, 2000



Note: Percentage of all self-employed migrants to NYC from each country/continent, and median income of self-employed migrants in 2000. \* Medians statistically different from U.S. at 5% level; \*\* Medians statistically different from U.S. at 1% level.  
Source: Author's calculations from 2000 Census (IPUMS.)

workers—intensified in the period between 1990 and 2000. Among the city's recent migrant population, there was an increase in educational attainment levels as well as a corresponding increase in the median incomes being achieved. However, not all recent migrants fared above the average and median lines, with certain groups—broken down by sector of employment, gender, educational attainment level, and origin—achieving greater socioeconomic mobility than others. Nevertheless, these shifts in New York City's overall economy created opportunities for various groups previously less engaged in self-employment—such as international migrants and women—to take advantage of the potential benefits of entrepreneurship in higher levels. For example,

as the incomes of domestic migrants in the Services sector dropped between 1990 and 2000 and less domestic migrants sought self-employment within this sector, the number of international migrants engaging in self-employment in the Services sector increased, accompanied by a corresponding increase in median incomes. In another example, as the number of women engaged in self-employment in the Industry sector increased by 88%, their median incomes increased by 20%, shifting the income ratio from 0.8 to 1.1 in women's favor. Although the High Skill sector remains the dominant force in the city's economy, there are certainly strides being made in other areas as well.

Overall, we find that the changing nature of New York City's economy continues to draw an increasingly diverse and talented labor pool and to create new opportunities for recent migrants. The demographic dynamism and socioeconomic mobility of the city's population have important consequences for the future of New York City's development. Thus, policies and programs that facilitate the further growth and diversity of the self-employment sector will be critical to the socioeconomic mobility of the city's labor pool, as well as to the growth of small business, the dynamics of community development, and the shape of the overall economy.

Further research in this area, both at the local and national levels, can help inform debates on the impact of urban migration on new job and business growth.

---

*Jonathan A. Schwabish is an Associate Analyst at the Congressional Budget Office, Washington D.C.*

*Jane E. Lynch is a Policy Analyst at the Partnership for New York City, New York, NY.*

## Notes

- <sup>1</sup> Dolfman and Wasser (2004).
- <sup>2</sup> Groshen, Erica L. and Simon Potter. "Has Structural Change Contributed to a Jobless Recovery?" *Federal Reserve Bank of New York: Current Issues in Economics and Finance*, Vol. 9, No. 8 (August 2003).
- <sup>3</sup> Logan, John R. and Richard D. Alba. "Minority Niches and Immigrant Enclaves in New York and Los Angeles: Trends and Impacts." In Frank D. Bean and Stephanie Bell-Rose, eds., *Immigration and Opportunity: Race, Ethnicity, and Employment in the United States*, (New York: Russell Sage Foundation, 2003): 172-193.
- <sup>4</sup> Logan, John R. and Richard D. Alba. "Minority Niches and Immigrant Enclaves in New York and Los Angeles: Trends and Impacts." In Frank D. Bean and Stephanie Bell-Rose, eds., *Immigration and Opportunity: Race, Ethnicity, and Employment in the United States*, (New York: Russell Sage Foundation, 2003): 172-193.
- <sup>5</sup> Miller, Glenn H. Jr. "People on the Move: Trends and Prospects in District Migration Flows." *Economic Review*, Federal Reserve Bank of Kansas City, (Third Quarter, 1994): 39-54.
- <sup>6</sup> Cummings, Scott. *Self-Help in Urban America: Patterns of Minority Business Enterprise*. (Kenikart Press. New York, 1980).
- <sup>7</sup> Schwabish, Jonathan A. "Easy Come, Easy Go: Migration in NYC, 1995-2000." Presented at the 2004 New York State Economics Association Annual Meeting (October 9, 2004).
- <sup>8</sup> Myers, Dowell. "Demographic Dynamism and Metropolitan Change: Comparing Los Angeles, New York, Chicago, and Washington, DC." *Housing Policy Debate*. 10:4 (1999): 919-954.
- <sup>9</sup> Light, Ivan, Parminder Bhachu and Stavros Karageorgis. 1993. "Migrant Networks and Immigrant Entrepreneurship." In Ivan Light and Parminder Bhachu, eds., *Immigration and Entrepreneurship: Culture, Capital, and Ethnic Networks* (New Brunswick and London: Transaction Publishers, 1993): 25-49.
- <sup>10</sup> Ibid.
- <sup>11</sup> Light, Ivan. "Immigrant Neighborhoods as Centers of Commerce." presented at Palmer House Hotel, Chicago, IL, under the auspices of The Illinois Immigration Policy Project (October 18, 2001).
- <sup>12</sup> Ibid.
- <sup>13</sup> Aldrich, Howard and Roger Waldinger. "Ethnicity and Entrepreneurship" *Annual Review of Sociology*, 16, (1990): 111-135; Lofstrom, Magnus. "Labor Market Assimilation and the Self-Employment Decision of Immigrant Entrepreneurs." *Journal of Population Economics*, Vol. 15 (2002): 083-114.
- <sup>14</sup> Logan and Alba, (2003).
- <sup>15</sup> Toussaint-Comeau, Maude. "Self-Employed Immigrants." Presentation at the Federal Reserve Bank of Chicago, April 15-16, 2004.
- <sup>16</sup> Mistick, Barbara. "The Feminization of Entrepreneurship: A case for a Women's Model in Fostering Economic development." Presentation at the USASBE Annual National Conference Bright Horizons for Small Business and Entrepreneurship, Clearwater, FL, January 15-18, 1998.
- <sup>17</sup> Ibid.
- <sup>18</sup> Davila, Alberto and Marie T. Mora. "English Proficiency and Immigrant Entrepreneurial Income in the U.S." *Department of Economics and Finance, University of Texas-Pan American* (August 2002).; Lofstrom (2002).
- <sup>19</sup> Davila and Mora (2002).
- <sup>20</sup> Light (2001).
- <sup>21</sup> Portes, Alejandro and Min Zhou. "Self-employment and the earnings of immigrants." *American Sociological Review*. 61 (1996): 219-230.
- <sup>22</sup> Light (2001); Lofstrom (2002).
- <sup>23</sup> As we are particularly concerned with push/pull factors and the conditions of New York City relative to source locations to the extent that they determine who migrates or not, we have chosen to focus our analysis on general regions of origin rather than ethno-racial classifications. These estimates are available from the authors upon request.
- <sup>24</sup> Sum, Andrew, Neeta Fogg, and Ishwar Khatiwada with Sheila Palma. "Foreign Immigration and the Labor Force of the U.S.: The Contributions of New Foreign Immigration to the Growth of the Nation's Labor Force and Its Employed Population, 2000 to 2004." *Center for Labor Market Studies*, Northeastern University (July 2004).
- <sup>25</sup> Gober, Patricia. "Immigration and North American Cities." *Urban Geography*, Vol. 21, No. 1 (January-February 2000): 83-90.
- <sup>26</sup> Our census data file was from the Integrated Public Use Microdata Series (IPUMS) of the Minnesota Population Center at the University of Minnesota. See Ruggles, Steven and Matthew Sobek et al. *Integrated Public Use Microdata Series: Version 3.0*. Minneapolis: Historical Census Projects, University of Minnesota, 2003. <http://www.ipums.org>.
- <sup>27</sup> See Schachter, Jason P., Rachel S. Franklin and Marc J. Perry. "Migration and Geographic Mobility in Metropolitan and Nonmetropolitan America: 1995 to 2000." *Census 2000 Special Reports*, U.S. Census Bureau (August 2003); U.S. Bureau of the Census. 2000 U.S. Census Fact Sheet. 2004. [http://factfinder.census.gov/home/saff/main.html?\\_lang=en](http://factfinder.census.gov/home/saff/main.html?_lang=en); U.S. Bureau of the Census. Summary File 3: 2000 Census of Population and Housing, Technical Documentation. SF2/12 (RV), (March 2004) <http://www.census.gov/Press-Release/www/2002/sumfile3.html>.
- <sup>28</sup> For example, from the IPUMS we calculate that New York City had 286,097 self-employed people in 2000. Using the web-based extraction tool on the U.S. Census website, 283,614 people are identified as having self-employment income in 2000.
- <sup>29</sup> Wonnacott, Thomas H. and Ronald J. Wonnacott. *Introductory Statistics*. (John Wiley & Sons. New York, 1990).
- <sup>30</sup> Lofstrom (2002).
- <sup>31</sup> Myers, Dowell. "Upward Mobility in Space and Time: Lessons from Immigration." In James W. Hughes and Joseph J. Seneca, eds., *America's Demographic Tapestry: Baseline for the New Millennium* (New Brunswick: Rutgers University Press, 1999): 135-157.
- <sup>32</sup> This mirrors the results found in Schwabish (2004).
- <sup>33</sup> When the under-18 population is included, this trend is reversed.
- <sup>34</sup> The IPUMS industry codes are not exactly the same in 1990 and 2000; hence, some matching decisions were made. A full list of the sectors included in each category for both years can be obtained by contacting the authors.
- <sup>35</sup> Although this latter number is not statistically significant.
- <sup>36</sup> The standard deviations of all the estimates in Tables 2 through 8 are available from the authors upon request.
- <sup>37</sup> Neither the "4+ years of college" nor the "Grade 12" categories require the respondent to have earned a degree. We must accept this fact as a source of potential bias.
- <sup>38</sup> See Card, David, and John DiNardo. "Skill Biased Technological Change and Rising Wage Inequality: Some Problems and Puzzles." *NBER Working Paper No. 8769* (February 2002). for example.
- <sup>39</sup> The variance (not pictured) in incomes for highly educated domestic migrants fell over the period, while it grew for international migrants with high levels of education. This may imply that incomes for domestic self-employed migrants became more stable during the 1990s than for international self-employed migrants.
- <sup>40</sup> These estimates are available from the authors upon request.