

19. The tables on occupational change utilize a technique known as "shift-share" analysis. The virtue of the procedure is that it decomposes the effects attributable to the factors of particular interest here: composition (or "group size"), occupational change, and "share," a residual term that reflects the shifts in the ethnic division of labor. The column for "group size" shows calculations made on the assumption that change in an occupation reflects changes in a group's relative size (after adjustments have been made for the impact of the local economy's decline). The column for "occupational change" shows calculations made on the assumption that groups gained or lost jobs because the occupations on which they had been dependent in 1970 waxed or waned over the course of the decade. The column labeled "interactive" adds group size and occupational change effects, thus indicating whether the two factors worked in opposite or reinforcing directions. Finally, the column for "share" shows whether a group's employment in an occupation increased or decreased, net of "group size" and "occupational change." For further details on the procedure, see Waldinger, "Changing Ladders," p. 378.
20. Waldinger, *Eye of the Needle*.
21. Bailey, *Immigrant and Native Workers*.

Dual City

3

The Informal Economy

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S. Sassen, The informal economy, in J. Mollenkopf and M. Castells, eds. *Dual City*, New York: Russell Sage, 1991.

The main theories of economic development generally do not foresee the possibility that an informal economy might arise in postindustrial societies. This controversial possibility demands not only empirical documentation but also a theoretical defense. As used here, the informal economy concept describes income-generating activities that take place outside the framework of public regulation, where similar activities are regulated.¹ Although particular instances of informal work in highly developed countries may resemble those of an earlier period, against the backdrop of decades of growing regulation that reduced and in many sectors virtually eliminated unregulated income-generating activity, they are actually a new development. Informal work is dissonant with the dominant economic theories, whether neoclassical or Marxist, that posit the disappearance and absorption of unregulated activities.²

To theorize the growth of an informal economy, we must rethink the propositions about advanced economies which explicitly or implicitly preclude such a development. Such a rethinking is under way for the case of manufacturing.³ Most of this retheorizing has focused on industrial organization, particularly trends toward vertical disintegration and decentralization.⁴ More generally, analysis has centered on what has come to be referred to as the decline of the Fordist model of production and the rise of new regimes of accumulation.⁵ This has led to an examination of how such trends have affected the overall organization of work and economic activity in what were once areas dominated by large-scale vertically integrated firms.⁶

A parallel examination of how such trends are playing themselves out

in major cities is now beginning to take place.⁷ Earlier works that go beyond a mere description of occupational and sectoral shifts only begin to analyze how the rise of services has reshaped urban economies.⁸ The present study of the informal economy asks whether decentralization and vertical disintegration have also occurred in the urban economic structure and whether they propel informalization. This would ground informalization within the basic properties of advanced urban economies. Such an explanation diverges from the common notion that the growth of an informal economy in cities like New York and Los Angeles results from the survival strategies of Third World immigrants.

To identify the links between informalization and advanced capitalism, this chapter will examine changes in types of jobs, types of firms, and subcontracting that could induce informalization. There is no precise measure of the informal economy and there is no exhaustive evidence. The economic restructuring that has contributed to a decline of the manufacturing-dominated industrial complex of the postwar era and the rise of a new, service-dominated industrial complex provides the context within which informalization must be analyzed.

The Informal Economy: An Analytical Specification

The informal economy can be analyzed only in relation to the formal economy and the institutional framework whereby the state explicitly regulates the process and outcomes of income-generating activities according to a set of enforceable legal rules. Without such an institutional framework, there can be no informal economy. In other words, while today's sweatshops may look similar to sweatshops of one hundred years ago, the subsequent implementation of various health and labor code regulations gives the sweatshops of today a different form and meaning than when the vast majority of manufacturing took place in an unregulated environment. The implementation, however imperfect, makes informalization a distinct process today.

Although certain activities lend themselves to informalization, it is not their intrinsic characteristics but rather the boundaries of state regulation that determine informalization. As these boundaries vary, so will the definition of what is informal.⁹ The informal economy is not a clearly defined sector or set of sectors with a common position in the work process. It is, rather, a highly opportunistic process with changing boundaries. The key to an analysis of the informal economy is, then, an understanding of the basic dynamics that induce informalization, notwithstanding the regulatory intent of the state and institutional arrangements, such as unions

and governmental enforcement agencies, which act as barriers to informalization.

Castells and Portes point out that the absence of institutional regulations may rest in different elements of the work process: the status of labor, the conditions of work, the form of management.¹⁰ But it is not intrinsic to any of these. Informality does not necessarily reside in the characteristics of the workers. In principle, an undocumented immigrant may be employed in a fully regulated job in the formal economy in full compliance while a citizen may be employed in an informal shop.¹¹ It is true that a large number of undocumented immigrants in the U.S. work in the informal economy,¹² but it is also true that many of the illegal homeworkers in the Netherlands are Dutch citizens,¹³ and many of the workers in the unregulated factories of Emilia-Romagna in Italy are Italian citizens.¹⁴ The expansion of informalization does not depend in principle on the existence of an immigrant labor force. Secondly, informal work produces legal products at home when such work is banned, or done in factories which violate various codes, thereby becoming illegal. Finally, when a factory or a shop operates in violation of health, fire, labor, tax, zoning, or other such regulations, or when a taxi is not licensed as required, they are part of the informal economy even if all the workers are properly documented.

An issue on which there is little agreement concerns the place of criminal activities. "Underground economy" is an umbrella term that has been used for several kinds of irregular economic activity. According to some, the underground and the informal economy are the same. This chapter takes the contrary position, which differentiates these activities in order to understand their specific dynamics and effects. We can begin by distinguishing at least three different components of the underground economy: (1) Criminal activities which by their very nature could not be carried out above ground. (2) Tax evasion on licit forms of income, something all states seem to confront. In the United States, the available information shows a large jump in unreported income. Tax evasion is now considered a severe problem, which it was not in the 1950s, 1960s, and early 1970s. (3) The informal economy which consists of the production and distribution of licit goods and services taking place in violation of the regulatory framework. While criminal activities have to be underground, work carried out in the informal economy could in principle take place in the formal economy. The interesting question is why it does not.

How, then, does informalization as we have defined it fit in the advanced economy of New York City? The existing literature on the "informal sector" has tended to focus on Third World countries and has, wittingly or not, assumed that such sectors will not occur in advanced

industrialized countries. Criminal activities and underreporting of income, unlike the informal economy, are recognized to be present in advanced industrialized economies. Their occurrence is not inconsistent with central propositions in the main theories of economic development. Indeed, income underreporting is clearly a response to the implementation of a taxation system regulated by the state. We will not therefore explore these phenomena.

Is the informal economy a marginal sphere that provides cheap labor to marginal firms? Or are components of the informal economy connected to the major growth sectors? Since much of the expansion of the informal economy in U.S. cities has been located in immigrant communities, some see its expansion as being due to the large influx of Third World immigrants. Cheap immigrant workers keep backward sectors of the economy alive, in this view. We should not assume that Third World immigration causes informalization. Immigrants may be in a favorable position to seize the opportunities represented by informalization. But the opportunities are not necessarily created by immigrants. They may well result from basic trends in the advanced industrialized economies. Similarly, what are perceived as backward sectors of the economy may not be remnants from an earlier phase of industrialization but may well represent a downgrading of work involving growing sectors of the economy. The organizing question must thus be whether informalization is part of the overall economic dynamic and how it helps constitute a "dual" city.

Conditions for Informalization in Advanced Economies

Several interrelated economic and spatial processes must be considered if we are to establish the theoretical and empirical plausibility of informalization in advanced economies. One is the labor market impact of the sectoral and occupational transformation in advanced economies over the last two decades, including the increased earnings dispersion and the growth of high- and low-income jobs. Another is the decline of Fordism, which entails a change as mass production, unions, and the "social contract" they forged lose their economic and political force. A third process involves the spatial transformation of the economy.

Post-World War II economic growth contributed to a vast expansion of the middle class while deterring and reducing informalization. Suburban-led growth was capital-intensive and promoted the consumption of standardized products. These developments facilitated unionization and other forms of workers' empowerment that can be derived from the centrality of mass production and mass consumption to national economic

growth. The incorporation of workers into formal labor market relations reached its highest level in the late 1960s and early 1970s. The economy transmitted the benefits accruing to the core manufacturing industries on to more peripheral sectors of the economy. The benefits of price and market stability and increases in productivity could be transferred to secondary firms, including suppliers and subcontractors but also to unrelated industries. Although a vast array of firms and workers still did not benefit from this shadow effect, their number was probably at a minimum in the postwar period.¹⁵ By the early 1980s the wage-setting power of leading industries and this shadow effect had eroded significantly.

The growth of small production runs, smaller scale enterprises, high product differentiation, and rapid changes in output have also transformed the organization of manufacturing production, promoting subcontracting and more flexible ways of organizing production.¹⁶ These trends have helped to feed the decline of unions in manufacturing, the loss of various contractual protections, and the increase of involuntary part-time and temporary work or other forms of contingent labor. An extreme indication of this downgrading is the growth of sweatshops and industrial homework.¹⁷ The consolidation of a downgraded manufacturing sector through piecework and industrial homework has arisen not only within industries with organized plants and reasonably well-paid jobs but also in new activities associated with the growing sectors of the economy and society.¹⁸

In addition, the growth industries of the 1980s—finance, insurance, real estate, retail trade, business services—show low average pay, greater earnings dispersion, weak (if any) unions, and a higher incidence of part-time and of female workers compared to the leading manufacturing industries of the 1950s and 1960s. Nationally, Blumberg has calculated that real earnings in these industries declined after the early 1970s.¹⁹ A study of 1980 census data by Sheets, Nord, and Phelps found that producer services and retail trade employment in major metropolitan areas were particularly strongly associated with the prevalence of low-wage jobs.²⁰ Harrison and Bluestone, the OECD, and Bell and Freeman found growing wage dispersion within industries and a tendency for industries with low average wages to suffer additional declines in wages and for those with high average wages to experience additional increases.²¹ A growing body of research has shown that loose labor markets contribute to the declining economic position of urban minority groups.²²

The impact of these trends on wages and incomes can be seen by comparing data from the 1950s and 1960s with those of the 1970s and 1980s. Inflation-adjusted average weekly wages peaked in 1973, stagnated over the next few years, and fell in the decade of the 1980s.²³ Furthermore, up

to 1963, inequality in the distribution of earnings declined. Since 1975, the opposite has been occurring. Harrison and Bluestone used CPS data to show that the index of inequality grew 18 percent from 1975 to 1986. Other studies find the same trend.²⁴ The national data show a clear increase in low-wage, full-time, year-round jobs since the late 1970s and a less pronounced increase in high-income jobs. In contrast to the decade from 1963 to 1973, when 9 out of 10 new jobs were in the middle earnings group and high-paying jobs actually lost share, only one in two new jobs was in the middle earnings category after 1973.²⁵ The rising numbers of low-paid workers who are not employed full-time and year-round reinforce this trend.²⁶ By 1986, they were a third of the labor force.²⁷

What matters for the purpose of this analysis is that the broader social compact between labor and employers in the leading industries has eroded. This compact rested on growing mass consumption fueled by the rising wages of unionized workers. In the case of industries that are growing most rapidly in New York, analyzed above by Drennan, such a compact is unlikely. Moreover, the national trend toward wage and income inequality has also taken its toll on the organization of work and family in New York City.

The Case of New York City

Several of the leading service industries are far more heavily concentrated in New York City than in the country as a whole. In 1985, over 26 percent of the city's employment was in FIRE (SIC 60-69), the communications group (SIC 48), business services (SIC 73) and legal services (SIC 81), compared to 15 percent for the nation. The incidence of these industries is also higher than in Los Angeles or Chicago, where it reached 17.8 percent and 20.3 percent. Producer services broadly defined accounted for 32 percent of all employment in the city in 1985, up from 25 percent in 1970, with a total employment of almost one million, accounting for 35 percent of the city's payroll in 1985. (They accounted for almost 40 percent of employment and 45 percent of payroll in Manhattan.)²⁸

Sheets, Nord, and Phelps have shown that these sectors have the strongest impact nationally on the increase in the proportion of low-wage jobs in major metropolitan areas.²⁹ From 1970 to 1980, service industries had a significant effect on the growth of employment paying below poverty-level wages. In retail industries, such as eating and drinking establishments, a 1 percent increase in employment resulted in a 0.88 percent increase in such jobs. Even in "corporate services" (FIRE, business services, legal services, membership organizations, and professional ser-

vices), a 1 percent employment increase generated a 0.37 percent increase in full-time, year-round, low-wage jobs.

While the growth of these industries in New York City, and especially in Manhattan, has probably been much stronger in higher-paid occupations than elsewhere in the country, the evidence suggests that they have also increased the number of low-wage jobs. Data from the New York State Department of Labor show that two sectors have had above average increases in the 1980s: financial services, up 10.3 percent from 1986 to 1987 and services generally up 8.4 percent. Financial services was the highest-paying sector, with annual average pay in New York City of \$43,964 in 1987 compared to an average of \$28,735 for all jobs in the city.³⁰ The next highest paid major industry group, transportation and public utilities, was far below this level. At the same time, unpublished data from the New York State Department of Labor based on occupational surveys in 1984, 1985, and 1986, show that even in financial services, 49.4 percent of the workers are clerical and another 13 percent are service, production, and maintenance workers.³¹ These figures suggest considerable earnings dispersion even within the city's flagship industry.

Data on earnings by occupation and industry for different boroughs of the city point to significant earnings differences between manufacturing and nonmanufacturing, between the corporate services and other service industries, and between Manhattan and the other boroughs. Surveys from the Bureau of Labor Statistics for the New York metropolitan area show that a majority of the 35 clerical occupational categories and the 21 office technical categories show a clear pattern of higher average weekly or hourly earnings in manufacturing than in nonmanufacturing industries.³² County business pattern data on average weekly earnings also show that jobs located in Manhattan pay significantly higher wages than do jobs in the same industry in the other boroughs. For example, average weekly earnings in the financial services ranged from \$732 in Manhattan to \$344 in the Bronx; in the case of business services, from \$501 in Manhattan to \$242 in Staten Island.

The New York State Department of Labor estimates that over half of the new jobs created and about half of all new openings in 1988-1989 will be low- to medium-low wage jobs and the other half, higher-income jobs. Of 666,249 total expected openings, only 56,739 will be newly created jobs, about 300,000 will be separations, and another 300,000 occupational transfers. With over 200,000, clerical groups will have the largest number of openings, followed by the services groups with over 170,000. Professional and technical occupations will have 92,000 openings. Cleaning and food service will have the largest number of openings in the service industries. Private household openings are expected to number al-

most 17,000. Over 18,000 of the *new* jobs will be professional and technical jobs, 6,000 will be managerial, 18,000 will be clerical, and another 18,000 will be service jobs.

The growth of industries with concentrations of high- and low-income jobs has influenced the organization of work, the types of jobs being created, and patterns of consumption. The expansion of high-income strata and the related gentrification of housing and retail markets rests, in the last analysis, on the availability of a large supply of low-wage workers. The typical middle class suburb rests on large capital investments in suburban land, road and highway construction, private automobiles, and rail transit.³³ High-income central city gentrification replaces much of this capital with low-wage labor.

Any city as dense as New York City naturally creates demand for small, full-service retail outlets located close to consumers. But the simultaneous growth of high-income and low-income households reinforces this trend. Instead of suburban self-service supermarkets and department stores, New Yorkers patronize delicatessens and specialty boutiques that operate in different ways and sell different things than do their suburban counterparts. High-income gentrifiers prefer goods and services that often cannot be mass-produced or sold through mass outlets. Customized production, small runs, specialty items, and fine food dishes are generally produced through labor-intensive methods and sold through small, full-service outlets. Part of this production can be subcontracted to low-cost operations, sweatshops, or households. Besides reducing labor costs, this enables production to take place in cheap space, a considerable advantage in a time of strong demand for centrally located land.

The growing low-income population also contributes to the proliferation of small operations and the move away from large, standardized factories and large chain stores for low-price goods. Small establishments relying on family labor, often falling below minimum safety and health standards, typically meet the consumption needs of the low-income population. Cheap, locally produced sweatshop garments, for example, can compete with low-cost Asian imports. Products and services ranging from low-cost furniture made in basements to "gypsy cabs" and family daycare meet the demand arising from the low-income population. The low cost of entry into such operations creates intense competition and marginal returns.

Under such conditions, low-cost labor and the ability to organize production flexibly are crucial. The next section will provide greater detail about such activities as the creation of jitney lines servicing only the financial district; the increase of gypsy cabs in low-income neighborhoods not served by regular cabs; the increase in custom woodwork for gentri-

fied areas; low-cost rehabilitation in poor neighborhoods; and the increase of homeworkers and sweatshops making either expensive designer items for boutiques or very cheap products. Susser's chapter provides additional evidence on household and childcare services.

We may thus derive operating hypotheses about the trends encouraging informalization in the economies of major cities: (a) expanding high-income populations increase demand for high-priced, customized services and products; (b) expanding low-income populations increase demand for low-cost services and products; (c) small firms able to produce customized services and goods in limited runs arise either as final producers or subcontractors to meet these demands; (d) given relatively low capital costs of entry, these firms operate at narrow profit margins in a highly competitive environment where success depends on the ability to mobilize low-wage labor and reduce operating costs; (e) these conditions in turn encourage noncompliance with regulations regarding wages and working conditions and induce informalization in a broad range of economic activities.

Informalization Trends In New York City

The author's research has combined (a) secondary analysis of employment data; (b) ethnographic research in select communities and workplaces; (c) interviews with local planning officials, union officials, community members, and government inspectors; and (d) examination of data on occupational safety and health violators and overtime or minimum wage legislation violators. On the basis of these data, industries were targeted for in-depth study of their informal component. Fieldwork was undertaken where community boards and local development corporation officials identified a large informal sector or many immigrant workers.³⁴ Zoning maps and data from the Department of Buildings were used to obtain more detailed information on these sites. Field visits were made to construction, garment, footwear, furniture, retail, and electronics firms in four of the five boroughs of New York City to determine the extent and kinds of informal activities and the possible need for new modes of regulation.³⁵

These efforts suggest the following profile of the informal economy in New York City: (a) informal work is present in a rather wide range of industrial sectors including apparel, accessories, construction contractors, special trade contractors, footwear, toys and sporting goods, furniture and woodwork, electronic components, packaging, transportation; (b) informal work also took place to a lesser extent in packaging notions, making lampshades, artificial flowers, jewelry, distribution activities, photoengraving, manufacturing explosives, etc.; (c) such operations tended to be

located in densely populated immigrant areas; (d) residential or commercial gentrification has begun to displace some "traditional" sweatshop activity (notably garments); and (e) in these areas, new forms of unregistered work catering to a new clientele have begun to emerge.³⁶

CONSTRUCTION New York City had 10,305 registered construction firms in 1988, up from 7,636 in 1980 and 8,718 in 1970.³⁷ Two-thirds were special trade contractors (SIC 17). They employed 116,618 workers, up from 75,135 in 1980 and 106,688 in 1970. Firms averaged 11 workers, and almost 80 percent of all firms employed fewer than 10. This is a labor-intensive industry, especially in the additions and alterations segments.³⁸ Major changes in the industry in New York City include a decline in the share of unionized work, the growth of subcontracting, and a "parallel industry" of residential rehab jobs undertaken by immigrant workers. The number of Hispanics in the industry overall has increased significantly over the last decade, much of it accounted for by subcontracting work.³⁹

The incidence of informal work varies considerably according to scale of the job. While the construction of new commercial buildings in Manhattan is still unionized and highly regulated, a great deal of commercial and residential alterations and renovations is done without the required permits and is likely not to meet various codes. Residential construction has long had the highest incidence of nonunion work. Nonunion contractors in New York make heaviest use of immigrants in their labor force. In a 4-block survey undertaken in Manhattan done by the Department of Buildings in 1981, 90 percent of all interiors had been done without a building permit.⁴⁰ Other citywide surveys of "illegal" construction work confirm this finding.⁴¹ On the other hand, there is little informal work in large public works projects. Until recently, this was also the case with large private sector projects, but these contractors are also increasingly resorting to nonunion subcontractors, including unlicensed operators, resulting in a rise in the violations recorded by the Department of Buildings and OSHA. The Union of Construction Contractors estimates that 33 percent of the \$4 billion private construction industry is now nonunion and that a growing share of the latter is unregistered.⁴² Informal work is rising in foundation excavations and trenching, mostly in outlying areas. Finally, there is a high incidence of informal work in such specialized crafts as stonecutting, masonry, and plastering (SIC 174), where unregistered immigrants have filled a vacuum in domestic skills (SIC 174).

APPAREL In 1988, 4,751 apparel firms (SIC 23) were registered in New York City. According to the official count these firms employed a total of

99,912 workers at an average of 21 workers per firm. Forty percent of all registered firms had fewer than 10 workers while half had between 10 and 49 workers. These firms are increasingly located outside Manhattan in the outer boroughs, especially Queens and Brooklyn, and in the metropolitan area counties in New Jersey.⁴³ Home production of highly specialized and high-fashion work, including knitwear, has also increased.⁴⁴

Informal work seems to have grown since the early 1970s. Department of Labor violations, raids by the Immigration and Naturalization Service, union organizers, interviews with homeworkers, and other sources all point to an increase of production workers in unregistered work situations, notably sweatshops and industrial homework. The International Ladies Garment Workers Union found fewer than 200 sweatshops in New York City in the early 1970s; the union's research department estimated that there were 3,000 such shops by the 1980s, often in areas of the city where they had never been previously, employing 50,000 workers in sweatshops and 10,000 homeworkers.⁴⁵ Other studies support the finding that sweatshops are increasing and spreading to new locations.⁴⁶ According to the New Jersey Department of Labor, the use of New Jersey homeworkers to make goods for New York City firms has also risen rapidly over the last few years.⁴⁷

The incidence of informal work is most prevalent in women's and children's wear and probably least common in men's wear. Sweatshops and homework are growing in knitwear, furs, embroidery, stuffed toys, and clothing for toys. Interviews with homeworkers confirmed that hourly or piece rate wages are very low. However, we also found an upgraded version of homework.⁴⁸ Some freelance or independent designers had immigrant workers come into their homes (typically large converted lofts in lower Manhattan) and work off-the-books. Some middle class women also took in expensive cloth and clothes to do finishing work at home or did knitting on special machines purchased by the workers themselves; these cases all involved Chinese or Korean households in middle class residential neighborhoods in the city. In other words, a dynamic and growing high-price market has incorporated production from sweatshops and the home (of poor and middle class immigrants and of designers). New Hispanic immigrants, especially Dominicans and Colombians, have replaced Puerto Ricans as the leading group of owners in the Latino population; the Chinese have increased their number of shops over the last 10 years; and the Koreans are emerging as the newest ethnic group to set up sweatshops and homework arrangements.

ELECTRONICS According to the official count, 388 electric and electronic equipment manufacturing firms (SIC 36) employing 17,666 workers regis-

tered in New York City in 1988.⁴⁹ The average firm size in 1988 was 45 workers, but most firms employed fewer than 10. In other words, employment is concentrated in larger firms, but smaller firms are the most numerous. Electronics manufacturing and the broader category covered by SIC 36 have not received much study over the last decade in the New York area. The available evidence suggests that the number of firms and jobs are declining rapidly.

Several patterns relating to the informal economy may be identified.⁵⁰ First, the aggregate declines veil the growth of some segments of this industry. Older branches, largely traditional electrical machinery firms characterized by large size and unionized labor, are indeed declining. But alongside this decline, a new subsector of small firms has arisen. It has almost no unionized labor and relies on a network of subcontractors for greater efficiency, quality, and speed. Interviewees described such subcontractors as "garage-fronts," "basement shops," and "neighbors."

Homework typically involved work taken home by technical personnel or owners, often engineers. Several of the firms interviewed had started as garage fronts or basement shops, informal operations located in residential, middle class neighborhoods. This contrasts with that of the garment industry, where most homework and sweatshops are located in low-income neighborhoods. Electronics homework also tended to be carried out as "extra work" by workers already employed by the firm.⁵¹ Informal work is less clearly linked to reducing wage costs than in the garment industry; it may represent a way of lowering the entry costs and enabling entrepreneurs to explore production and market conditions.

FURNITURE AND FIXTURES In 1988, New York City had 398 registered firms in this industry (SIC 25) employing 8,288 workers, a decline from 10,176 in 1980 and 16,568 in 1970. With an average size of 20 workers per firm, almost half of all firms employed fewer than 10 workers. Major changes over the last decade include a massive decline in larger, standardized firms, many of which left for the South, and an increase in more highly craft-based furniture making and woodwork. A precise count is not possible because many of the latter firms are unregistered and located largely in residential areas.

The emergence of informal work in this industry may be a recent event. Almost all earlier production was formal, whether mass production or high-priced customized work. Industry specialists and our fieldwork suggest that informal work has grown up to provide the customized work and products demanded by commercial and residential gentrification. The newly founded International Design Center in Queens has also generated demand for new production. While the industry lost 20 percent of its

registered labor force over the last decade, new furniture-making shops have been set up in Queens and Brooklyn. These shops employ highly skilled immigrants to produce high-cost, crafted woodwork for higher-income residents. Most are not in sites zoned for manufacturing. Many are located on second floors, which command lower rents. We heard of low-cost furniture-manufacturing shops catering to low-income communities, mostly immigrant communities, and were able to identify two such shops in basements in Manhattan. Both are informal operations serving the local immigrant community. They make simple, basic furniture: tables, chairs, shelves, cabinets.

OTHER SECTORS The footwear industry has experienced massive losses in its registered work force, losing 21 percent of its workers in the last five years alone. But unregistered production both of low-cost standardized and highly crafted footwear (e.g., sandals and moccasins) nonetheless has been increasing. One estimate from industry sources is that at least 10 percent of all footwear production is informal. Furthermore, subcontracting and use of homework have increased even in unionized shops, according to the union that represents most footwear workers (Amalgamated Clothing and Textile Workers Union, or ACTWU).

The most notable development of informal work in transportation is the increase in so-called gypsy cabs and unregistered vans operating in the city. There are now twice as many gypsy cabs and so-called liveries as there are licensed taxicabs. The Commissioner of Transportation cites 21,000 such cars.⁵² In addition, an as yet unidentified number of vans function as an informal mass transportation system serving specific employers or jitney routes. Gypsy cabs serve areas not well served by the formal transportation system or by the licensed cabs, often low-income immigrant or minority communities. In areas that entail transfers or two and even three fares in the formal system, a single-fare, one-ride informal van becomes attractive to low-income commuters. A variant is jitneys following established public transportation routes picking up people before or after the bus.

Retail sales are rife with informal operations. Records at the Department of Finance and Taxation show increased violations both in unlicensed street vending and flea markets and high-priced jewelry and fur shops that use fictitious out-of-state addresses to avoid sales taxes. Hundreds of auto-repair "shops" can be seen on the streets of immigrant neighborhoods.⁵³ The evidence is too fragmentary on these sectors to warrant a detailed presentation.

Discussion

The evidence points to several distinctions that have implications for theory and policy. The first concerns the origin of demand for informally produced or distributed goods and services. It can result from demand in the formal economy, from both final consumers and firms. Most of the informal work in the garment, furniture, construction, packaging, and electronics industries is of this type. It can also arise in the immigrant communities where such activities are performed.

Second, a variety of different market contexts can promote informalization. Pressure to reduce labor costs in the garment industry has been exerted by massive competition from low-wage countries. In this instance, informal work represents an acute example of exploitation. The rapid increase in the volume of residential renovations associated with the transformation of low-income, dilapidated neighborhoods into higher-income commercial and residential areas has also given rise to informalization. The volume of work, its small scale, labor intensity, high skill content, and short-term nature are all conducive to informal work. Informal work can also arise from inadequate formally produced services and goods, which may be too highly priced, inaccessible, or simply not provided in low-income areas. Examples of informal production to fill these gaps include gypsy cabs, informal neighborhood childcare centers, low-cost furniture manufacturing shops, informal auto repair, and a whole range of other activities. Clusters of informal shops can eventually generate agglomeration economies that attract additional entrepreneurs. This is illustrated by the emergence of auto repair "districts," vendors' "districts," or clusters of both regulated and informal factories in areas not zoned for manufacturing. These may signal to employers the existence of an informal "hiring hall."

Third, enterprises in the informal economy face different kinds of locational constraints. For some firms, access to cheap labor induces them to locate in New York City, though typically in combination with access to the city's final or intermediate markets. Access to low-wage immigrant workers allows these firms to compete with Third World factories or to provide rapid production turnover times. The expansion of the Hispanic population in New Jersey has brought about a rapid growth of garment sweatshops and homework in several New Jersey counties. In contrast, shops engaged in customized production or operating on subcontracts evince locational dependencies on New York City. These firms are bound to specific clients or customers, require specialized design services, require brief turnover between design and production, demand a critical volume of spending capability on the part of buyers, or utilize immigrant en-

claves. Leaving New York for a lower-cost location may not be an option for such firms, leading them to bid up space and reduce the supply of low-cost space.

Fourth, we can distinguish among the types of jobs in the informal economy. Many are unskilled, with no training opportunities, involving repetitive tasks. But others demand high skills or acquisition of a skill. The growth of informalization in the construction and furniture industries can be seen as having brought about a re-skilling of the labor force. Some jobs pay extremely low wages, others pay average wages, and still others were found to pay above-average wages. Typically, however, there seems to be a saving involved for the employers or contractors compared with what would have to be paid in the formal market.

Fifth, we can identify different locations in the spatial organization of the informal economy. Immigrant communities are a key location for informal activities, meeting both internal and external demand for goods and services. Gentrifying areas are a second important location, containing such informal activities as renovation, alteration, small-scale new construction, woodwork, and installations. Other locations in low-rent loft areas may house informal manufacturing and industrial service areas serving a citywide market. Finally, areas like 14th Street provide markets to street vendors.

A theme common to many of these variations is that the city's larger formal economy creates and/or promotes the informal production of goods and services. It generates demand for specific kinds of products and services, such as those associated with residential or commercial gentrification, that are suited to low-cost, small-scale production. This suggests that the informal sector does not result simply from immigrant survival strategies but is rather integral to the structural transformation of the New York City economy. Workers and firms respond to the opportunities this transformation presents. However, this response is conditioned by the position in which workers and firms find themselves. Immigrant communities occupy what might be called a "favored" structural location to seize both the entrepreneurial opportunities and the less desirable jobs being generated by informalization.

Conclusion

This discussion sought to underscore two points. First, the economic development of New York City cannot be understood in isolation from the fundamental changes in the organization of advanced economies. The economic, political, and technical forces that have undermined the central

role of mass production also weakened the regulatory framework that shaped employment relations. The service industries that have driven large urban economies during the 1980s show greater dispersion or inequality in occupations and earnings, a proliferation of jobs in the lower-paying echelons, and weak or absent unions. Only against this backdrop does the prevalence of informalization in advanced economies make sense.

The institutional and regulatory framework that shapes contemporary employment relations differs greatly from the earlier one. This framework has influenced the sphere of social reproduction and consumption which, in turn, feeds back into the organization of work and the distribution of earnings. Whereas this feedback bolstered the growth of a suburban middle class in the earlier period, it currently fosters a growing dispersion of earnings and labor market casualization.

The second basic point is that these structural trends have produced increased economic polarization. Although the middle strata still constitute the majority, the conditions that contributed to their expansion and politicoeconomic power—the centrality of mass production and mass consumption—have been displaced by new sources of growth. This is not simply a quantitative transformation, but provides the elements for a new economic regime.⁵⁴ This tendency towards polarization may be seen in the spatial organization of economic activity, the structures of social reproduction, and the organization of the labor process. In sum, the growth of the informal economy in New York City represents not a regression from or an anomaly in an otherwise advanced capitalist economy, but a fundamental aspect of the postindustrial city.

Notes

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1. Castells, Manuel, and Alejandro Portes, "World Underneath: The Origins, Dynamics, and Effects of the Informal Economy," in Portes, A., M. Castells,

and L. Benton, eds., *The Informal Economy* (Baltimore and London: The Johns Hopkins University Press, 1989).

2. Landes, D. S., *The Unbound Prometheus* (Cambridge: Cambridge University Press 1969); Braverman, H., *Labor and Monopoly Capital* (New York: Monthly Review Press, 1974).
3. Piore, Michael, and Charles Sabel, *The Second Industrial Divide* (New York: Basic Books, 1984); Scott, Allen J., and Michael Storper, eds., *Production, Work, Territory: The Geographical Anatomy of Industrial Capitalism* (Boston: Allen & Unwin, 1986); Taylor, M. I., and N. J. Thrift, "Industrial Linkage and the Segmented Economy: I. Some Theoretical Proposals," *Environment and Planning A*, 14,12 (1982), pp. 1601-1613; Holmes, John, "The Organization and Locational Structure of Production Subcontracting," in Scott and Storper, *Production, Work, Territory*, pp. 80-106; Berger, S., and M. J. Piore, *Dualism and Discontinuity in Industrial Societies* (Cambridge: Cambridge University Press, 1980).
4. Piore and Sabel, *The Second Industrial Divide*; Scott and Storper, *Production, Work, Territory*.
5. Aglietta, Michael, *A Theory of Capitalist Regulation: The U.S. Experience* (Norfolk, UK: Lowe and Brybone, 1979); Lipietz, Alan, "New Tendencies in the International Division of Labor: Regimes, Accumulation, and Modes of Regulations," in Scott and Storper, *Production, Work, and Territory*.
6. Massey, Doreen, *Spatial Divisions of Labor* (London: MacMillan, 1984); Hill, Richard Child, "Comparing Traditional Production Systems: The Case of the Automobile Industry in the United States and Japan," *International Journal of Urban and Regional Research* 13,3 (September 1989): 462-480; Capecchi, Vittorio, "The Informal Economy and the Development of Flexible Specialization in Emilia-Romagna," in Portes, Castells, and Benton, *The Informal Economy*.
7. Castells, Manuel, *The Informational City* (London: Basil Blackwell, 1989); Sassen, Saskia, *The Global City: New York, London, Tokyo* (Princeton, NJ: Princeton University Press, forthcoming).
8. Stanback, T. M., Jr., and T. J. Noyelle, *Cities in Transition: Changing Job Structures in Atlanta, Denver, Buffalo, Phoenix, Columbus (Ohio), Nashville, Charlotte* (Totowa, NJ: Allanheld, Osmun, 1982); Sassen-Koob, Saskia, "The New Labor Demand in World Cities," in Smith, Michael P., ed., *Cities in Transformation: Capital, Class, and Urban Structure* (Beverly Hills: Sage Publications, 1984).
9. Fernández-Kelly, M. P., and Saskia Sassen, "Collaborative Study on Hispanic Women in the Garment and Electronic Industries in New York and California." Final Report submitted to the Revson, Ford, and Tinker foundations (1990).
10. Castells and Portes, "World Underneath," in Portes, Castells, and Benton, eds., *The Informal Economy*.

11. The passing of sanctions against employers for knowingly hiring undocumented workers alters this proposition in those cases where the employer knowingly hires such a worker. The informality then resides in the form of management.
12. Sassen, Saskia, "New York City's Informal Economy"; Stepick, Alex, "Miami's Two Informal Sectors," and Fernández-Kelly, M. Patricia, and Anna M. García, "Informalization at the Core: Hispanic Women, Homework, and the Advanced Capitalist State," in Portes, Castells, and Benton, *The Informal Economy*.
13. Renooy, P. H., *Twilight Economy: A Survey of the Informal Economy in the Netherlands* (Amsterdam: Faculty of Economic Science, University of Amsterdam, 1984).
14. Capecchi, Vittorio, "The Informal Economy and the Development of Flexible Specialization in Emilia-Romagna," in Portes, Castells, and Benton, *The Informal Economy*.
15. Scott and Storper, *Production, Work, Territory*; Blumberg, Paul, *Inequality in an Age of Decline* (New York: Oxford University Press, 1980).
16. Today many industries must accommodate rapid changes in output levels and product characteristics. Production of basic goods and consumer durables, the leading growth industries in manufacturing in the postwar period, has declined. The most rapidly growing manufacturing sectors within manufacturing are the high-technology complex and craft-based production in traditional branches such as furniture, footwear, and apparel.
17. It is the result of several concrete developments besides the more general processes cited above. In the case of the garment industry, the city's largest manufacturing sector, the biggest shops with mechanized production were the ones to move. Less mechanized, specialized shops and the industry's marketing and design operations have remained in the city. The greater demand for specialty items and limited edition garments has promoted the expansion of small shops and industrial homework for highly priced garments and accessories in the city because small runs and proximity to design centers are important locational constraints (Sassen, Saskia, "Immigrant Women in the Garment and Electronics Industries in New York." Third Research Report presented to the Revson Foundation, New York City (May 1989)). A parallel argument can be made for furniture, furs, and footwear. Small-scale, immigrant-owned plants have also multiplied because of their easy access to cheap labor and, more importantly, because of a growing demand for their products in the immigrant communities and in the city at large.
18. In the case of New York City, three kinds of activity seem to be taking place. First, manufacturing firms producing things ranging from hand tools through furniture to boxing gloves appear to be healthy. Second, small-scale production for retailers with high-income markets has increased in businesses ranging from gourmet carry-out to boutique clothing and accessories. Cheap labor and large markups make this production profitable. The availability of plants

- willing to undertake short production runs on a subcontract basis also contributes. Third, production takes place for the newly expanded low-income mass market, much of it sold on the street. In large cities like New York and Los Angeles, this market is largely supplied by local or overseas sweatshops facilitated in turn by a large immigrant work force. (Fernández-Kelly, M. P., and Saskia Sassen, "Collaborative Study on Hispanic Women in the Garment and Electronic Industries in New York and California." Final Report. It is not easy to measure these three kinds of activities; this is merely a tentative organization of fragmentary evidence.
19. Using BLS data and census data, Blumberg, *Inequality in an Age of Decline*, estimated net spendable average weekly earnings of production or nonsupervisory workers with three dependents for several industries. Of the six major industry groups, all recorded increases from 1948 to 1968. From 1968 to 1978, all except FIRE and trade recorded gains though at much lower levels than in previous decades. FIRE recorded a decline of 5 percent and trade of 3.6 percent. Manufacturing, which had experienced increases of 20 percent from 1948 to 1958 and of 18 percent in the subsequent decade, had an increase of only 7.4 percent from 1968 to 1978. FIRE and trade had increases of about 20 percent in the first postwar decade and about 13 percent in the subsequent decade to arrive at negative rates in the 1970s.
 20. Sheets, Robert, G., Stephen Nord, and John J. Phelps, *The Impact of Service Industries on Underemployment in Metropolitan Economies* (Lexington, MA: D.C. Heath, 1987).
 21. Harrison and Bluestone, *The Great U-Turn*, Organization for Economic Cooperation and Development, *OECD Employment Outlook* (Paris: OECD, September 1985), pp. 90-91; Bell, Linda, and Richard Freeman, "The Facts About Rising Industrial Wage Dispersion in the U.S.," Industrial Relations Research Association, *Proceedings* (May 1986). Using census data and the 1976 survey on income and education, Stanback and Noyelle, *Cities in Transition*, showed that there is a high incidence of the next to lowest earning class in all services except distributive services and public administration. Almost half of all workers in the producer services are in the two highest earnings classes; but only 2.8 percent are in the middle earnings class compared with half of all construction and manufacturing workers.
 22. Borjas, George, and Marta Tienda, "The Economic Consequences of Immigration," *Science* 235 (February 6, 1987); Wilson, William J., "The Urban Underclass in Advanced Industrial Societies," and Kasarda, John D., "Urban Change and Minority Opportunities," in Paul E. Peterson, ed., *The New Urban Reality* (Washington, DC: The Brookings Institution, 1985); Wilson, William J., *The Truly Disadvantaged: The Inner City, the Underclass, and Public Policy* (Chicago: University of Chicago Press, 1987); Freedman, Richard B., and Harry Holzer, eds., *The Black Youth Employment Crisis* (Chicago: University of Chicago Press, 1986); Tienda, Marta, "Puerto Ricans and the Underclass Debate," *Annals of the American Academy of Political and Social Science* 501 (January 1989).

23. During the post-World War II period the real inflation-adjusted average weekly wages of workers increased from \$67 to almost \$92 in 1965 and declined slightly to \$89 in 1979. BLS data shows that from 1947 to 1957 real spendable earnings grew over 20 percent; from 1957 to 1967 by 13 percent, and from 1967 to 1977 by 3 percent. Blumberg, *Inequality in an Age of Decline*, p. 71.
24. Harrison and Bluestone, *The Great U-Turn*, Bell and Freeman, *Black Youth Unemployment*, OECD, *OECD Employment Outlook*, pp. 90-91. Some analysts argue that the increase in inequality in the earnings distribution has been driven by demographic shifts, notably the growing participation of women in the labor force and the large number of young workers due to the baby boom generation, two types of workers traditionally earning less than white adult males. Lawrence, Robert Z., "Sectoral Shifts and the Size of the Middle Class," *Brookings Review* (Fall 1984). Harrison and Bluestone counter this argument by showing (Chapter 5) that the increased inequality remained after controlling for various demographic factors as well as the shift to services. Inequality increased within such groups as white women, young workers, white adult men, and so on. While the sectoral shift accounted for one-fifth of the increase in inequality, most of the rest occurred *within* industries. (See their appendix Table A.2 for 18 demographic, sectoral, and regional factors.) The authors explain the increased inequality in the earnings distribution in terms of the restructuring of wages and work hours (Chapters 2 and 3).
25. Notwithstanding the increase in multiple-earner families and transfer payments, family income distribution has also become more unequal. Using CPS data on family income, Blumberg, *Inequality in an Age of Decline*, found that real family income increased by 33 percent from 1948 to 1958; by 42 percent from 1958-1968; but by only 9 percent from 1968-1978. By 1984, the Gini coefficient of income inequality stood at its highest since the end of World War II, having sharply increased in the 1980s after only slight increases in the 1970s. A June 1989 House Ways and Means Committee staff report found that from 1979 to 1987 the average income of the bottom fifth of families declined 8 percent while that of the top fifth increased 16 percent. Adjusting for inflation and family size, the bottom fifth suffered a 1 percent decline from 1973 to 1979 and a 10 percent decline from 1979 to 1987; the top fifth increased 7 percent from 1973 to 1979 and 16 percent 1979 to 1987. It should be noted that 1979 and 1987 were both years of prosperity and low unemployment.
26. Part-time work increased from 15 percent in 1955 to 22 percent in 1977. See Blumberg, *Inequality in an Age of Decline*, pp. 67 and 79, references, p. 267; Harrison and Bluestone, *Great U-Turn*, p. 102.
27. Deutermann, W. V., Jr., and S. C. Brown, "Voluntary Part-Time Workers: A Growing Part of the Labor Force," *Monthly Labor Review* 101 (June 1978).
28. U.S. Department of Commerce, Bureau of the Census, *County Business Patterns*, various years.

29. Sheets, Nord, and Phelps, *The Impact of Service Industries*.
30. Note that in individual industries, security brokers ranked among the highest with \$69,670, and domestic household workers ranked lowest with \$10,110.
31. These data cover all 791,000 workers in the financial service industry in New York State in 1987. Since 576,000 of these are in New York City, we can assume the occupational distribution is similar in the city.
32. For example, in 1980 the highest-paid category of secretaries earned \$335.50 in manufacturing and \$326 in nonmanufacturing (although they did earn \$353 in public utilities). The same pattern held for 3 of the remaining 4 categories of secretaries, as did most of the other 35 office clerical categories and 21 technical categories. The pattern changed somewhat in 1988; while manufacturing still paid higher average wages, this was more true for the highest-paid categories and much less so in the lower-paid categories. For example, the highest-paid category of secretaries, accounting for 10 percent of all secretaries, earned an average of \$621 in manufacturing and \$571 in nonmanufacturing; the highest-paid category of word processor earned \$442 in manufacturing and \$375 in nonmanufacturing. But in the lowest-paid occupational categories, nonmanufacturing paid slightly higher average weekly earnings.
33. Sassen, Saskia, *The Mobility of Labor and Capital* (Cambridge: Cambridge University Press, 1988).
34. Complaints of businesses in violation of legally defined uses of building or zoning ordinances are normally registered with local development corporations and community boards before being referred to the Department of Buildings.
35. Columbia University, "The Informal Economy in Low-Income Communities in New York City" (New York: Columbia University, Program in Urban Planning, 1987).
36. For a detailed account see Sassen, S., and W. Grover, "Unregistered Work in the New York Metropolitan Area" (New York: Columbia University, Program in Urban Planning, Papers in Planning, 1986; Columbia University, "The Informal Economy in Low-Income Communities in New York City" (New York: Columbia University, Program in Urban Planning, 1987); Columbia University, "Immigration Research Project" (New York: Columbia University, Program in Urban Planning, 1989).
37. For each of the industry examples, the number of firms, firm size, and number of employees is derived from the New York State Department of Labor, ES202 ensured employment file.
38. The amount of additions and alterations to residential dwellings in New York City is very high. The State Division of Housing and Community Renewal estimated that there were more than 1,500 documented instances of major capital improvements (window replacements, roof and boiler replacements, etc.) made to apartment buildings, affecting some 60,000 rental units in the first half of 1986 alone, according to Marcuse, Peter, "Abandonment, Gentrification, and Displacement: Linkage in New York City," in Smith, N., and P.

- Williams, *Gentrification of the City* (Boston: Allen & Unwin, 1986). Fieldwork by our team in Washington Heights in 1987 found a significant volume of alterations.
39. Balmori, D., "Hispanic Immigrants in the Construction Industry" (New York University Center for Caribbean and Latin American Studies. Occasional Paper No. 38, 1983).
 40. The Building Trades Employers Association is the representative body for unionized contractors. Its major function is collective bargaining with the unions that are represented in the Building and Construction Trade Council. William Canavan, the Association's president, estimated that alterations account for about half of the building construction activity in the city and that the alterations sector contains significant elements of informal activity. Mr. Canavan speculated that the declining labor pool of construction workers in the metropolitan area would eventually permit the absorption of parts of the informal sector.
 41. The widespread conversion of rental units to cooperatives and gentrification of neighborhoods in the late 1970s and early 1980s engendered a rapid increase in the demand for rehabilitation and renovation work. If the office building construction boom ends, many unionized workers may become interested in smaller projects again. Gallo, Carmenta, "The Construction Industry in New York City: Immigrant and Black Entrepreneurs" (Conservation of Human Resources Project, Research Program on Newcomers to New York City, January 1981).
 42. A recent accident in a major construction site in midtown Manhattan illustrates some of these trends. A crane operator was found to be unlicensed. The accident led to a citywide inspection of high-rise construction sites, which revealed widespread use of nonunion subcontractors and an unexpectedly high incidence of subcontractors without the requisite permits or in violation of one or more codes. See also Balmori, "Hispanic Immigrants in the Construction Industry," and Gallo, "The Construction Industry in New York City."
 43. Sassen, Saskia, "Immigrant Women in the Garment and Electronics Industries in New York." Third Research Report presented to the Revson Foundation, New York City (May 1989).
 44. Sassen, 1989b. There is a vast literature on the garment industry in New York City. The sources documenting these trends include studies by the New Jersey Department of Labor, "Study of Industrial Homework" (Trenton, NJ: Office of Wage and Hour Compliance, Division of Workplace Standards, 1982), the New York State Department of Labor, "Study of State-Federal Employment Standards for Industrial Homeworkers in New York City" (Albany, NY: Division of Labor Standards, 1982), New York State Department of Labor, "Report to the Governor and the Legislature on the Garment Manufacturing Industry and Industrial Homework" (Albany, NY: Division of Labor Standards, 1982); Abeles, Schwartz, Hackel, and Silverblatt, Inc., *The Chinatown*

- Garment Industry Study* (Report to ILGWU Locals 23-25 and the New York Sportswear Association, 1983); Leichter, Franz, "Return of the Sweatshop: A Call for State Action" (New York, 1979) and Leichter, Franz, "Return of the Sweatshop: Part II of an Investigation" (New York, 1981); City of New York, Office of Economic Development, "Garment Center Study" (New York, 1987).
45. It is impossible to evaluate the adequacy of these figures, but union organizers and members of various immigrant communities confirm a sharp increase in the number of such jobs. The figures for special permits and certificates for homework issued by the Division of Labor Standards for New York City provide an equally inadequate picture because such permits and certificates are no longer issued in women's wear, where the largest number of homeworkers are employed, and because authorized homeworkers represent only the tip of the iceberg.
 46. Leichter, "Return of the Sweatshop I and II"; Abeles, Schwartz, *Chinatown Garment Industry*; Sassen, "Immigrant Women in the Garment and Electronics Industries"; Columbia University, "Informal Economy."
 47. New Jersey Department of Labor, "Study of Industrial Homework."
 48. Sassen, "Immigrant Women in the Garment and Electronics Industries."
 49. The main source for this industry is research in progress by the author. This project seeks to identify general patterns, subcontracting arrangements and use of homeworkers in the electronics industry in 8 four-digit level branches in the SIC 35, 36, and 38 groups. It is based on a survey of a random sample of 100 electronics manufacturing firms in the New York metropolitan area and a study of homework.
 50. Sassen, "Immigrant Women in the Garment and Electronics Industries."
 51. A similar study carried out in California (Fernández-Kelly, M. P., and Saskia Sassen, "Collaborative Study on Hispanic Women in the Garment and Electronic Industries in New York and California," found a different pattern: extensive use of homeworkers to assemble and clean electronics components. This would suggest that a large supply of low-wage immigrant women does not inevitably lead to their use in a given industry.
 52. The most thorough study of private regulated and unregulated transportation in New York City was carried out by Grava, Sclar, and Downs, from Columbia University, for the Metropolitan Transportation Authority. They found that virtually every black or ethnic neighborhood had some form of "gypsy" and "livery" car service, and that these were typically run by members of the community: thus there are black, Puerto Rican, Haitian, Korean, and Hassidic Jewish "livery" car services. They estimated the current livery car service fleet at 22,000 vehicles. While many of these are in compliance, many are not. None of the estimated 8,000 gypsy cabs, on the other hand, are in compliance.
 53. Columbia University, "The Informal Economy."
 54. Sassen, Saskia, *The Global City*.