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WORKERS, PEASANTS, AND PEDDLERS: A STUDY OF LABOR STRATIFICATION IN THE POST-REVOLUTIONARY IRAN

In the post-revolutionary decades, the Iranian economy has undergone significant transitions. This paper is a study of the changes in the pattern of occupational and labor stratification in the Iranian economy in these years. This is a sufficiently long time, permitting the identification of decisive structural shifts in the Iranian economy and its labor force. For the purpose of this study, we propose two periods in the post-revolutionary years. The first period comprises the years of fervent search for a populist Islamic utopia, which began with the 1979 revolution and came to an end by 1986, when the burden of the war with Iraq and the glut in the world oil market made the populist project practically defunct. The death of Ayatollah Khomeini in June 1989 marked the beginning of the second period, one that is characterized by a move toward "economic restructuring" à la the International Monetary Fund–World Bank, aiming for a general liberalization of economic activities, including foreign-exchange realignment, decontrolling of prices, reduction of subsidies, and privatization of nationalized enterprises.

In the first period, political instability and social turmoil, with a severe expression of antagonism toward capital and property relations, caused the retrenchment of capital and weakened, and even destroyed, many market institutions. The disturbances in international economic linkages accentuated the seriousness of the disruption in the accumulation process. Many capitalists fled the country; many others curtailed their activities or even stopped them altogether. Some enterprises were nationalized; many others became simply dysfunctional. This was tantamount to shriveling of capitalist relations of production. The other side of the coin was an expansion of petty-commodity production and a gargantuan increase in redundant service employment. This transition can be called "structural involution." Although this may appear as evening out of the severely uneven economy, it can be, as it was, a degenerative process, creating tangles within the economy, obstructing accumulation and, consequently, aggravating the post-revolutionary economic crisis.

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In the second period, the Islamic Republic of Iran struggled to reconstitute the institutions of the market and to reinvigorate capitalist relations of production through its liberalization policy. Although the Islamic Republic's liberalization policy has not proceeded consistently and has not promoted any appreciable economic growth, it has made notable advances in the reconstruction of market institutions and capitalist relations. Thus, the years 1989–96 can be viewed as a period of reversing the transitional changes in the first post-revolutionary decade, or the "de-involution" of the economic structure. It should be expected that the pronounced changes in the economy in these two periods would be manifested in the structure of the Iranian labor force, affecting the activity distribution of employment, the pattern of employment status and occupational position, and the characteristics associated with those occupying various employment categories.

Changes in the structure of the labor force are generally effected by long-run socioeconomic, technological, and demographic changes. Yet particular circumstances, such as revolutionary upheavals, political reforms, and wars, can destabilize, deform, and weaken the existing employment structure by creating new opportunities in employment status for some population groups while limiting the opportunities for others. Hence, one can perceive changes in the patten of employment as the result of two concurrent processes. First, changes may occur when new positions are created and others are eliminated as socio-economic changes promote certain activities and retard others. This will increase or decrease the number of persons in various positions, changing the distribution of employment, as well as the pattern of employment status and occupational positions. Second, changes may come as the organization of production is modified or as the composition of those holding the positions changes, without any appreciable change in the composition of economic activities. In this situation, the pattern of employment status and occupational position, and the characteristics associated with each category may change, too, although the activity distribution of employment has not changed appreciably. In a period of socio-economic transition, the pattern of employment status and occupational positions may change rapidly as the result of these two concurrent processes.

In any socio-economic system, employment status and occupational position are among the important indicators of social stratification and a significant reflection of inter-class as well as intra-class changes and movements. However, making a connection between changes in employment status and occupational position and the class structure of society raises contentious theoretical and methodological issues.⁴ Much, if not all, of the methodological concerns with class analysis in different theoretical models hover around the operational dimension of the theoretical elements. A study of economic aspects of class formation requires data on ownership of means of production, income, wealth, education, employment status and occupational position, lifestyle, and power relations. Yet even if data were available, it would be difficult to define and operationalize class and stratum concepts and to identify empirically their relative importance in a socio-economic system.⁵ This is particularly troublesome in societies experiencing a systemic transition within a multitude of different modes of production and with an acutely uneven combined development. However, as a first step toward a class analysis, one has to describe and analyze employment patterns in the occupation-economic activity matrices, because occupational categories are the

empirically visible features of production relations and claims to economic resources.⁶ The aim of this study is just that: to reveal the pattern of changes in the structure of the labor force as a result of the transitional changes in the post-revolutionary Iranian economy. We recognize that the analysis of changes in the position of women is of particular importance in studying the structure of the labor force. Because of its importance, it deserves a separate study, which is beyond the scope of this paper.⁷

STATISTICAL DATA

Iran's decennial censuses of population and housing for 1976, 1986, and 1996 provide a relatively uniform classification of employment in different economic activities and occupations for the country.8 The timing of these three censuses roughly corresponds to the demarcation of the two periods in our study. Census 1976 reflects the general disposition of the Iranian population at the height of the monarchical White Revolution, fueled by the oil bonanza of those years. Census 1986, by contrast, reflects the conditions at the depth of the post-revolutionary decline, accentuated by a world oil glut. Certainly, comparison of these two periods will accentuate the magnitude of changes in the initial post-revolutionary period. Similarly, keeping 1986 as a benchmark for the comparison of the effects of Islamic Republic's liberalization effort will also exaggerate the impact of these policies in the second decade of the post-revolutionary period. Therefore, any observable changes between censuses of these periods may be viewed as a trend only with considerable caution.⁹

The census data are disaggregated for the urban and rural areas and by age and gender. Economic activities are divided into agriculture, mining (including crude-oil and natural-gas production), manufacturing, public utilities (electricity, gas, and water), construction, services (including public administration and defense), and activities that are not adequately defined or are not reported. The classification of employment status in Iranian censuses is based on the International Classification of Status in Employment adopted by the International Labor Office (ILO).¹⁰ This classification defines workers' status in employment on the basis of their contractual relationship, which is closely associated with the property relations in the production process.¹¹ This is necessary information for any study of class structure, yet many countries do not provide data on employment status, for practical or political reasons. Interestingly, such a classification was adopted by the Statistical Center of Iran for the census of population during the Shah's regime, and the necessary data have been gathered consistently in the various censuses in the pre- and post-revolutionary periods.

The Iranian census defines employment status in six categories: entrepreneurs (employers), self-employed workers, wage and salary earners employed by the private sector ("private employees"), wage and salary earners employed by the public sector ("public employees"), unpaid family workers, and those whose employment status is not specified or is not reported ("not specified"). Entrepreneurs are those in the private sector who own all or a part of their enterprise and employ at least one wage or salary earner. Self-employed workers manage an economic activity in the private sector, yet they do not employ a wage or salary earner. Unpaid family workers work for their relatives who might be self-employed workers or entrepreneurs. Private employees are those who receive wage and salaries by working for entrepreneurs. Public employees are the wage and salary earners in the state and semi-state sector, such as revolutionary foundations (bonyads). In the last two censuses, wage and salary workers in cooperatives are specified as a separate category. In this study, we have added these workers to the number of private employees. The Iranian census relies on the ILO's International Classification of Occupations, classifying workers based on their area and level of expertise, ranging from high-level scientists and administrators, clerical, and skilled production workers to the unskilled manual workers in various economic activities.

The Iranian censuses of population for 1976 and 1996 consider age ten as the threshold for entering the labor force. However, the minimum age for being included in the labor force in the census for 1986 is only six. Thus, the number of those in the active labor force between ages six and nine (nearly all among family workers) must be subtracted from the total number of those in the active labor force for 1986 to make the three sets of data comparable. The employed category includes civilian and non-civilian labor force (including those who are attending military schools or are performing military service), the seasonally employed, ¹⁴ trainees, and family workers. The unemployed are those who are actively seeking a job. Those who are employed and those who are unemployed, together, constitute the active labor force. Students (at all levels, except those in military schools), homemakers, retired people, and those who receive income (from rent or dividends, etc.) but are not employed and are not looking for a job are not included in the active labor force. ¹⁵

GROWTH OF POPULATION AND LABOR FORCE

Iran's population increased from 33.7 million in 1976 to 60.1 million in 1996. This is an increase of 78.2 percent, indicating an average annual rate of growth equal to 2.9 percent (Table 1). There is some debate about the possible over-counting of the population in the 1986 Census, and consequently the very sharp rise in the reported rate of population growth in the 1976–86 period (3.9% annually, compared with 2.7% in the previous decade) and the steep decline in this rate in the subsequent period. ¹⁶ This debate notwithstanding, there is little dispute that there was *some* increase in the rate of population growth in the first post-revolutionary decade, and *some* decline in that rate in the decade that followed.

Throughout the post-revolutionary decades, the flow of rural migrants to the cities continued, a trend that was accelerated in the pre-revolutionary decades.¹⁷ In 1976, more than half of the population of Iran still lived in rural areas. By 1996, more than 60 percent of Iranians lived in cities. In these decades, as in the pre-revolutionary period, not all the increase in the proportion of urban population can be attributed to rural-to-urban migration. The expansion of urban life into the rural areas, particularly to the villages surrounding the big cities, and the increase in the population of villages, which causes a change in their classification from rural to urban, have also contributed to the increase in the rate of urbanization.¹⁸ In any case, it is interesting to note that the difference between the reported rate of growth of urban and rural population remained at 3 percent over the past three censuses (Table 1).

Although the potentially "active" population (those age ten and older) has increased from 23.0 million to 45.4 million (by 97.4%) in the post-revolutionary period, the

TABLE 1 Population, urban and rural: 1976, 1986, 1996

96	%Annual Rate of Change	2.9 4.3 1.3
1976–96	%Change	78.2 132.2 30.2
96-	%Annual Rate of Change	2.0 3.2 0.3
1986–96	%Change	21.46 37.15 2.82
1976–86	%Annual Rate of Change	3.9 5.4 2.4
1976	%Change	46.68 69.32 26.58
	%	100.0 61.3 38.7
1996	Million	60.06 36.82 23.24
2	%	100.0 54.3 45.7
1986	Million	49.45 26.84 22.60
	%	100.0 47.0 53.0
1976	Million	33.71 15.85 17.85
	Population	Total Urban Rural"

^aIncludes non-sedentary population.

Sources: Sarshumari-yi Unumi-yi va Nufus Maskan—Kull-i Kishvar, 1335 (Tehran: Markaz-e Amar-e Iran, 1980); Sarshumari-yi Umumi-yi va Nufus Maskan—Kull-i Kishvar, 1365 (Tehran: Markaz-e Amar-e Iran, 1988); Sarshumari-yi Umumi-yi va Nufus Maskan—Kull-i Kishvar, 1375 (Tehran: Markaz-e Amar-e Iran, 1997).

"active labor force" has increased from 9.8 million to 16.0 million (63.3%). This is reflected in a significant and continual decline in "activity rate" (the percentage of active labor force in the population age ten and older), from 42.6 percent in 1976, to 39 percent in 1986, and 35.3 percent in 1996 (Table 2). The low activity rate in 1996 can be explained partly by the sharp increase in the number of those between age of ten and fourteen, and subsequently in the number of students in the population of that age group. The number of students in the ten-to-fourteen age group increased from 4.4 million in 1986 to 7.9 million in 1996, as the population in this age group increased from 5.9 million to 9.1 million, respectively. Iran's activity rate in these years is significantly lower than that for Brazil, Indonesia, and Turkey. The decline in activity rate and the high fertility rate in the 1976–86 decade has caused a sharp increase in dependency rate (the ratio of non-active population to the number of those counted as the active labor force), from 2.4 to 2.9. The decline in the rate of population growth in the subsequent decade has caused this ratio to decline to 2.7, but it is still larger than it was in 1976 (Table 2). The decline in the rate of population to the number of those counted as the active labor force).

ECONOMIC DECLINE AND STRUCTURAL INVOLUTION

The post-revolutionary demographic conditions must be juxtaposed against the general economic conditions to provide a background for the analysis of changes in occupational

TABLE 2	Labor force, employment and unemployment:
	1976, 1986, 1996 (in millions)

	1976	1986	1996
Population 10 years or older ^a	23.0	32.9	45.4
Active labor force	9.8	12.8	16.0
Activity rate (%) ^b	42.6	39.0	35.3
Dependency ratio ^c	2.4	2.9	2.7
Employed	8.8	11.0	14.6
Unemployment rate (%), urban ^d	4.4	15.3	8.9
Unemployment rate (%), rural ^d	3.0	12.9	9.4
Students	4.4	6.5	12.6
Homemakers	7.7	11.2	13.2

[&]quot;Census 1976 and Census 1996 include the population ten years or older in the labor force. Census 1986, however, includes working children from age six as a part of labor force. To make the data comparable for all three censuses, those between the age six and nine in Census 1986 are excluded from the labor-force data for that year.

Sources: Census 1976: Sarshumari-yi Umumi-yi va Nufus Maskan—Kull-i Kish-var, 1355 (Tehran: Markaz-e Amar-e Iran, 1980); Census 1986: Sarshumari-yi Umumi-yi va Nufus Maskan—Kull-i Kishvar, 1365 (Tehran: Markaz-e Amar-e Iran, 1988); Census 1996: Sarshumari-yi Umumi-yi va Nufus Maskan—Kull-i Kishvar, 1375 (Tehran: Markaz-e Amar-e Iran, 1997).

^bPercentage of active labor force in the population ten years or older.

^{&#}x27;The ratio of non-active population to the number of those counted as "active labor force"

^dSeasonally unemployed workers who were not seeking employment at the time of census are considered employed in *Census 1986* and *Census 1996*. Adjustment is made to the 1976 data to make the unemployment rate consistent with the rates in subsequent years.

status in these years. The post-revolutionary economic crisis in Iran has been examined extensively.²³ Here, briefly, we tell our story.²⁴ In the first post-revolutionary decade, the Iranian economy confronted a crisis of the post-revolutionary type. Open social confrontations jeopardized the security of capital and impaired the sanctity of property rights. International economic linkages were disrupted, too, because of domestic disturbances and international antagonism toward the Iranian Revolution. This had serious effects on the economy because of its heavy dependence on imported intermediate and capital goods. Above all, while the new regime had committed itself to restructuring the economy, it had no clear idea about the parameters of its ideal economic order. All that it could declare was that the new order would be Islamic. Thus, the pull and the push in the struggle of various factions in the Islamic Republic to define the new economic order took place in the context of a discourse on Islamic jurisprudence. The range of Islamic economic ideals constituted a spectrum from the left of Proudhun to the right of Friedman, yet all toward construction of an Islamic utopia.²⁵

In the midst of these political-social confrontations, accentuated by takeovers, confiscation, and nationalization of economic enterprises, market relations were enervated, capital was withdrawn, many capitalists fled the country, and, obviously, capital accumulation and production were severely disrupted. At the same time, the share of government and quasi-government ownership of the means of production increased. Although these conditions and the mobilization campaign for the war with Iraq (1980–88) gave a wider scope for involvement of the state in the economy, the sharp decline in oil revenues in 1985 and 1986 accentuated the disruption in the oil-dependent economy of Iran. Between 1976 and 1986, gross national income declined as value-added in all major economic activities either declined or increased only meagerly. The only major exceptions were agriculture and "real estate and professional activities" (Table 3). Production in agriculture suffered little from the socio-political disruption in spite of a widespread land-takeover movement by peasants. When land was appropriated, peasants immediately began cultivating their newly acquired parcels to prove their ownership. In these circumstances, the higher reliance on domestic output of agriculture (as importing agricultural products had become more difficult due to disruptions in Iran's international trade and the decline in foreign-exchange earnings) brought the Islamic Republic to favor this sector more than before in its allocation of resources (foreign exchange, credit, and infrastructural investment). The favoritism of the Islamic Republic toward agriculture is partly responsible for substantial growth in agricultural output in these years. One may also suggest that the de facto redistribution of about 800,000 hectares of prime agricultural land (6% of arable land in Iran) may have led, at least temporarily, to higher productivity.

The economic decline in this period is magnified if the increase in population is taken into account. As population increased by about 47 percent between 1976 and 1986, gross national income per capita (in 1982 prices) declined from 337,000 rials to 207,000 rials (by 36.8%). Value-added per capita declined sharply in all major economic activities (25.8% in manufacturing, 61.7% in construction, and 26.8% in services), except in agriculture and "real estate and professional activities" (Table 3).

The effect of disruptions in capital accumulation in this period was even more dramatic. By 1981, total investment (gross domestic fixed capital formation) had declined by 48 percent and investment in machinery by 52 percent. In 1986, total investment was only about one-half and investment in machinery (by the government and

TABLE 3 Value added and employment in major economic activities: 1976, 1986, 1996

	V _s (bi	Value Added (billion rials) ^a	p _e (s	Average Annual Growth (%) ^a	Annual (%) ^a	Value (1,	Value Added/Capita (1,000 rials) ^a	apita 'a	Share ii	Share in Non-Oil GDP $(\%)^b$	1 GDP	Employ	Employment Share (%)	re (%)
	1976	1986	1996	1976–86	1976-86 1986-96 1976	1976	1986	1996	1976	1986	1996	1976	1986	1996
Agriculture	1,706	2,651	3,818	4.5	3.7	51	54	64	17.0	25.1	24.8	34.0	29.0	23.0
Industry and mining	1,197	1,386	2,804	1.5	7.3	36	28	47	16.7	10.8	19.6	20.7	14.3	19.4
Manufacturing	1,049	1,148	2,294	6.0	7.2	31	23	38	14.6	0.6	17.2	19.0	13.2	17.5
Construction	1,150	649	069	-5.6	9.0	34	13	11	13.3	7.7	5.2	13.5	11.0	11.3
Services	4,297	4,606	6,322	0.7	3.2	138	93	105	54.9	54.4	50.7	30.9	42.4	46.3
Trade, restaurant, & hotels	1,047	1,045	1,400	0.0	3.0	31	21	23	12.6	18.4	18.7	9.7	8.0	13.2
Transportation & communication	867	786	1,160	-1.0	4.0	56	16	19	7.9	9.7	7.0	4.9	5.7	6.7
Financial services	449	113	135	-12.9	1.8	13	7	7	5.7	1.3	1:1	0.7	8.0	1.0
Real estate & professional services	90/	1,249	1,888	5.9	4.2	21	25	31	11.4	13.6	11.0	0.4	0.2	0.3
Public services	1,382	1,226	1,327	-1.2	8.0	41	25	22	17.3	13.7	10.6	14.5	24.6	22.1
Public administration and defense												8.4	16.8	11.1
Social, domestic & personal services	190	236	411	2.2	5.7	9	5	7	2.4	2.5	2.4	2.9	3.2	3.0
Imputed financial services	-344	-48	40	-17.8	n.a.	-10	-1	1	4.3	-0.5	-0.3			
Non-oil GDP (at factor prices)	6,473	8,459	12,049	2.7	3.6	192	171	201						
Gross national income (GNI)	11,353	10,251	14,506	-1.0	3.5	337	207	242						

n.a., not applicable

"1982 prices.

"Current prices.

"Current prices.

Sources: Bank Markazi, Hesabha-ye Melli Iran, 1353–1366 (Tehran: Bank Markazi, 1991); idem, Hesabha-ye Melli Iran, 1367–1369 (Tehran: Bank Markazi, 1992); idem, Economic Report and Balance Sheet, 1375 (Tehran: Bank Markazi, 1997).

the private sector combined) was about one-third of what they were a decade before (all in 1982 prices). To take the fluctuations in the rate of investment in these years into account (there was some increase from 1983 to 1985), we can calculate the average annual accumulation of investment in the years 1977-86. Overall, in these years average annual accumulation of investment declined by one-third and investment in machinery by the private sector by two-thirds (Table 4).

The impact of these changes on various sectors and major economic activities was different (Table 3). Between 1976 and 1986, the share of agriculture in non-oil gross domestic product (GDP) increased from 17 percent to 25 percent, as this sector experienced considerable growth in spite of the general economic disturbances. At the same time, the share of manufacturing and construction, which together accounted for 28 percent of non-oil GDP in 1976, amounted to no more than 17 percent in 1986. Meanwhile, the share of services remained more or less the same. Yet in terms of the relative importance of different economic activities within the service sector, some important changes are observable. Between 1976 and 1986, the share of trade, restaurants, and hotels increased sharply, from 12.6 to 18.4 percent. However, public services and financial services (mainly banking and insurance), which had suffered from an absolute decline in these years, show a decline in their share of non-oil GDP. Thus, for the first time in the modern history of Iran, agriculture's share in the output of the economy increased while the shares of manufacturing and construction declined. This structural shift, along with the pro-rural bias in the Islamic Republic's public spending in the first revolutionary years, gave rise to an increase in the income of rural households compared with their urban counterparts.²⁶

The disruption in economic activities and the decline in investment and output are reflected in the increase in unemployment between 1976 and 1986, from 4.4 to 15.3 percent and from 3.0 to 12.9 percent in the urban and rural areas, respectively (Table 2).

TABLE 4 Gross domestic fixed capital formation: 1976–96 (in billion rials, 1982 prices)

				1977-	-86	1987-	-96
	1976	1986	1996	Annual Average	% of 1976	Annual Average	% of 1976
Total	3,329	1,646	2,447	2,200	66	1,818	55
Private	1,425	885	1,415	1,097	77	1,050	74
Machinery	516	43	598	200	39	393	76
Construction	909	842	817	888	98	658	72
Government	1,904	761	1,032	1,111	58	767	40
Machinery	388	277	328	370	95	255	66
Construction	1,516	483	704	741	49	512	34
Machinery, total	904	320	926	570	63	648	72
Construction, total	2,425	1,326	1,521	1,630	67	1,170	48

Sources: Bank Markazi, Hesabha-ye Melli, 1353-1366 (Tehran: Bank Markazi, 1991); idem, Hesabha-ye Melli, 1367-1369 (Tehran: Bank Markazi, 1992); and Economic Report 1375 (Tehran: Bank Markazi, 1997).

STRUCTURE OF THE LABOR FORCE: PERIOD 1

The most significant dimension of labor stratification is employment status of workers. The structural involution, resulting from the retreating capitalist relations of production, brought about intensification of petty-commodity production and self-employed service activities and a decline in wage labor. Between 1976 and 1986, in urban and rural areas and in all economic sectors, the number of "private sector employees" (i.e., wage earners in the private sector) declined dramatically, and the number of self-employed increased sharply (Tables 5 and 6). In 1976, there were 3.1 million private employees in Iran. By 1986, in spite of a 25 percent increase in the size of the labor force, the number of private employees was 1.9 million (39% fewer). In the same period, the number of self-employed workers increased from 2.8 million to 4.4 million (57%). Thus, in the Iranian economy, private-sector wage earners, who accounted for 35 percent of the labor force in 1976, made up only 17 percent of the

TABLE 5 Distribution of the employed work force according to employment status, urban and rural: 1976, 1986, 1996 (in thousands of workers)

	197	76		1986			1996	
		_			%Change			%Change
Employment statuus	Total	%	Total	%	1976–86	Total	%	1986–96
Total								
Entrepreneurs	182	2.1	341	3.1	87.3	528	3.6	54.6
Self-employed	2,810	31.9	4,398	40.0	56.5	5,199	35.7	18.2
Family workers	1,021	11.6	462	4.2	-54.7	797	5.5	72.5
Private employees	3,072	34.9	1,882	17.1	-38.7	3,327	22.8	76.8
Public employees	1,673	19.0	3,454	31.4	106.5	4,258	29.2	23.3
Not specified	41	0.5	464	4.2	1,041.6	463	3.2	-0.3
Total	8,799	100.0	11,002	100.0	25.0	14,572	100.0	32.5
Urban								
Entrepreneurs	143	3.5	206	3.5	43.8	385	4.4	86.8
Self-employed	915	22.3	1,742	29.3	90.3	2,535	28.8	45.5
Family workers	86	2.1	42	0.7	-50.4	114	1.3	168.4
Private employees	1,545	37.6	1,073	18.0	-30.6	2,116	24.0	97.2
Public employees	1,405	34.2	2,594	43.6	84.6	3,352	38.1	29.2
Not specified	20	0.5	295	5.0	1,410.4	299	3.4	1.6
Total	4,114	100.0	5,953	100.0	44.7	8,799	100.0	47.8
Rural								
Entrepreneurs	40	0.9	134	2.7	234.8	142	2.5	5.8
Self-employed	1,895	40.4	2,613	52.4	37.9	2,627	46.0	0.5
Family workers	936	20.0	414	8.3	-55.8	667	11.7	61.2
Private employees	1,527	32.6	802	16.1	-47.4	1,207	21.1	50.5
Public employees	268	5.7	858	17.2	219.9	905	15.8	5.5
Not specified	21	0.5	165	3.3	681.1	162	2.8	-1.8
Total	4,687	100.0	4,987	100.0	6.4	5,711	100.0	14.5

Sources: Sarshumari-yi Umumi-yi va Nufus Maskan—Kull-i Kishvar, 1355 (Tehran: Markaz-e Amar-e Iran, 1980); Sarshumari-yi Umumi-yi va Nufus Maskan—Kull-i Kishvar, 1365 (Tehran: Markaz-e Amar-e Iran, 1988); Sarshumari-yi Umumi-yi va Nufus Maskan—Kull-i Kishvar, 1375 (Tehran: Markaz-e Amar-e Iran, 1997).

TABLE 6 Sectoral changes in status of employment, urban and rural: 1976, 1986, 1996 (in thousands of workers)

	∀	Agriculture	0		Industry ^a		ŭ	Construction	u		Services	
Employment Status	1976	1986	1996	1976	1986	1996	1976	1986	1996	1976	1986	9661
Total												
Entrepreneurs		110.1	124.0	50.3	67.2	126.4	18.8	42.7	83.3	75.1	91.2	193.7
Self-employed		2,315.0	2,181.7	309.3	444.8	652.7	99.1	388.5	469.9	692.4	1,163.9	1,894.7
Family workers		372.4	488.8	411.3	65.0	242.3	4. 4.	3.7	7.1	17.3	20.2	58.9
Private employees	623.4	292.6	418.0	785.7	439.7	966.2	1,055.2	663.9	972.4	580.4	423.0	970.5
Public employees		39.4	56.9	264.5	491.4	742.9	10.5	60.5	62.7	1,352.7	2,739.8	3,395.4
Not specified		61.2	87.7	2.4	9.99	92.0	0.7	46.9	55.0	2.7	232.8	228.1
Total	2,991.9	3,190.8	3,357.3	1,823.6	1,575.3	2,822.5	1,188.7	1,206.3	1,650.5	2,720.6	4,670.1	6,741.4
Urban												
Entrepreneurs	9.0	16.6	28.2	43.5	56.3	111.5	17.2	32.8	68.5	70.7	80.9	168.1
Self-employed	122.4	219.6	288.3	178.2	288.6	410.3	73.9	251.2	326.8	538.2	930.0	1,474.7
Family workers	13.2	11.6	21.2	60.2	12.9	52.4	0.9	1.6	3.3	11.1	14.4	33.5
Private employees	71.9	42.6	82.1	510.5	293.5	684.2	469.1	361.1	561.5	471.2	332.2	731.5
Public employees	14.1	13.7	25.7	202.0	358.1	577.2	5.9	35.0	43.8	1,177.7	2,099.7	2,640.3
Not specified	0.1	8.1	14.6	1.0	4.1	62.6	0.4	27.5	34.5	2.0	174.9	177.7
Total	230.6	312.2	460.8	996.2	1,052.5	1,898.2	567.3	709.2	1,038.3	2,270.9	3,633.1	5,225.9
Rural												
Entrepreneurs	26.8	92.1	94.8	8.9	10.9	14.9	1.6	10.0	14.8	4.4	10.4	14.9
Self-employed		2,054.6	1,858.8	131.0	155.3	241.1	25.1	137.1	143.0	154.2	233.3	361.3
Family workers	574.4	352.6		351.1	51.8	188.6	3.5	2.1	3.9	6.2	4.8	13.4
Private employees		247.7		275.2	146.3	281.6	586.2	301.3	410.4	109.2	90.3	162.8
Public employees		25.6	30.4	62.5	133.3	165.6	4.6	25.5	18.9	175.0	637.7	2.799
Not specified		52.1		1.4	22.3	29.3	0.3	19.3	20.4	9.0	9.99	36.8
Total	2,761.3	2,840.6	2,841.3	828.1	526.6	921.2	621.4	495.9	611.5	449.7	1,034.1	1,257

^aIncludes mining, electricity, gas, water.

Sources: Sarshumari-yi Unumi-yi va Nufus Maskan—Kull-i Kishvar, 1355 (Tehran: Markaz-e Amar-e Iran, 1980); Sarshumari-yi Umumi-yi va Nufus Maskan—Kull-i Kishvar, 1365 (Tehran: Markaz-e Amar-e Iran, 1988); Sarshumari-yi Umumi-yi va Nufus Maskan—Kull-i Kishvar, 1375 (Tehran: Markaz-e Amar-e Iran, 1997).

workers in 1986. In the same period, the proportion of self-employed workers increased from 32 percent 40 percent. Similar changes are observed both in the rural and urban economy.

Three issues must be addressed. First, it is true that some of the self-employed workers are engaged in professional occupations (e.g., lawyers, physicians, and accountants). From a theoretical perspective, a substantial increase in the proportion of self-employed workers in the labor force points to a weakening of wage-labor (capitalist) relations of production, be it an increase in the number of those engaged in handicrafts, home industries, peasant agriculture, or professional services. Moreover, the number of professional workers engaged as self-employed is very small compared with the large number of workers who hold this employment status. In 1986, only 43,000 of 4.4 million self-employed workers were classified as "scientific, technical, and specialized" worker. That is less than 1 percent. In the urban areas, where skilled professionals are concentrated, they constitute only 2 percent of the self-employed workers.²⁷

Second, when petty-commodity relations of production are rekindled, one should expect the proportion of the labor force employed as family workers to increase, whereas in 1986 this proportion actually declined substantially. One factor in this change seems to be the method by which the 1986 census was conducted. It includes a large increase in the number of those workers with "unspecified" status. Family workers are more likely to remain "unspecified" in status than others. Moreover, the Islamic Republic's revolutionary and war mobilization attracted youths, especially rural men, more than any other group. The young—particularly, the rural young—are among the most likely groups to be employed as family workers.

Third, it can be argued that the decline in the number of wage workers in the private sector resulted from a large increase in the number of "public workers" when many enterprises were nationalized and the governments became more dominant in certain market activities. Although this may be a tenable argument in some circumstances, the most significant increase in the number of government (public) workers came in activities traditionally outside the domain of the private sector, such as defense and government administration. The only major area in which public employment substantially replaced private employees was industry, where public employment increased by 226,000, accounting for 13 percent of the increase in the number of public employees. But in that sector, the number of private employees decreased by 346,000 (Table 6). Thus, the reduction in the number of wage earners in the private sector goes beyond the effect that the expansion of the public sector may have had on the economy. The immense increase in the number of self-employed workers, particularly in the urban economy (by 90% when the number of urban workers increased by 45%) is indicative of the retardation of capitalist relations of production, which leads to de-proletarianization of the work force. The expansion of public employment only mitigated this process.

In the urban economy, industries and services suffered from the de-proletarianization process most severely. While the number of urban industrial workers increased by 56,000 (5.6%) between 1976 and 1986, the number of private employees decreased by 217,000 (43%). In the same period, the number of public employees in industrial enterprises increased (mostly due to nationalization of these enterprises) by 156,000

(77%), and the number of self-employed workers increased by 110,000 (62%) (Table 6). These changes are reflected in the large increase in the number of small workshops, the decline in the average size of medium-size firms, and the increase in the size of industrial majors (more than fifty workers, mostly public enterprises).²⁸

The service sector in the urban economy experienced a similar structural change in addition to a substantial expansion. While the number of service workers increased by 1.4 million (60%) between 1976 and 1986, the number of private employees decreased by 139,000 (29%). In the same period, 922,000 (78%) were added to the number of public employees, most of whom were engaged in defense and public administration

Between 1976 and 1986, industrial and construction employment dropped sharply in the rural economy (36% and 20%, respectively) (Table 6). This was entirely due to a decline in the number of private employees and family workers, as the numbers in all other categories increased. A peculiar aspect of the Iranian census in this respect is that many urban industrial workers who reside in townships outside the city limits are counted as "rural" industrial workers. With regard to employment in the construction sector, too, it must be noted that a substantial proportion of these activities are infrastructural or military projects carried out in the rural economy by large private contractors. Thus, the decline in urban manufacturing and in government construction projects were important contributors to the decline of private wage workers in the non-urban (rural) economy. We will return to one of the manifestations of this phenomenon when examining Concentration Index later.

Employment in the agricultural sector of the rural economy was affected by land redistribution more than by any other factor. In this sector, the number of self-employed increased from 1.6 million to 2 million, and the number of private employees decreased from 552,000 to 248,000, as more agricultural workers could become small landowning peasants. The peasantization of agriculture in this period, interestingly, was accompanied by a substantial increase in the number of agricultural entrepreneurs, from 27,000 to 92,000. Thus, although the number of self-employed workers in agriculture was larger than that in any other sectors in 1986, there were also more entrepreneurs in agriculture than in any other sector.

The rate of increase in employment in the service sector of the rural economy (584,000 workers, or 130%) was larger than in any other sector in the economy. Nearly 80 percent of this increase (463,000 workers) resulted from the increase in the number of public employees in the service sector of the rural economy. No less than 95 percent of the increase in the number of public employees in the rural sector is accounted for by the increase in the number of "administrative and defense" workers. Similar to other sectors, the number of self-employed workers in rural services increased and the number of private employees declined.

Another manifestation of the involution process is the decline in the concentration of capital in the economy. We define the Concentration Index as the ratio of private employees per entrepreneur in the economy and its various sectors. In 1976, the Concentration Index for the Iranian economy was 16.9. By 1986, this index had declined to 5.5. The decline in the size of the index is observed in every sector and in the urban and rural economy (Table 7). It is noteworthy that the Concentration Index, or the number of wage earners per entrepreneur, was higher in the rural economy than

TABLE 7 Concentration Index (ratio of private employees to entrepreneurs); 1976, 1986, 1996

	1976	1986	1996
Total	16.9	5.5	6.3
Agriculture	17.4	2.7	3.4
Industry	15.6	6.5	7.6
Construction	56.0	15.5	11.7
Services	7.7	4.6	5.0
Urban	10.8	5.2	5.5
Agriculture	8.0	2.6	2.9
Industry	11.7	5.2	6.1
Construction	27.3	11.0	8.2
Services	6.7	4.1	4.4
Rural	38.2	6.0	8.5
Agriculture	20.6	2.7	3.5
Industry	40.3	13.4	18.9
Construction	357.6	30.2	27.6
Services	24.8	8.7	10.9

Sources: Sarshumari-yi Umumi-yi va Nufus Maskan—Kull-i Kishvar, 1355 (Tehran: Markaz-e Amar-e Iran, 1980); Sarshumari-yi Umumi-yi va Nufus Maskan—Kull-i Kishvar, 1365 (Tehran: Markaz-e Amar-e Iran, 1988); Sarshumari-yi Umumi-yi va Nufus Maskan—Kull-i Kishvar, 1375 (Tehran: Markaz-e Amar-e Iran, 1997).

in the urban economy in 1976 and remained higher in 1986, as well. This is mainly a reflection of the extension of urban industrial activities into the outskirts of the city limits and the government's huge construction projects in the rural economy, as noted earlier

Thus, one can conclude that the decline in the Concentration Index in all economic sectors indicates that the retrenchment of capital led to a significant reduction in the concentration of the capital in the economic landscape of Iran. Some large and medium-size establishments ceased operation, and the remaining firms and newly established firms were on average smaller.

Structural involution resulted in a decline in wage-related employment and an increase in non-wage employment. This overall effect is shown in Table 8. Whereas in 1976 more than 72 percent of the urban labor force held wage-related employment (including entrepreneurs and public and private employees), by 1986 this ratio had declined to 55 percent. Even when the increase in unemployment in this period is taken into account, the proportion of wage-related labor force (employed and unemployed) in the urban economy declined from 76.5 percent to 70.4 percent. ²⁹ Clearly, the decline in wage-related employment is greater than that for which the increase in unemployment can account. Meanwhile, the proportion of urban workers in non-wage employment increased from 23.5 percent to 29.6 percent of the urban labor force. We observe the same pattern of changes in the rural economy. The number of those in wage-related activities (employed and unemployed) decreased from 47.8 percent to

Total Urban Rural 1976 1986 1996 1976 1986 1996 1976 1986 1996 Wage-related labor force 60.5 58.6 59.9 76.5 70.4 69.5 47.8 44.2 45.2 Employed^a 56.9 44.4 50.8 72.1 55.1 60.6 44.8 31.3 35.7 Entrepreneurs, private & public employees Unemployed⁶ 14.2 9.1 4.4 15.3 8.9 3.0 12.9 9.4 3.6 Non-wage employment 39.5 41.3 40.1 23.5 29.6 30.5 52.2 55.8 54.8 Self-employed, family work-

Wage-related and non-wage employment in urban and rural regions: 1976, 1986, 1996 (in %)

100.0

100.0

100.0

100.0

100.0

100.0

100.0

ers, & "not specified"

Total

Sources: Sarshumari-yi Umumi-yi va Nufus Maskan-Kull-i Kishvar, 1355 (Tehran: Markaz-e Amar-e Iran, 1980); Census 1986: Sarshumari-vi Umumi-yi va Nufus Maskan-Kull-i Kishvar, 1365 (Tehran: Markaz-e Amar-e Iran, 1988); Census 1996: Sarshumari-yi Umumi-yi va Nufus Maskan-Kull-i Kishvar, 1375 (Tehran: Markaz-e Amar-e Iran, 1997).

44.2 percent, and the number of those in non-wage employment increased from 52.2 percent to 55.8 percent of the rural labor force. These change point to the significant retardation of capitalist relations of production in the urban and rural economy.

The limited information available on the sources of income of urban and rural households confirms these results. According to the survey of households by the Statistical Center of Iran, the proportion of wages and salary in the income of an "average" urban household declined in this period from 46 percent to 40 percent (Table 9). Unfortunately, the data do not separate the income received from entrepreneurship from that received from self-employment. Nevertheless, the share of income from these two sources, together, increased from 23 percent to 27 percent. Another study shows that the share of expenditures of households of entrepreneurs declined in this period as economic disruptions caused a fall in the rate of profit.³⁰ Therefore, it can be speculated that the share of income from self-employment actually increased by more than these figures suggest. In the same period, the share of miscellaneous income increased from 31 to 33 percent. Miscellaneous income is income received from nonemployment sources, such as rent, pensions, and interest. It is interesting that the larger share of miscellaneous income is from non-monetary sources, indicating inkind transfer payments made through family networks.

We observed the same pattern of change in the source of income in the rural area, as one should predict. The major difference between the income sources of urban and rural households is that, in the rural economy, income from wages and salary has been smaller and the share of income from entrepreneurship and self-employment larger than the "average" urban households. Moreover, because both productivity and output increased in agricultural activities in this period (Table 3), the rate of profit in agricul-

^aSeasonally unemployed workers who were not seeking employment at the time of census are considered employed in Census 1986 and Census 1996. Adjustment is made to the 1976 data to make the unemployment rate consistent with the rates in subsequent years.

TABLE 9 Sources of income of a "typical" urban and rural household: 1977, 1986, 1996 (in %)

		Urban			Rural	
	1977 ^a	1986	1996	1977 ^a	1986	1996
Wages & salary	46.0	40.0	30.8	32.6	28.3	26.5
Public employees	n.a.	27.7	18.2	n.a.	12.3	9.3
Private employees	n.a.	12.3	12.6	n.a.	16.0	17.1
Entrepreneurs & self-employed	23.2	27.1	32.5	49.5	53.4	55.7
Agriculture	2.2	3.1	3.5	37.8	42.0	38.5
Non-agriculture	21.0	23.9	29.0	11.7	11.4	17.2
Miscellaneous income	30.5	32.9	36.7	17.9	18.2	17.8
Money income	8.8	7.4	9.4	3.7	2.1	5.0
Non-money income	21.7	25.5	27.3	14.2	16.2	12.8
Total	100.0	100.0	100.0	100.0	100.0	100.0

n.a., not available.

Sources: MAI, Natayij-e Amargiri-yi Budjih va Daramad-i Khanivarha-yi Shahri, selected years; idem. Natayij-e Amargiri-yi Budjih va Daramad-i Khanivarha-yi Rusta'i, selected years.

ture also should have increased. Therefore, the increase in the share of entrepreneurs and self-employed in household income is reflective of the increase in the profit rate, as well as the increase in the number of self-employed agricultural workers. It is also noteworthy that miscellaneous income in the rural economy is much less important than in the cities, mainly because fewer households receive pensions, rent, and other returns on income-earning assets.

In other words, throughout the economy, petty-commodity production and self-employed-service activities expanded. This above all was a "natural" reaction to the disruptions in the capitalist process of production in these years. This was a way of survival for the workers released from failing or shrinking enterprises and for the new entrants into the labor market (young and rural migrants). They tried to eke out a living by engaging in home industries, setting up small workshops and grocery stores, working as street peddlers, or becoming cab drivers. These are activities that require little capital. Yet they are mostly redundant in the economy and have a low rate of productivity. Ironically, the Islamic Republic, many of whose leaders had a background in traditional economic activities and represented many socio-cultural values of petty-commodity producers and petty merchants, actively promoted self-employment and small-scale production.

ECONOMIC LIBERALISM AND DE-INVOLUTION

On 10 July 1988, Iran accepted the United Nations cease-fire Resolution 598, and the deadly and costly eight-year war with Iraq ended. Throughout the years of war and economic crisis, in spite of low productivity, a meager growth rate, and a rapidly increasing population, the Islamic Republic tried to maintain the level of private con-

^aSurvey was not conducted for the urban areas in 1976.

sumption through an elaborate system of subsidies and extensive price controls. Thus, between 1977 and 1988, when national income per capita declined by 48 percent in 1982 prices, real private consumption per capita declined by only 23 percent. This was reflected in an increasing share of private consumption and a declining share of investment in national income. In these years, the share of private consumption in gross national income (in current prices) increased from 41 to 67 percent, and the share of gross domestic fixed capital formation decreased from 21 to 13 percent.³¹ Foreign-exchange control with a number of fixed rates, favoring large manufacturing enterprises (especially those owned by the state and various "revolutionary foundations"), provided a substantial subsidy for their imported intermediate inputs and capital goods and a vast and lucrative black market for foreign exchange and industrial material imported with the highly valuable exchange quotas.

After 1989, the Islamic Republic began pursuing a policy of economic liberalization, gradually decontrolling prices, cutting subsidies, increasing the prices of goods and services provided by the government, and relaxing some exchange restrictions.³² Most important, in March 1993, the Islamic Republic floated the rial, which had been fixed at 70 rials for the government and for some "emergency" instances and at 600 rials for the privileged enterprises receiving foreign-exchange quotas. Within a few days, the rate reached 1,750 rials per dollar. When, by May 1993, the currency depreciated to 7,000 rials per dollar, the Central Bank declared the "floating" exchange rate fixed at 1,750 rials to the dollar.

Even after the "float" was fixed, domestic prices continued to increase—by 60 percent in 1994, only officially. By 1996, consumer prices had increased, officially, by 359 percent in comparison with 1990.33 The inflation caused a wave of popular reactions. The Islamic Republic, fearful of destabilizing political reactions, retreated, and until the end of Hashemi Rafsanjani's presidency in 1997, the Islamic Republic pursued a zigzag strategy of economic liberalization, pushing forward when there was not much political reaction, and withdrawing when there was.

In spite of the Islamic Republic's retreat from its economic-liberalization policy, some essential steps were taken toward reconstituting capitalist relations of production in this period. The half-hearted economic-liberalization policy provided a political environment that was hospitable to capitalist relations of production. Although the economic means for capital accumulation were not substantially improved, there was at least no overt antagonism toward capital. Market institutions were repaired and reconstituted. Chambers of commerce became active in pursuing "business interests," and the Tehran stock market began functioning, trading mainly the stocks of recently privatized companies. The government began courting capital, even foreign capital, which was viewed only a few years earlier as the vivid representation of Satan on Earth. The relatively high level of oil revenues (about \$18 billion-\$19 billion from 1990 to 1996) facilitated the expansion of the market and the growth of the economy. Capital accumulation began to increase, even though in constant prices it did not reach the pre-revolutionary level and on average remained lower than in the first postrevolutionary decade (Table 4). Between 1986 and 1996, in step with the increase in oil revenues, gross national income and non-oil GDP grew 3.5 percent and 3.6 percent, respectively (Table 3). Meanwhile, the urban unemployment rate declined substantially, from 15.3 to 8.9 percent. The improvement in the rural sector was not as much, but it was nevertheless significant: unemployment declined from 12.9 to 9.4 percent (Table 2).

The highest rate of growth in this period took place in the industrial sector (7.3% annually over the ten-year period), with agriculture and services trailing behind (3.7% and 3.2%, respectively) (Table 3). With the higher rate of growth of industries, the share of industrial value added in the non-oil GDP, and the proportion of the labor force employed in that sector increased substantially, from 10.8 percent and 14.3 percent, respectively, to 19.6 and 19.4 percent. The share of construction in value added decreased, although the proportion of those employed in that sector remained relatively unchanged, reflecting perhaps the decline in the government's share in construction (mostly large-scale projects) and the increase in the private sector's share (mainly residential construction).

In the second post-revolutionary decade, the share of services in value added declined to 51 percent in 1996, from 54 percent in 1986. This was due mainly to the slow growth of financial services and public services (1.8% and 0.8%, annually, respectively) in that decade. Nevertheless, the share of employment in services continued to increase from 42 percent in 1986 to 46 percent in 1996. Services employed only 31 percent of the labor force in 1976. The decline in the share of agricultural employment continued its secular trend in the second post-revolutionary decade. About a quarter of the labor force was employed in agriculture in 1996, and more than one-third of the population remained rural. Twenty years earlier, in 1976, more than half of the population was rural, and agricultural employment accounted for about one-third of the labor force (Tables 1 and 3).

In sum, in the second post-revolutionary decade, the liberalization policy, as indecisive and incoherent as it was, helped to rejuvenate capitalist relations of production. Although the state continued its omnipotent presence in the market, the political and social environment of the market provided a much more hospitable condition for capitalist activities. Granted, the high oil revenues of 1990–96 helped to facilitate economic activities and the rejuvenation of capitalist reproduction. If we named the recoiling of capital and the growth of petty-commodity production in the previous decade structural involution, what we observe in the second decade of the post-revolutionary years can be called structural de-involution. This, in contrast with the conditions of the previous decade, is expected to lead to the acceleration of capital accumulation, proletarianization of the labor force and de-peasantization of agriculture. Although the process of de-involution is not yet complete, its manifestations are amply evident in the labor market.

STRUCTURE OF THE LABOR FORCE: PERIOD 2

Between 1986 and 1996, employment increased by 3.6 million, or 33 percent. Nearly 80 percent of this increase (2.8 million) was added to urban employment, which increased by 48 percent. Rural employment increased only by 15 percent in this decade, reflecting a large flow of emigrants from the rural to the urban economy (Table 5).

The changes in employment status in response to the de-involution process in the second period are clearly discernable (Table 5). The increase in the number of private employees in the urban economy by 1.04 million (97.2%) is most significant among

all categories. The number of private employees in industry and services increased by more than 100 percent, and in construction it increased by more than one-half (Table 6). At the same time, there was a rapid increase (87 percent) in the number of urban entrepreneurs. These changes reflect the rejuvenation of capitalist relations of production in this period. Yet in spite of this large increase in the number of private employees, these workers made up less than one-fourth of urban employment in 1996, far less than in 1976 (38%) but more than in 1986 (18%) (Table 5).

Although the rate of increase in the number of public employees in this period (23%) was much less than that in the previous period (107%), 804,000 workers were nevertheless added to the government payroll (Table 5). Nearly all (94%) of this net increase in the number of public employees was added in the urban economy. It is noteworthy that in 1996 the number of public employees engaged in "public administration and defense" in the country was 1.6 million, 232,000 fewer than in 1986. This reduction was nearly equally distributed between the urban and rural economy. This reduction was the result of the post-war military demobilization. Thus, in 1996, compared with 1986, more than 1 million additional government employees were added to civilian activities. From this, 874,000 were in the urban area and 162,000 in the rural areas. By the same token, in the service sector of the urban economy, where the net increase in the number of "public employees" was 540,000, the number of civilian public employees increased by 656,000. Another 219,000 public employees were added in the urban industrial sector, while the economic liberalization and privatization of public enterprises was supposed to be in progress.

In spite of the capitalist rejuvenation in this period, the number of urban selfemployed workers increased by 793,000, nearly the rate of growth of the urban employment. Thus, the proportion of self-employed workers in the urban force remains relatively unchanged compared with 1986. This huge increase in the number of selfemployed workers reflects the labor market's inability to absorb the large flow of rural migrants and young new entrants into the job market. No less than 69 percent (545,000) of these new self-employed workers were concentrated in the urban services. In 1996, self-employed workers engaged in "sales and presentation of goods" in the urban economy numbered 662,000, and those who worked as "drivers and operators of moving vehicles" constituted a population of 354,000.³⁴ Thus, more than 1 million urban Iranian workers (12% of urban employment) work as one-man grocers, street vendors, or cabbies.

The de-involution process can also be observed in the rural economy. Over the 1986-96 period, the number of self-employed workers remained rather constant, mainly because of the halt in the growth of peasant farming. The number of selfemployed workers in rural agriculture actually declined by 196,000 in this period. Yet at the same time, the number of family workers (mainly in rural industry and agriculture) increased by 61 percent, more than four times the rate of increase in the rural labor force. This is mainly the outcome of the post-war military demobilization, the increase in the population-growth rate between 1976 and 1986, and the limited employment opportunity in that sector. Those in the age 10–19 category constituted 48 percent of rural family workers in 1996. From this, 62 percent were boys and 38 percent girls.³⁵ The same age group constituted only 17 percent of family workers in the rural economy in 1986.³⁶ The increase in reliance on family workers may be an outcome of the decline in the mobilization of the young for the war effort in the post-1988 cease-fire with Iraq. The rates of increase in the number of entrepreneurs and government employees in the rural economy are relatively small (5.8% and 5.5%, respectively).

At the same time, the number of private employees increased by 51 percent. Thus, the de-involution process is characterized by an expansion and deepening of capitalist relations of production. Although this process has halted the peasantization of agriculture, and has even reduced the number of petty-commodity-producing farmers, while the number of private employees has increased, the data indicate that the reliance on family workers has increased substantially since 1986.

The effect of expansion of capitalist production in the second period has been rather weak in increasing the concentration of capital and in changing the sources of income. As Table 7 shows, the Concentration Index for the whole economy increased from 5.5 to 6.3 between 1986 and 1996. This is still much smaller than 1976's 16.9. In the urban economy, the Concentration Index increased in industry, services, and agriculture (an insignificant sector in the urban economy), and decreased in construction. Yet in all sectors of the urban economy, the Concentration Index in 1996 was significantly lower than what it was in 1976. In the rural economy, the concentration of capital increased in agriculture, industry, and services, while the index for construction continued to decrease. Even in sectors in which an increase in the concentration of capital is observed, the number of employees per employer is still much lower than what it was in 1976. This corroborates the general conjecture that the Iranian economy is still dominated by a mass of self-employed petty-commodity producers and many small capitalists—much more so than in 1976, before the revolution.

Overall, by 1996 the proportion of the labor force in wage-related activities (including entrepreneurs, private and public employees, and unemployed workers) increased slightly compared with 1986 (from 58.7% to 59.9%). By 1996, the proportion of wage-related employment in the urban economy was higher (60.6%) than in 1986 (55.1%) but still significantly lower than in 1976 (72.1%) (Table 8). But this increase was mainly the result of a reduction in the rate of unemployment. The proportion of the labor force in wage-related activities (employed and unemployed) even declined slightly between 1986 and 1996, and the proportion of those engaged in urban non-wage employment remained nearly unchanged.

Interestingly, in the rural economy in the same period, the relative size of the wage-related labor force increased noticeably, from 44.2 percent to 45.2 percent. If we exclude unemployed workers, the number of those *engaged* in wage-related activities in the rural economy increased from 31.3 percent in 1986 to 35.7 percent in 1996, still significantly lower than in 1976. The increase in wage-related employment in the rural sector is an indication of the deepening of capitalist relations of production in that sector in the past decade. This can be partly accounted for by the increase in the rate of capital accumulation by rural entrepreneurs and "better-off" self-employed rural workers, mainly in agriculture but also in rural industries and services, and the subsequent increase in the number of wage laborers in the rural sector.

The data on the sources of income from annual household income-expenditure surveys, however, tell another interesting story. In the urban economy, the proportion of income of an "average" family from wages or salary has declined substantially since

1986, whereas the contribution of earnings of entrepreneurs and self-employed workers increased. These two, inter-related changes reflect a decline in the real income of wage earners to the benefit of those who receive income from capital (entrepreneurs) or from self-employment. The same pattern is observed in the rural economy, albeit at a much slower rate (Table 9). Although the decline in the share of wages both in the urban and rural economy is the result of a decline in the share of wages of public employees, the share of wage income of private employees in rural household income actually increased from 16 to 17.1 percent between 1986 and 1996. In the urban economy, the share of private employees' wages remained rather constant.

The reliance of the "average" urban household on miscellaneous (mostly non-money) income continued to increase while the share of income from this source declined in the rural sector. It is an oddity that urban households, on average, rely on non-monetary miscellaneous income for 27.3 percent of their sustenance (as of 1996), whereas the same source accounts for only 12.8 percent of income for a "typical" rural family.

CONCLUSIONS

The post-revolutionary transitions in the Iranian economy have been manifested in some dramatic changes in the structure of the labor force. A prolonged economic crisis of the post-revolutionary type followed the 1979 revolution. This economic crisis resulted from the disturbance in the social order, giving rise to the withdrawal of capital and disruptions in market institutions. In the first post-revolutionary decade, these disturbances led to serious interruptions in the accumulation process, and consequently to a sharp decline in output and employment. We have argued in this study that this general condition of economic disorder is tantamount to a shriveling of the capitalist relations of production and expansion of petty-commodity production, accompanied by an increase in redundant service activities. We have called this type of transition "structural involution," characterized by de-proletarianization of labor, a decline in wage-related activities and in wage income, and an increase in the peasantization of agriculture.

In this analysis, we have demonstrated the manifestations of a widespread "structural involution" both in the urban and rural economy and all the major sectors of the economy (manufacturing, construction, services, and agriculture). Our analysis has focused on changes in the employment status of the Iranian labor force, noting, most importantly, the significant decline of wage employment in the private sector and the substantial increase in the number of self-employed workers. We have also shown that, although in this period the number of government employees increased sharply, the decline in the number of wage earners in the private sector does not represent a shift of employment from private to public wage employment. The most substantial increase in the number of those working for the government resulted from an increase in the number of public employees in "public administration and defense," and other activities that do not compete with the private sector, while the economy suffered from a high rate of unemployment. Thus, the most important explanation for the decline in wage labor in the private sector is found in the expansion of petty-commodity production, as manifested in the increase in the number of self-employed workers. The data on distribution of sources of income also reflect a general decline in the share of wage income.

The data point to the fact that, in this period, concentration of capital—that is, the number of "private employees" per entrepreneur—declined substantially. This indicates that, with the withdrawal of capital, the average size of firms in the economy declined as the number of one- or two-worker workshops and service outlets increased.

Although the economic-liberalization strategy that the Islamic Republic has pursued since 1990 has failed in accomplishing its stated objectives, it has nevertheless succeeded in rejuvenating market institutions of and reinvigorating capitalist relations of production. We called this reverse transition "de-involution." The "de-involution" process that began in the second post-revolutionary decade is manifested in changes in the structure of the labor force, bringing it closer to its pre-revolutionary configuration. Clearly, this process is not complete. The continuation of social conflicts and a deep factional confrontation within the political regime about the very nature of the "new" economic order that the Islamic Republic still aims to establish have seriously retarded the reversal process. Debates and disagreements about repealing the labor law and about constitutional limitations on the activity of capital are among the most significant political obstacles in the way of any complete reconstitution of capitalism in Iran. It is ironic that the expansion of petty-commodity production was actively promoted by the Islamic Republic in the early revolutionary decade. Thus, as the Islamic Republic embarked on an economic-liberalization strategy it not only confronted the resistance of the masses who were economically hurt by economic liberalizing policies; it also found shifting its rhetoric toward promoting capitalist accumulation politically painful and even dangerously destabilizing. The structure of the labor force suggests that a huge social group exists that is holding the Islamic Republic to its revolutionary commitments—that is, helping every enterprising "Muslim" to establish a small business and to protect the owners of every small enterprise against the deadly competition of large, "leaching capitalists," domestic or foreign.

In this study, we have concentrated on the overall changes in the composition of the labor force within the urban and rural economy and the major economic sectors. The change in the structure of the labor force has another dimension: the characteristics of workers who make up each expanding or contracting occupational group. That is, who has moved where and what are the characteristics of the workers entering and leaving various occupational positions? Examining this dimension is the next step toward identifying changes in the class configuration of Iranian society in the past two post-revolutionary decades.

NOTES

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¹By "capitalist relations of production" we mean relations between private owners of means of production (natural resources and instruments of production) and wage labor (workers dispossessed of the means of production) in economic activities in an economy based on generalized commodity production.

²Clifford Geertz uses the term "involution" in his study of Java's agricultural development under the domination of the Dutch in the 19th century. By involution Geertz means a process of change involving elaboration of, and entanglement in, the existing pattern without transforming the pattern itself: see Clifford Geertz, Agricultural Involution: The Process of Ecological Change in Indonesia (Berkeley: University of California Press, 1963). We use the term in this general conceptual sense without subscribing to Geertz's dualistic model or the pecularities that he specifies for Java's development. For a discussion of structural involution, see Sohrab Behdad, "Production and Employment in Iran: Involution and De-Industrialisation Theses," in The Economy of the Islamic Iran: Between State and Market, ed. Theirry Coville (Louvain, Belgium: Peeters, 1994).

³This transition can be viewed as a mirror image of the process described in Arthur Lewis, "Economic Development with Unlimited Supplies of Labour," Manchester School (1954): 139-91. Lewis notes a movement from the "subsistence" sector of the economy to the "capitalist" sector. In Iran we observe the opposite in the early post-revolutionary period. We are indebted to an anonymous referee for this observation.

⁴There is much debate in the literature on the importance of employment status and occupational relations. See, for example, Anthony Giddens, The Constitution of Society: Outline of the Theory of Structuration (Cambridge: Polity Press, 1984); and Barry Hindess, Politics and Class Analysis (Oxford: Blackwell, 1987). For a survey of debates, see Rosemary Crompton, Class and Stratification: An Introduction to the Current Debate (Cambridge: Polity Press, 1998); David B. Grusky, "The Contours of Social Stratification," in Social Stratification, ed. David B. Grusky (Boulder, Colo.: Westview Press, 1994); and Erik Olin Wright, "Rethinking, Once Again, the Concept of Class Structure," in Reworking Class, ed. John R. Hall (Ithaca, N.Y.: Cornell University Press, 1997).

See Erik Olin Wright, Class Counts: Comparative Studies in Class Analysis (Cambridge: Cambridge University Press, 1997).

⁶In spite of these debates, as Savage points out, "most perspectives on class tend to adopt some sort of structural approach on the way that social classes are rooted in the division of labour and, in particular, employment relations": Mike Savage, "Class Analysis and Social Research," in Social Change and Middle Class, ed. Tim Butler and Mike Savage (London: UCL Press, 1995).

We examined this issue in Farhad Nomani and Sohrab Behdad, "The Nature of Marginalization of Women's Work Force in Iran," paper presented at Middle East Economic Association, New Orleans, 5-7 January 2001. See also, among others, Maryam Poya, Women, Work and Islamism: Ideology and Resistance (London: Zed Books, 1999); Parvin Alizadeh, "State and Social Position of Women: Female Employment in Post-Revolutionary Iran," in The Economy of Iran: The Dilemma of an Islamic State, ed. Parvin Alizadeh (London: I. B. Tauris, 2001); Fatemeh E. Moghadam, "Commoditization of Sexuality and Female Labor Participation in Islam: Implications for Iran, 1960-1990," in In the Eye of the Storm, ed. M. Afkhami and E. Friedl (London: I. B. Tauris, 1994), and V. M. Moghadam, "Women, Work and Ideology in the Islamic Republic," International Journal of Middle East Studies 20 (1988): 221-43.

⁸Markaz-e Amar-e Iran (hereafter, MAI), Sarshumari-yi Umumi-yi Nufus va Maskan—Kull-i Kishvar, 1355 (Tehran: MAI, 1980); idem, Sarshumari-yi Umumi-yi Nufus va Maskan-Kull-i Kishvar, 1365 (Tehran: MAI, 1988); and idem, Sarshumari-yi Umumi-yi Nufus va Maskan-Kull-i Kishvar, 1375 (Tehran: MAI, 1997). These three censuses will be referred to as Census 1976, Census 1986, and Census 1996.

⁹For a study of changes in this period, see Adnan Mazarei, Jr., "The Iranian Economy under the Islamic Republic: Institutional Change and Macroeconomic Performance (1979-1990)," Cambridge Journal of Economics 20 (May 1996): 289-314.

¹⁰See International Labor Office (hereafter, ILO), Yearbook of Labour Statistics (Geneva: ILO, 1996), 1104-5.

11Ibid., 63.

¹²In 1996, the number of wage and salary earners in the cooperatives was only 56,715, compared with 3,270,472 who received their wages or salaries from the private sector: Census 1996, 190.

¹³ILO, Yearbook, 1110-11, and idem, International Standard Classification of Occupations, rev. ed. (Geneva: ILO, 1969).

¹⁴Census 1986 and Census 1996 include in the "employed" category those seasonal workers who had not been working in the seven days prior to the census and were not seeking employment: Census 1986, 4; Census 1996, 7. However, Census 1976 considers the same group of workers "unemployed": Census 1976, 4. The unemployment rates for 1976 are adjusted to make comparison possible.

¹⁵Census 1996, 6-8.

¹⁶Naser Pakdaman, "Jam'iyat-i Iran: Diruz, Emruz, Farda," *Chishmandaz* 2 (1987); Hassan Hakimian, "Population Dynamics in Post-Revolutionary Iran: A Re-examination of Evidence," in Alizadeh, *Economy of Iran*.

¹⁷For the pre-revolutionary, years see Massoud Karshenas, *Oil State and Industrialization in Iran* (Cambridge: Cambridge University Press, 1990); Hasan Hakimian, *Labour Transfer and Economic Development: Theoretical Perspectives and Case Studies From Iran* (New York: Harvester Wheatsheaf, 1990); and Eric Hooglund, *Land and Revolution in Iran:* 1960–80 (Austin: University of Texas Press, 1982).

¹⁸The number of population centers classified as cities increased from 452 in 1976 to 496 in 1986 and 614 in 1996. The number of populated rural "settlements," however, remained at about 65,000 in 1976 and 1986 and increased to 68,000 in 1996: MAI, *Salnameh Amari-ye Keshvar, 1366* (Tehran: MAI, 1988), 59, and idem, *Salnameh Amari-ye Keshvar, 1375* (Tehran: MAI, 1998), 47.

¹⁹According to the ILO, "economically active population comprises all persons of either sex who furnish the supply of labour for production of goods and services": ILO, *Yearbook*, 5.

²⁰Census 1986, 69; Census 1996, 1.

²¹Cf. 58 percent for Brazil (1992) and Indonesia (1994) and 51 percent for Turkey (1995): ILO, *Yearbook*, 11–35.

²²The dependency ratio for Brazil (1992) is 2.1; for Indonesia (1994), 2.2; and for Mexico (1995), 2.5. Egypt (3.2 for 1994) and Pakistan (3.6 for 1993) are among the small number of countries reporting a dependency ratio that is significantly higher than Iran's.

²³See, among others, Mazarei, "Iranian Economy"; Massoud Karshenas and Hashem Pesaran, "Economic Reform and the Reconstruction of the Iranian Economy," *Middle East Journal* 49 (1995): 89–111; Reza Ghaffari, "The Economic Consequences of Islamic Fundamentalism in Iran: The Political Economy of Islamic Republic of Iran, 1979–94," *Capital and Class* 56 (1995): 91–115; Jahangir Amouzegar, *Iran's Economy under the Islamic Republic* (London: I. B. Tauris, 1993); and M. R. Ghasimi, "The Iranian Economy after the Revolution: An Economic Appraisal of the Five-Year Plan," *International Journal of Middle East Studies* 24 (1992): 599–614.

²⁴For further discussion, see Sohrab Behdad, "The Post-Revolutionary Economic Crisis," in *Iran after the Revolution: Crisis of an Islamic State*, ed. Saeed Rahnema and Sohrab Behdad (London: I. B. Tauris, 1995), 97–128.

²⁵See Ali Rahnema and Farhad Nomani, *The Secular Miracle: Religion, Politics and Economic Policy in Iran* (London: Zed Books, 1990), chap. 3; and Sohrab Behdad, "A Disputed Utopia: Islamic Economics in Revolutionary Iran." *Comparative Studies in Society and History* 36 (1994): 775–813.

²⁶Sohrab Behdad, "Winners and Losers of the Iranian Revolution: A Study in Income Distribution," *International Journal of Middle East Studies* 21 (1989): 327–58.

²⁷Census 1986, 219, 225.

²⁸For an analysis of the size distribution of manufacturing enterprises, see Behdad, "Production and Employment in Iran."

²⁹Unemployed workers are included in this category because they seek employment as wage or salaried labor

³⁰Behdad, "Winners and Losers."

³¹Bank Markazi, *Hesabha-ye Melli Iran, 1353–1366* (Tehran: Bank Markazi, 1991), 138–39, 248, 252; and idem, *Hesabha-ye Melli Iran, 1367–1369* (Tehran: Bank Markazi, 1992), 16, 57, 59.

³²For a discussion of the issue, see Sohrab Behdad, "From Populism to Economic Liberalism: The Iranian Predicament," in Alizadeh, *Economy of Iran*.

³³Bank Markazi, Economic Report and Balance Sheet, 1375 (Tehran: Bank Markazi, 1997), 160-61.

³⁴Census, 1996, 274.

³⁵Ibid., 282.

³⁶Census 1986, 239.