

CHAPTER IV

EMPLOYMENT AND WAGES

1. MAIN DEVELOPMENTS

In the labor market, the rapid expansion of economic activity in 1987 reflected itself in a substantial increase of business sector employment and a decline in unemployment. For the second consecutive year, employment rose only in the business sector while the share of employment in the public services continued to decline. On average, real wages in the business sector continued to rise more than labor productivity, following their even greater disparity in the previous year.

The number of local employees in the business sector rose by 4.5 percent in 1987, following a 2.1 percent increase in the previous year. The major part of the additional employment was in industries producing for the home market. Most of the increase in employment occurred in the first half of the year, when economic activity accelerated, while the slower growth rate in the second half of the year caused a parallel tapering off in the expansion of employment.

Unemployment declined from its 1986 average of 7.1 percent to 6.1 percent in 1987, thus still remaining above the unemployment rate prevailing until 1984, prior to the adoption of the economic stabilization program. In the last quarter of 1987 the unemployment rate dropped below this level—to 5.7 percent.

Developments in the labor market were affected by the sharp changes in the composition of the national product that have been taking place in the last three years, as domestic demand directed towards the business sector expanded rapidly. This was accompanied by substantial changes in its composition, with a jump in private consumption and, in the year under review, also a rise in fixed investment, while domestic defense procurement declined. In addition to the effects of domestic demand, the business sector product was also significantly affected by growth-contributing changes on the supply side—continuing restraint in the labor input in the public services and substantial improvements in economic performance as a result of disinflation, the tax cuts and the reduction of government involvement in the capital market. This growth overcame the retarding effects of rigidities in the wage system and in the system of financing business activity.¹ The growth of the business sector product

¹ The factors affecting developments in the national product are discussed in greater detail in Chapters II and VI.

made it possible for exports to expand rapidly, primarily due to a productivity rise in the industries producing tradeable goods. Productivity in the business sector as a whole rose in 1987 on average by 2.6 percent, following gains of 4.9 and 3 percent, respectively, in 1986 and 1985.

The growth of the business sector product reflects a considerable expansion of activity in all main economic sectors, while the sharp changes in the composition of demand showed up in the sub-branches and in particular enterprises within the main industries. Sub-branches and enterprises faced by rising demand for their products

Table IV-1
POPULATION, EMPLOYMENT, AND WAGE PER EMPLOYEE POST, 1980-87
(Percent change over preceding period)

	1980	1981	1982	1983	1984	1985	1986	1987
Working-age population	2.5	1.8	1.8	2.0	2.2	2.2	1.9	1.9
Civilian labor force	3.2	2.3	1.3	2.6	3.0	1.6	1.8	1.5
Israeli employed persons	1.1	2.0	1.4	3.2	1.5	0.7	1.4	2.6
Employment rate of Israelis ^a	(49.0)	(48.9)	(48.3)	(48.6)	(48.0)	(47.1)	(46.7)	(46.9)
Total man-hours of Israelis	-1.1	2.6	0.0	2.3	1.7	0.7	0.8	2.3
Residents of Judea, Samaria and the Gaza District employed in Israel	-3.0	1.0	4.2	8.4	2.9	-1.3	5.6	11.8
Total employed in Israel	0.8	2.0	1.6	3.5	1.6	0.6	1.7	3.2
Total man-hours worked in Israel	-1.3	2.6	0.3	2.6	1.7	0.5	1.4	3.2
Real wage per employee post ^b								
Estimate A	-3.4	11.1	-0.9	4.7	-2.5	-6.8	11.6	8.2
Estimate B	(-3.0)	(10.4)	(-0.4)	(5.9)	(-0.4)	(-9.0)	(7.8)	(7.9)
Real disposable wage per employee post, ^c								
based on estimate A	-4.8	15.2	-2.9	3.1	-5.8	-2.2	13.5	7.7
based on estimate B	(-4.5)	(14.5)	(-2.3)	(4.2)	(-3.6)	(-4.5)	(9.7)	(7.4)

^a The number of employed persons relative to the working age population; the estimates are adjusted for changes in the composition of the population by age, sex and education (see note 13 below); base year for the correction—1984; adjusted to the 15+ population.

^b Both estimates are CBS data based on employers' returns to the National Insurance Institute, deflated monthly by the Consumer Price Index. Since wages are on average paid at the end of the month, deflation by the average CPI for the month biases the real wage upwards at times of inflation. Estimate A is corrected for this two-week timing discrepancy by deflating the nominal wage for month *t* by the geometric mean of the CPI for *t*, *t*+1. Estimate B is not corrected.

^c Corrected for changes in the rate of direct taxation of wage earnings (deductions for income tax and National Insurance premiums). The estimate is approximate, being based on tax rates (for the method of the estimate see Chapter V, Table V-9) and should therefore be treated with caution.

SOURCE: Central Bureau of Statistics—Monthly Bulletin of Statistics, labor force surveys and family surveys in Judea, Samaria and the Gaza District; and Bank of Israel calculations.

grew rapidly, while those encountering shrinking demand ran into hardships. The last two years' developments in the labor market largely reflected the difficulties in adjusting to these structural changes. Since 1984 there has been evidence of a decline in labor force participation and the employment rate² of the working-age population (see Fig. IV-2), despite the accelerated recovery of economic activity and the tax cuts that were expected, in particular, to bring forth an increase of labor supply. It would therefore seem that these downtrends in labor force participation and the employment rate are affected by difficulties in adjusting to the changes in the structure of demand, and apparently also by the considerable wage rise in the low wage brackets due to the enactment of the minimum wage law, which reduced job opportunities for young Israelis with a low level of education.

In 1987, too, wages continued to rise rapidly also in 1987, at a rate inconsistent with a further curbing of inflation.³ The wage rise was partly due to higher demand for labor in expanding industries, but after last year's considerable wage increase—in excess of productivity gains—market forces might have been expected in 1987 to correct this overshooting by a more restrained wage increase, not exceeding the rise in labor productivity. Last year's excessive wage rise was partly perceived as compensating for the considerable erosion of the purchasing power of wages in 1985 in consequence of the economic stabilization program. However, the continued increase of wages in 1987—by 8.2 percent in terms of purchasing power—raised them to a level some 10 percent higher (disposable wages—13 percent) than their 1983 peak, prior to the adoption of the stabilization program. In 1987 wages rose at about the same rate in the business sector and public services, thus maintaining the 10 percent decline of wages in the public sector relative to the business sector—a gap created in 1985–86 in the wake of the stabilization program.

The wage rise in the business sector in the last two years was only partially reflected in employers' wage costs, since the government reduced the tax burden on wages by cutting employers' contributions to the National Insurance Institute by about 2 percent of wage costs in 1986 and a further 2.5 percent in 1987.⁴ Nonetheless, even after this easing of the tax burden, employers' wage costs per hour rose in 1987, in terms of value

² The ratio of employed persons to the working-age population. The estimates are adjusted for changes in the composition of the population by age, sex and education.

³ Real wages are estimated in this chapter in a 'corrected' manner: since wages are on average paid at the end of the month, deflation by the average CPI for the month biases the real wage upwards at times of inflation. Estimate A is corrected for this two-week timing discrepancy by deflating the nominal wage for month t by the geometric mean of the CPI for t , $t+1$.

⁴ The effect of changes in the structure of taxes on wages is not unequivocal; cuts in income tax tend to reduce gross wages, while the reduction of employers' contributions to the NII causes gross wages to rise.

Table IV-2
EMPLOYMENT AND UNEMPLOYMENT, 1986-87
 (Quarterly data)

	1986				1987				2nd half 1986 over 1st half 1986	1st half 1987 over 2nd half 1986	2nd half 1987 over 1st half 1987
	I	II	III	IV	I	II	III	IV			
Employed persons in Israel, thousand											
<i>Business sector</i>											
Israelis	956	959	967	965	985	999	1,002	1,012	0.9	2.7	1.5
Workers from Judea, Samaria and Gaza	88.4	93.1	93.9	94.2	98.1	98.5	102.1	113.0	3.6	4.5	9.4
Total	1,044	1,052	1,061	1,059	1,083	1,098	1,104	1,125	1.1	2.9	2.2
<i>Public services^a</i>											
Total employed in Israel	1,449	1,459	1,474	1,479	1,507	1,501	1,502	1,542	1.5	1.9	1.2
Unemployment rate, percent of labor force											
Men	6.5	6.7	6.3	6.7	4.8	5.3	6.0	5.0			
Women	8.4	8.9	7.7	6.8	7.1	6.9	8.2	6.9			
Total	7.2	7.6	6.9	6.7	5.7	5.9	6.9	5.7			
Employment rate ^b	46.7	46.6	46.8	46.7	47.2	46.8	46.5	47.1			

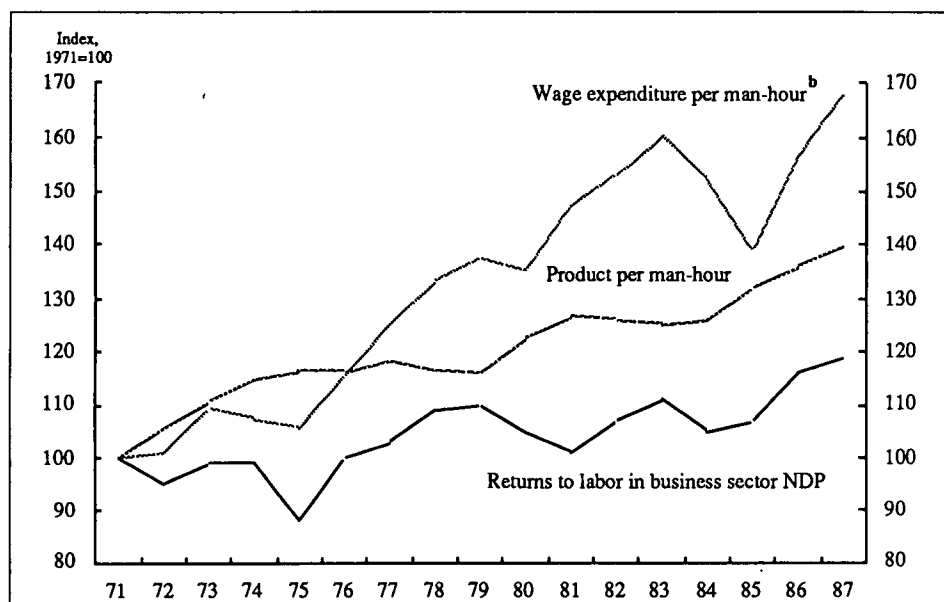
^a Includes workers from Judea, Samaria and Gaza.

^b See note a to Table IV-1.

SOURCE: Central Bureau of Statistics, labor force surveys and family surveys in Judea, Samaria and the Gaza District, and Bank of Israel calculations.

added, by 5.7 percent, following their steep 11.7 percent rise in 1986 (see Table IV-3). With a 2.6 percent increase in gross hourly output, employers' real wage costs per unit of product (the real wage cost) rose in 1987 by 3 percent, following an 8.4 percent increase in the preceding year. Estimates of labor costs and industrial output for exports, in terms of the effective exchange rate, show a similar picture: the index of the share of wages in this output rose in 1987 by some 5 percent, following an exceptionally steep rise the year before.⁵

Figure IV-1
BUSINESS SECTOR WAGE EXPENDITURE, PRODUCT PER MAN-HOUR,^a
AND RETURNS TO LABOR IN BUSINESS SECTOR NDP,^b 1971-87



^a The estimate of returns to labor in NDP is obtained from a comparison of several variables from different statistical sources (GDP, taxes and subsidies, wages, imputed returns to labor of self-employed, etc.). This method may result in a systematic bias of aggregate returns to labor, since the biases of the different components are cumulated. This bias is probably greater in the estimate of the absolute amount of the returns to labor; it is less in the estimate of changes between periods.

^b In terms of private consumption.

The development of real wage costs, which points to a continuous decline, throughout the last three years, in the share of profits in the business sector product, is puzzling. It raises the question how a declining trend in the average share of profits can be consistent with the accelerating expansion of business activity, and what induces employers to continue paying wages increments which are on average in excess of

⁵ For a more detailed discussion of export profitability, see Chapter VII, The Balance of Payments.

Figure IV-2
LABOR FORCE PARTICIPATION RATES, EMPLOYMENT
AND UNEMPLOYMENT RATES, 1980-87^a



^a Quarterly data are seasonally adjusted.

^b The horizontal lines denote the 1984 level.

SOURCE: Central Bureau of Statistics, labor force surveys, and Bank of Israel calculations.

labor productivity growth. We are unable to offer satisfactory answers to these questions. In our assessment, these developments largely reflect rigidities in the adjustment of wages and employment to the sharp changes in the structure of demand in the last three years. Due to the downward rigidity of wages, economically justified wage increases in growing enterprises, in which output and productivity were rising, were not as a rule matched by corresponding wage falls in losing industries and enterprises. Moreover, automatic wage hikes are assured even in losing enterprises by economy-wide wage settlements, such as the cost-of-living agreement, the minimum wage law, and industry-wide wage agreements. Examples of such wage increases in firms that have been losing money for many years can be found in government enterprises of the defense establishment, in firms of Hevrat Ha'ovdim, the holding company of the Histadrut (General Federation of Labor), as well as in other enterprises which continued to accumulate losses for many years. Modest wage reductions in some of these enterprises have been broached only recently. Traditional norms of wage linkages between different occupations and trades have had a similar effect. These factors, which tend to push up average wages above the growth of labor productivity, become more forceful when far-reaching structural changes generate wide disparities in the growth of different industries, and losses mount in those that are unprofitable. The impact of these factors, which might have accelerated the contraction of losing industries, thus promoting the adjustment of the production structure, has been impeded by the substantial involvement of various public institutions in the business sector. Many enterprises enjoyed one or the other measure of public backing, and their performance was not guided exclusively by profit maximization. Public support enabled many losing firms to stay in business despite having accumulated losses for many years. Another factor which held back structural adjustment during the years of economic crisis was the government's accommodative policy, which made it come to the aid of industries that had run into difficulties due to changes in the composition of demand or an excessive yielding to pressures for wage hikes. It would seem that the expectation that such policies would continue, has also in 1987 affected the conduct of many employers, as may be seen from the pressures they exerted towards the end of the year for granting government aid to industries exporting to the dollar bloc, or for a devaluation of the currency. In our view, the combined influence of these factors, against the background of the sharp changes in the structure of demand was the cause of the exceptional wage rise in the last few years, and has impeded a further curbing of inflation. Retarding the adjustment of the production system to the changes in demand, these factors held back the full potential acceleration of growth and productivity rise that might have come from the successful halting of galloping inflation.

We estimate that the influence of some of the factors mentioned above has weakened in 1987, due to the government's consistent policy, in recent years, of reducing its involvement in the business sector, and the gradual removal of public support for losing

industries. In the year under review this promoted the adjustment of the production system, as apparent in the rapid growth of business sector employment and the relatively high growth rate of the economy. It is, however, doubtful whether there has been any substantial weakening of the forces behind the wage rigidities. The rapid rise of average business sector wages, in excess of labor productivity growth, is still much affected by the automatic linkage arrangements deriving from the minimum wage law, the cost-of-living allowance agreement, and the demands for industry-wide wage increases. These arrangements explain more than half of the rise in money wages.

Table IV-3
CHANGE IN BUSINESS SECTOR LABOR COSTS^a, 1983-87
(Percent change over preceding period)

	1983	1984	1985	1986	1987
1. From employees' perspective, in terms of private consumption ^b	4.5	-5.2	-9.4	12.7	7.2
2. From employers' view, in terms of value added ^c	4.8	-4.9	5.6	11.7	5.7
3. Real labor costs to employers ^d	5.4	-5.6	0.7	8.4	3.0
4. Relative price of business sector product ^e — $P/P_c = [1+(1)]/[1+(2)]$	-0.3	-0.3	-15.5	-1.1	-1.0
5. Labor productivity ^f	-0.6	-0.7	4.9	3.0	2.6

^a According to national accounts definitions.

^b Wage expenditure per man-hour, including fringe benefits, deflated by the implicit price index of private consumption as estimated in the national accounts.

^c Hourly wage expenditure as in note (b), deflated by the implicit price index of the business sector net domestic product, at factor cost. The reduction in employers' national insurance contributions lowered wage costs to employers by some 2 percent, and a further 2.5 percent in 1987.

^d The share of wages in net business sector product, as in note (c), excluding changes in labor productivity (estimate of product from resource uses).

^e Implicit price index of business sector NDP relative to implicit price index of private consumption

^f Real business sector NDP per man-hour..

SOURCE: Central Bureau of Statistics and Bank of Israel calculations.

Table IV-4
SECTORAL COMPOSITION OF EMPLOYMENT, ISRAELIS, 1970-87
 (Percent)

	1970	1979	1985	1985 ^a	1986	1987	Average annual rate of change		
							1970- 1979	1979- 1985	1985- 1987
Public services	23.9	29.2	29.6	29.9	29.7	28.8	5.2	1.9	0.2
Business sector	76.1	70.8	70.4	70.1	70.3	71.2	2.0	1.5	2.8
<i>of which:</i> Financial and business services	5.2	7.8	9.6	9.7	9.8	9.6	7.7	5.4	1.2
Industry	24.2	24.0	22.9	22.9	23.6	23.4	2.8	0.9	3.0
Other business sector	70.9	63.0	60.8	60.4	60.5	61.6	1.5	1.0	3.0
Total	100.0	100.0	100.0	100.0	100.0	100.0	2.9	1.6	2.0

^a New series from 1985: (a) working-age population and labor force—age 15+ instead of 14+ so far; (b) estimates of population and labor force corrected according to the 1983 population census.

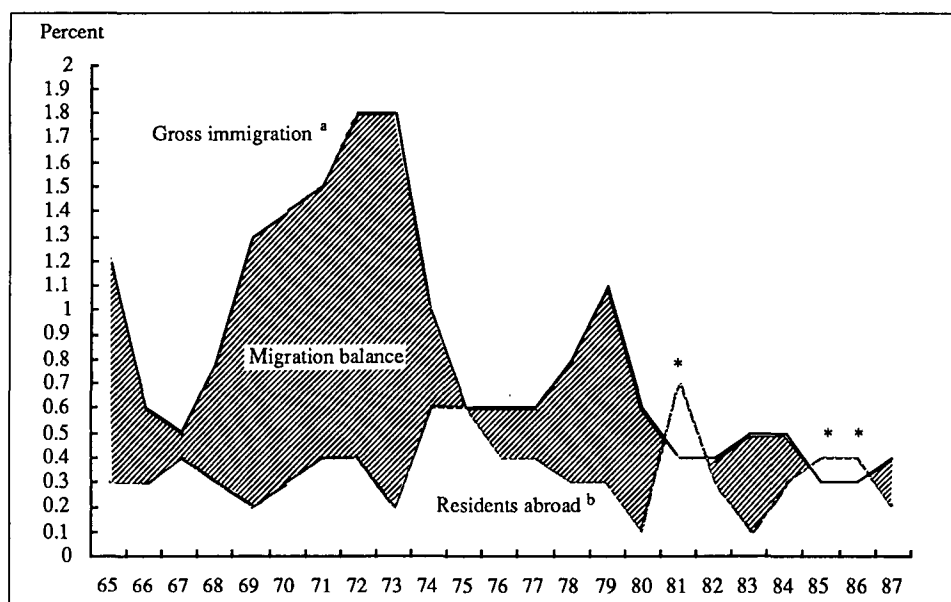
SOURCE: Central Bureau of Statistics, labor force surveys.

Table IV-5
REAL WAGES IN 1987 RELATIVE TO EARLIER PERIODS
 (Indexes, 1986=100)

	1984	1985	1986	1987	4th quarter		Percent change	
					1986	1987	1984- 1987	1986 IV- 1987 IV
Total	96.1	89.6	100.0	108.2	103.3	112.0	12.5	8.4
Business sector	92.4	88.5	100.0	108.4	103.8	113.1	17.3	9.0
Public services	105.5	92.5	100.0	107.4	101.9	108.7	1.9	6.7
Agriculture	93.9	87.9	100.0	109.6	105.5	114.1	16.7	8.2
Industry	94.7	90.3	100.0	107.3	102.8	110.7	13.3	7.7
Construction	91.7	85.7	100.0	116.6	108.4	129.3	27.2	19.2
Commerce & entertainment	86.2	86.6	100.0	108.0	106.7	116.9	25.3	9.6
Transport & communications	92.7	88.5	100.0	110.3	103.9	112.9	19.0	8.7
Financial services	88.9	86.8	100.0	105.2	100.0	107.8	18.3	7.8
Personal services	88.0	82.2	100.0	114.9	108.5	124.9	30.6	15.1

SOURCE: Central Bureau of Statistics data based on employers' returns to the National Insurance Institute, deflated monthly by the CPI and, in addition, corrected for the bias in the conventional method of deflation (see note b to Table IV-1). Includes workers from Judea, Samaria and the Gaza District employed in Israel.

Figure IV-3
MIGRATION BALANCE, 1965-87
 (Percent of permanent population)



^a Immigrants, tourists acquiring immigrant status, immigrant Israelis (children born abroad to Israeli nationals), and persons returning under the family reunion scheme.

^b Israelis residing abroad for over 12 months, less Israelis returning after absence of 12 months or more, potential immigrants going abroad, and residents who have not returned from a visit to Jordan. See also CBS, *Statistical Abstract of Israel*.

* Negative migration balance.

SOURCE: Central Bureau of Statistics.