

CHAPTER IX

INVESTMENT AND CONSTRUCTION

1. MAIN DEVELOPMENTS

Domestic investment turned up in 1978, ending five years of slowdown and even absolute decline. Total fixed investment, excluding ships and aircraft, rose by 7 percent; nondwelling investment increased by 11 percent, while investment in housing remained at its 1977 level (the downtrend was arrested and even reversed during the year). The turnabout in investment was fairly wide-ranging. Differences worth mentioning are those between business investments, which rose rapidly, and publicly financed infrastructure investments, which continued to fall, particularly in the case of transport and telecommunications. The further decrease in infrastructure investment (and public housing) apparently reflects not only a tight fiscal policy but also difficulties in implementing even budgeted activities (e.g. new public residential construction and expansion of the telephone network).

An additional distinction can be made between plant-intensive and construction-intensive investments. It takes a longer time for an increase in new building projects to find full expression in the investment data, due to their long gestation period. Thus, while the area of starts for all purposes rose in 1978 by about 20 percent, there was no change in total investment in construction between 1977 and 1978.

Since investment consists mainly of construction work and imported equipment, investment prices went up much faster in 1978 than at the general price level. The average increase was around 70 percent, while for imported equipment it reached over 80 percent. These were caused by the high effective devaluation in the case of imported equipment and the accelerated rise of construction prices, after they had lagged behind the general price level in the previous three years.

Basically, the renewed growth in investments in 1978 marks a turning point in the business cycle characteristic of the Israeli economy. The main determinants of the cycle in this country are fluctuations in immigration and investments, mainly in construction. After several years during which part of the excess investment was gradually activated (and other investments turned out to be unsuited to the altered demand pattern), the ground was set for a new takeoff during 1977. The first signs appeared in the housing market, which rapidly passed from a state of excess supply to excess demand. There was

TABLE IX-1
GROSS FIXED INVESTMENT BY SECTOR, 1975-1978
(IL million, at 1975 prices)

	1975	1976	1977	1978	1976	Percent annual change			1978 (IL mil- lion, cur- rent prices)
						1977	1978	Price change 1978	
1. Agriculture ^a	1,070	1,100	970	1,090	3	-12	12	59	3,050
2. Water	220	200	180	210	-8	-8	16	58	560
3. Electricity	780	830	940	960	6	13	3	67	2,830
4. Industry, mining and quarrying	3,690	3,380	2,960	3,550	-8	-12	20	71	10,490
5. Construction equipment	420	240	120	150	-43	51	24	73	420
6. Transportation and telecommunications ^b	2,930	2,570	2,240	2,520	-12	-13	12	82	8,230
Thereof: Excl. vehicles	1,910	1,950	1,290	1,220	-22	-13	-6	73	3,600
7. Trade, hotels and business services ^c	1,240	1,940	1,500	1,480	8	11	-1	65	4,410
8. Public services ^c	3,690	3,040	2,730	2,960	-16	-10	8	65	8,630
9. Total nondwelling investment (1-8)	14,040	12,700	11,640	12,920	-10	-8	11	74	38,620
10. Housing construction	8,730	7,640	6,040	5,940	-13	-21	-2	74	16,870
Private	5,100	4,910	4,610	4,870	-4	-6	6	75	14,230
Public	3,630	2,730	1,430	1,070	-25	-48	-25	54	2,630
11. Total fixed investment ^b (9+10)	22,770	20,340	17,680	18,860	-11	-13	7	71	55,490

^a Agriculture, forestry, and land amelioration, as well as investment in livestock.

^b Excl. ships and aircraft. This figure is given in more detail in Table IX-2.

^c Due to the lack of direct data on the distribution of investments in domestically produced equipment among the service subbranches, the distribution here between business and public services is a Bank of Israel estimate. For the purpose of this estimate, it has been assumed that such investments are distributed similarly to those in imported equipment. Public services include the central government, local authorities, the Jewish Agency, and nonprofit institutions.

SOURCE: Central Bureau of Statistics. The figures are rounded; the rates of change were calculated from the original data.

also an accelerated growth of private consumption (in particular purchases of durables), and business activity in general was stepped up to meet local demands.

The major role played by the domestic market in 1978 is reflected in the large number of industrial branches that increased their investments, whereas in the preceding two years, investments were concentrated in a few export-oriented branches.

As in the past, there were some special external factors which influenced in particular the timing and intensity of the turn of trend in the investment cycle. Just as the slump in investments from 1973 onward was affected by the world-wide economic recession (caused by the jump in raw material prices, particularly oil) and the policy of restraint following the Yom Kippur War, so we can single out several factors which probably affected the growth of investments in 1978. Among these were the liberalization of foreign currency control, which was accompanied by a large devaluation in the case of foreign currency transfers to Israel (the mean impact was felt in the housing market), and the additional protection of manufacturers producing for the local market. The peace process may also have contributed to the positive expectations concerning the level of activity, and hence also to investment plans.

In recent years there has been a strikingly rapid rise in the capital/product ratio. New investments, although on the decline, were larger than current discards, and so the capital stock increased, even though the stagnation of GNP did not justify such a growth.

This is generally attributed to a change in demand and production patterns (namely the expansion of exports as opposed to a slump in the domestic market). Plants in which production is shrinking find it difficult to reduce their capital stock beyond current discards, while new or expanding plants increase their capital stock. If, in addition, the weight of capital-intensive products grows (as happened in the case of the production and export of petrochemicals and minerals), this too pushes up the overall capital/product ratio. In this analysis, we assume the existence of unutilized capital in plants in which production decreased, and so the renewed growth of production in such plants should in itself help to decrease the capital/product ratio.

The expansion of investments in 1978 diminishes the validity of this explanation. It transpires that, together with the growth of production, there was a renewed increase in current investments in all industrial branches, including those which were supposed to possess unutilized capital stock. It seems therefore that the main reason lies in the subsidization of capital investments, which rose along with the acceleration of inflation. An increased capital subsidization obviously enlarges the gap between the profitability of an investment to the economy and its profitability to the individual investor, thus increasing the capital/product ratio. The subsidization of investment of capital grew in previous

years and increased further in 1978, due to the further escalation of inflation as well as to the amendment of the Law for the Encouragement of Capital Investments.

It is worthwhile noting that the revision of the law was intended mainly to simplify administrative procedures and was not utilized for the appraising of the whole subject of encouraging investments. Insofar as changes of economic significance were introduced, they amount, for the moment at least, to a heavier subsidization.¹

The policy of promoting investments as expressed in the Law for the Encouragement of Capital Investments – subsidized-interest development budgets, grants, tax refunds, accelerated depreciation for tax purposes, cheap credit through exchange rate and linkage insurance (and the tariff protection of local products against competitive imports) – came into existence when the economic scene was completely different from what it is today. From a state of unemployment and availability of uneducated and unskilled manpower, the Israeli economy passed to a state of manpower shortages, particularly manual labor, despite the fact that the economy possessed an additional reserve of unskilled manpower from the administered areas. The continued subsidization of capital investments (and protection of domestic production), under the present circumstances and those expected in the future, makes the achievement of our economic goals more difficult, in that it prevents the efficient use of the actual and potential manpower at the disposal of the Israeli economy. It should be emphasized that investments in labor-saving equipment for a given volume of production do not require capital subsidization (since the shortage of workers and the consequent rise in their wages make them worthwhile). However, capital subsidization encourages additional production activities (the scale effect), which augment the total demand for manpower. Among these activities are some that are not profitable to the economy, which has to pay the full price of the capital, but are profitable to the individual entrepreneur, who pays a reduced price for the capital made available to him.

Implementation of investments of doubtful benefit to the economy is not a new phenomenon. However, the previous four years, which saw a noticeable increase in capital subsidization, did not seem the right time to correct this distortion for fear of large-scale unemployment. In view of the mounting pressure on available resources, including a shortage of workers and the growth of the current deficit, it seems that the time is ripe to abolish capital subsidization.

A further distortion stemming from inflation is the inflationary taxing of profits. Some maintain that this may possibly offset the distortion in capital subsidization, but in

¹ For details, see the chapter on the financial institutions.

TABLE IX-2

GROSS FIXED INVESTMENT, BY TYPE OF ASSET, 1975-1978
(IL million, at 1975 prices)

	1975	1976	1977	1978	Percent annual change			Price change 1978	1978 (IL mil- lion cur- rent prices)
					1976	1977	1978		
1. Residential construction	8,730	7,640	6,040	5,940	-13	-21	-2	74	16,870
2. Nonresidential construction	5,810	5,170	4,950	5,030	-11	-4	2	62	14,030
3. Total construction	14,540	12,800	10,980	10,970	-12	-14	0	69	30,900
4. Equipment from domestic production	2,800	2,410	2,290	2,700	-14	-5	18	57	7,090
5. Imported equipment	5,690	5,300	4,810	5,500	-7	-9	14	81	18,950
6. Total equipment	8,490	7,720	7,100	8,200	-9	-8	15	73	26,040
7. Total investment in construction and equipment (3 + 6)	23,020	20,520	18,080	19,170	-11	-12	6	71	56,930
8. Land transport vehicles	1,020	1,070	950	1,300	5	-12	38	84	4,640
9. Ships and aircraft	260	190	410	320	-27	120	-23	93	1,430
10. Total equipment, excl. ships and aircraft	8,230	7,530	6,690	7,890	-9	-11	18	74	24,610
11. Total investment in construction and equipment, excl. ships and aircraft (10+3)	2,770	20,340	17,680	18,860	-11	-13	7	71	55,490

SOURCE: Central Bureau of Statistics. The figures are rounded; the rates of change were calculated from the original data.

fact it tends to aggravate the undesirable effect, resulting in an excessive volume of investments.

In housing construction the moderate tempo of the recovery is of special interest. The slow response of public construction (and of some large building companies traditionally associated with public construction and just as cumbersome in their operations) is a familiar feature of previous cyclical swings in this industry. But it is surprising that private housing starts also expanded modestly and during 1978 there was even some retreat. Basically it seems that private construction starts continue to move in step with effective demand for housing. What differentiates 1978 from the same stage of previous cycles is the restraining effect of the credit and assistance scheme for those entitled to housing (according to Ministry of Housing criteria) against the background of accelerated inflation. The lag in adjusting the amount of available credit for the rise in dwelling prices, which nearly doubled this year, prevented many who are eligible for such financing to public assistance from purchasing homes. The increase in nominal interest had a similar effect: in the case of large, long-term loans a rise in the nominal interest rate, even a low one, instead of indexing, resulted in a heavy initial burden which most eligible borrowers cannot assume. Thus we find that after an initial jump in home sales in 1977 and the early part of 1978, the level sagged, pulling down new construction starts.

The impression of a shortage of homes which prevailed in 1978 reflected more the soaring of prices and the fears of continuation of this trend along with the absence of a proper credit scheme, rather than an actual scarcity of housing. The level of current housing completions in recent years, including 1978, and data on the steady decline in overcrowding do not confirm this feeling. The sense of shortage can be partially attributed to the improved housing norms which accompanied the secular rise in housing standards.

During 1978 suggestions were made to change the credit scheme, the main points of which were indexing the loans and monthly repayments, greatly increasing the size of the loans, and providing direct budgetary grants in place of subsidization through artificially lowered interest rates.

Experience shows that an increase in private housing starts can be expected along with a rise in purchases, and if the credit and assistance scheme facilitates purchases (not necessarily of new homes), the construction industry can boost supply well above the present level (about 30,000 starts). It should be remembered that in the early 1970s the annual level of starts reached approximately 70,000, and that the industry is able to start and complete over 50,000 units a year.

On the other hand, from the point of view of supply, the acceleration of inflation causes a severe problem, namely the imposition of income tax and value added tax on in-

TABLE IX-3

GROSS FIXED CAPITAL STOCK BY SECTOR 1960-1979

	Percent increase in gross capital stock								Change in gross capital stock in 1978 ^a (IL billion, 1978 prices)				Distribu- tion of gross capital stock at beginning of 1979 (%)
	Average								Stock at beginning of 1978	Gross investment during 1978	Retirement in 1978	Stock at beginning of 1979	
	1960- 1965	1965- 1968	1968- 1973	1974	1975	1976	1977	1978					
Agriculture	5.8	3.4	3.6	4.9	5.2	5.0	3.8	4.1	51.5	3.05	0.92	53.6	9.1
Water	9.0	4.3	2.2	2.1	2.3	2.0	1.7	2.0	21.4	0.56	0.12	21.9	3.7
Industry	9.0	3.5	10.1	8.2	8.3	6.7	5.1	6.2	122.0	10.49	2.97	129.6	22.1
Construction equipment	13.5	1.2	4.6	8.8	7.1	2.6	-0.9	-0.1	9.0	0.42	0.44	9.7	1.7
Electricity	7.5	7.0	6.3	7.0	7.5	7.4	7.9	7.6	26.7	2.83	0.65	28.9	4.9
Transportation	15.1	11.6	12.3	9.4	5.3	3.8	2.6	2.9	160.3	9.67	5.33	164.7	28.0
Public services	15.8	13.1	11.1	1.9	9.7	7.0	5.6	5.6	126.6	8.63	1.47	133.8	22.8
Private services	16.3	11.4	9.4	9.4	7.1	6.9	6.8	5.4	42.6	4.41	2.01	45.0	7.7
Total nondwelling capital stock	10.9	7.5	9.0	8.0	7.0	5.5	4.4	4.7	561.0	40.06	13.89	587.1	100.0
Residential housing	9.7	7.0	8.6	9.9	8.5	6.8	5.0	4.7	347.2	16.87	0.75	363.3	
Total fixed capital stock	10.4	7.3	8.8	9.1	7.6	6.1	4.7	4.7	908.2	56.93	14.64	940.4	

^a Rounded figures. The rates change were calculated from original data.

SOURCES: Central Bureau of Statistics and Bank of Israel.

flationary profits derived from the holding of inventories by the builders, particularly of land. A partial solution to the problem is "percentage transactions"² with land owners, and construction contracts placed by the final purchaser on a plot he himself acquires. Contractual connections of this nature have increased lately, but they do not provide a full solution.

Dwelling prices went up twice as fast as the general price level in 1978, whereas previously they had lagged behind the general price rise. The jump in prices stemmed mainly from the reduced supply of completed or nearly completed new units. Their supply is highly inelastic in the short run due to the long duration of construction, and a drop in starts in the preceding years caused the short supply in 1978. In the last quarter the uptrend in the relative price of homes slowed, as sales sagged and the unsold stock of dwellings in the hands of the builders increased. The probable reasons for the subsiding of demand during 1978 were given above, and it should not be assumed that the stabilization of sales and construction starts is likely to persist.

2. NONDWELLING INVESTMENT

An increase of about 10 percent in nondwelling investment (excluding ships and aircraft), following declines at a similar rate in the two preceding years and the slackening of growth in 1973-75, no doubt signifies a turnabout in the investment trend.

In contrast to the previous two years the growth of investment embraced most sectors of the economy, and in industry most of its branches. It is possible, therefore, to point to a clear connection between the renewed growth of investments and the general recovery in domestic market activity which, compared with exports, was assisted by an increased protection against competing imports. It may also be that part of the incremental investment in 1978 was not a response to the actual increase in domestic demands, but reflected entrepreneurs' expectations of an accelerated rise in these demands in the future.

A high 17 percent increase was recorded in agriculture. This was due mainly to the large number of hothouses constructed for growing flowers for export, with the financing exceeding the amount of directed and subsidized credit available.

The biggest rise was in imported commercial vehicles, which were up about 40 percent after dipping sharply in the previous three years. Most of the steep upswing was account-

² I.e. the acquisition of land in exchange for some of the homes to be built on it. The transaction saves the builder the cost of financing the land and the payment of income tax on inflationary profits derived from the appreciation of land values.

ed for by private cars (30 percent of which are included in business investment) and small commercial vehicles, which are a close substitute for private cars. The purchase of heavy trucks, demand for which was expected to grow, was held up due to expectations of an increase in the rate of subsidized financing by the government. In this context it should be noted that excess trucking capacity was built up as a result of the rush imports after the Yom Kippur War, while demand for transport services, in which excavation work is a large component, was considerably reduced.

In private services, the uptrend in investment was arrested. But unlike the rest of the economy, this sector did not experience a cessation of growth in previous years. It suffered less from the general slowdown of the economy, apparently due to the secular rising trend in the weight of services with the increase in GNP and the standard of living, including the growing importance of the large capital-intensive marketing chains and the spreading of technological changes, from computerization in financial and business services to the introduction of frozen foods. The economic reform significantly increased the export profitability of various services. However, at this stage, there are no data indicating new investments in services which can be attributed to this development.

In contrast to the cessation of investment growth in business services, there was a larger investment this year in public services, notably in the construction of health institutions and public buildings. Despite this increase, total investment in public services in 1978 was still about 20 percent lower than in 1975.

The much larger capital spending by industry in 1978 constitutes a clear change of trend. In the two preceding years total industrial investment shrank despite the heavy subsidization of capital, structural changes, and large investments in a number of export projects in mining and quarrying and petrochemicals. Developments in domestic demands, which dictated the decline in 1976–77, were also responsible for the renewed growth in 1978. A distinct indication of this is the fact that most branches of industry shared in the growth, and not only those producing largely for export. The unification of exchange rates, which was not accompanied by any significant exposure of local goods to competing imports, increased the absolute profitability (and profitability relative to export) of production for the domestic market, particularly since this change coincided with the recovery of this market. Just as it is not clear whether an increased investment in production for the local market is desirable (because of the high protective barriers and the heavy subsidization of capital), the same reservation can be made for some export investments. In recent years a number of investments were made because of the availability of a relatively large amount of directed and subsidized credit and the direct incentives granted under the policy of promoting export expansion, without any possibility of ascertaining whether in the final analysis this would improve balance of

payments. When most exchange rate differentials were abolished in October 1977, some of these projects faced the prospect of unprofitable production despite the heavy subsidization of capital, next to raw materials the main component in production costs. In reaction to the above, various enterprises demanded (and some obtained on the strength of commitments given to them in the past) further subsidization through the extension of additional cheap credit.

Infrastructure investments continued to shrink, apart from electricity and water. The continuing decline in roads and telecommunications³ took place despite the chronic lag, which in 1978 was accentuated by the acceleration of the general level of economic activity. This lag greatly hampers entrepreneurs whose specific investments are subsidized. This attitude toward infrastructure investments probably stems from the fact that they are directly financed through the government budget, unlike the subsidization of business investments which are partly implemented through extrabudgetary arrangements (such as administrative protection against competing imports and exchange rate and indexation insurance for loans).

If the curtailment of public infrastructure investment can in fact be attributed to the desire to restrict aggregate domestic demand because of inflation and the deficit in the balance of payments, then it should be pointed out that the subsidization of business investments, even if it is not expressed directly in the budget, has no less an effect on aggregate demand than infrastructure investments or any other public expenditure. On the contrary, since subsidization also stimulates investments that are not profitable to the economy, preventing such investments in order to reduce aggregate domestic demand should be accorded priority over any other curtailment in expenditure.

3. RESIDENTIAL CONSTRUCTION

The cyclical nature of the construction market and the tendency toward divergence once it experiences deviation from the equilibrium trend, have been discussed at length in Bank of Israel Annual Reports since the mid-sixties. An initial shortage which sparks a rise in prices followed by the advancing of purchases and speculative demand in anticipation of a continued shortage and further price rises is by now a familiar process. What distinguishes the present upswing is the significant price rises (mainly in relation to current income and mortgage credit), which are dampening demand for additional homes.

³ The data on investment in "Transportation and telecommunications, less vehicles" in Table IX-1 mainly reflect public infrastructure investments.

TABLE IX-4

PRINCIPAL DATA ON CONSTRUCTION ACTIVITY, 1975-1978

	1975	1976	1977	1978
Total output (IL million, at 1975 prices)	16,580	14,260	12,290	12,310
Investment in housing	8,730	7,640	6,040	5,940
Investment in nonresidential construction	5,810	5,170	4,950	5,030
Output of other construction ^a	2,040	1,460	1,310	1,340
Construction starts (million m ²)	6.3	5.6	4.7	5.6
Residential	4.7	3.7	3.0	3.7
Nonresidential	1.6	1.9	1.7	1.9
Home construction starts (thousands)	52	35	27	33
Home construction completions (thousands)	56	56	43	36
Employed (thousands)	126	119	114	111
Israelis	90	86	85	80
From administered areas	36	33	29	31
Cement sales (millions of tons)	2.4	2.1	1.9	2.0
Investments in construction equipment (IL million, 1975 prices)	420	240	120	150
Annual average change in price indexes: (percent)				
Housing construction inputs	30.7	26.4	30.9	57.3
Road construction inputs	49.1	26.0	36.3	75.1
Construction starts in Judaea, Samaria, and the Gaza strip (million m ²)	0.8	0.9	0.9	1.1

^a Defense construction and a partial estimate of maintenance work. We do not possess an overall estimate which includes renovations and alterations, and therefore the output estimate is biased downward, a bias which has been increasing in the past years.

SOURCE: Central Bureau of Statistics.

This explains the relatively low level of construction starts in 1978 (compared with earlier periods of cyclical upturn), following an initial jump of about 50 percent in the volume of starts at the end of 1977 and beginning of 1978. The credit and assistance scheme in force in 1978 was characterized by nonindexed credit and current payment terms, and consequently the loans were also small in proportion to the total price, the

TABLE IX-5

AREA OF NONRESIDENTIAL CONSTRUCTION STARTS, 1974-1978
(thousands of m²)

	Total non-residential starts	Hotels, commercial, and office buildings	Industrial premises and workshops	Public buildings	Farm structures ^a
1974	2,120	330	775	595	425
1975	1,600	180	560	530	325
1976	1,870	330	490	635	420
1977	1,710	250	450	655	355
1978	1,870	330	590	680	265

^a Does not include hothouses.

SOURCE: Central Bureau of Statistics.

repayment period was short, and the initial payments were high, because of the large subsidization element in nonindexed credit. This arrangement not only did not interfere with, but in fact gave a stimulus to, the rather more affluent, part of whose demand for (additional or improved) housing can be deferred. The worst hit were low-income first-time potential purchasers. The ability to influence the volume of current demand through the credit scheme was therefore not properly utilized. Where binding norms exist for various population groups entitled to a certain housing standard with government assistance, the inability to realize the normative demand due to price rises and the lack of adequate mortgage credit⁴ does not bring about a stable equilibrium. Social pressures tend to lead to a massive increase in various kinds of public assistance, so that the nominative demand finds full expression in the market place. The final result is the intensification of effective demands along with the increase in credit and assistance, which encourages advance and speculative purchases (which in turn aggravate it further). Another

⁴ Whereas dwelling prices nearly doubled between 1977 and 1978, the increase in the size of loans for those eligible for public assistance ranged from 10 percent (young couples) to 30 percent (those living in overcrowded conditions and new immigrants).

potential problem which may aggravate the situation is the growth discerned in immigration to Israel, which might assume large proportions.

The steep price rises in both completed homes and inputs (land and building materials) should be viewed mainly as an adjustment to the general inflation after they had lagged behind the increase in the general price level in the preceding three years.

The long gestation period of housing construction obviously forms a convenient background for a price rise stemming from increased demand. The volume of new construction starts is also relatively inelastic, although to a lesser extent. However, Table IX-8 shows that the bottleneck most responsible for price rises in the market is the supply of dwellings in advanced stages of construction: there was a striking drop in the stock of unsold units not yet finished. The unexpected increase of this stock at the end of 1978 reflected a fall in sales, which, as stated above, can be attributed to the constraints imposed by price rises and the credit and assistance scheme (see Table IX-8).

It seems that the feeling of a shortage of homes which prevailed in 1978 reflected the soaring of prices and fear of a continuation of this trend more than a real shortage. The level of current housing completions in recent years, including 1978, and data on the continued drop in overcrowding do not confirm this feeling of a shortage. It stemmed partially from a rise in housing norms, which accompanied the rise in the general standard of housing, including the growing tendency of young single people, to establish separate households. Despite all this, there is no doubt that compared to the situation two years ago the choice of apartments available for sale or rent has shrunk, and there has been an even more conspicuous change in prices.

A. PUBLIC RESIDENTIAL CONSTRUCTION

Overbuilding initiated by the Ministry of Housing in 1974 and the beginning of 1975 created surpluses which pressured the market in 1975-77. From a peak of about 11,500 starts in the first quarter of 1975, the level dropped to 1,500 in the first quarter of 1977 and a quarterly average of some 1,800 in 1978.

The Ministry of Housing was aware this time that the volume of current starts (including private construction) during the downswing was too low, and in view of the long gestation process it was not advisable to delay renewing starts until a shortage arose. But since thousands of empty apartments were available, and there was need to assist large construction companies which were in difficulties, the Ministry found it impossible to persuade the Ministry of Finance and the Knesset to allocate funds for new construction.

Already at the end of 1973 the Ministry of Housing tried to step up its assistance to various eligible groups and to enlarge the number of persons entitled to receive cheap credit, in order to encourage the purchase of homes during the slump and thereby moder-

TABLE IX-6

RESIDENTIAL CONSTRUCTION, 1967-1978

(thousands of units)

	Total	Starts		Completions			
		Private construction	Public construction	Total	Private construction	Public construction	
1964	48.4	21.1	27.3	38.0	18.8	19.2	
1967	19.0	9.8	9.3	27.9	15.3	12.6	
1968	24.3	15.8	8.4	22.6	13.2	9.4	
1972	67.5	37.0	30.5	47.3	26.9	20.5	
1974	58.6	25.3	33.3	51.7	27.8	23.9	
1975	51.6	23.9	27.7	55.6	29.1	26.5	
1976	35.4	23.1	12.3	55.6	28.2	27.5	
1977	26.7	20.9	5.9	42.8	23.3	19.6	
1978	32.4	25.3	7.2	35.6	20.6	15.0	
Quarterly data							
1977	I	6.3	4.6	1.7	12.1	6.3	5.9
	II	6.8	5.2	1.6	10.8	6.1	4.6
	III	6.4	5.3	1.1	10.2	5.4	4.8
	IV	7.2	5.8	1.5	9.8	5.5	4.3
1978	I	8.5	6.6	1.9	9.0	5.3	3.6
	II	8.3	6.8	1.6	9.5	5.2	4.3
	III	7.6	5.7	1.9	8.8	4.7	4.1
	IV	8.0	6.2	1.8	8.3	5.3	3.0

SOURCE: Central Bureau of Statistics.

ate the cyclical downturn in the housing market. But because of the expectations engendered by the surplus of homes and the drop in their relative price or expectations which prompted the deferral of purchases increasing the size of mortgage loans was not sufficient. These improvements in the terms of assistance tended, if anything, to further intensify these expectations. In view of the special nature of the housing market, including expectational effects and flexibility in the timing of purchases, it seems that there is a

TABLE IX-7

HOME SALES AND PRICES, 1971-1978

	Price index for privately built homes in urban centers	Percent annual average change in private home prices	Ratio between change in private home price index and change in consumer prices (annual average) (%)
1971	100	28.1	+14.4
1972	95	31.9	+16.8
1973	75	27.9	+6.6
1974	68	39.8	0
1975	52	26.0	-9.5
1976	46	9.3	-16.8
1977	49	12.0	-16.8
1978	55	93.3	+28.4

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

need for a flexible program which will help to neutralize the public's expectations in an attempt to regulate the volume of purchases.

The renewed growth of immigration provides a suitable opportunity for re-examining the housing policy for immigrants. In recent years the government has tended to withdraw from direct construction activity and allocation of dwellings (the reference is to the initiation and financing of projects and allocation of homes; in actual fact "public construction" too is carried out by private firms and builders). A clear manifestation of this trend was the decision taken at the end of 1974 to assist young couples to purchase homes from any source, not necessarily from the Ministry of Housing or from firms which put up homes in coordination with and through the partial financing of the Ministry. This liberalization trend was not applied to immigrant housing, and here the allocation of publicly constructed dwellings continues to be the practice. Apart from the possible pitfalls inherent in an administrative system which allocates highly expensive properties, the experience of previous peak periods of immigration shows that precisely at a time of

TABLE IX-8

**SALES, UNSOLD INVENTORY, AND PRICES IN THE
PRIVATE HOUSING MARKET, QUARTERLY, 1977-1978**

	Private home sales in 21 urban centers	Percent of unsold homes held by builders in total units under construction through framework	Percent of unsold homes held by builders in total units under construction in final stages	Quarterly change in private home prices ^a compared to consumer price index
1977				
I	2,695	78.0	71.2	-2.5
II	3,230	72.7	59.4	-5.0
III	2,700	72.4	61.6	-2.0
IV	3,300	66.8	56.8	-4.0
1978				
I	4,420	57.5	47.2	+8.7
II	3,170	66.8	44.5	+12.2
III	3,255	64.1	34.3	+17.8
IV	2,405	70.7	48.4	+9.6

^a The average of the prices in a semi-annual survey, whose midpoint is the end of the quarter, divided by the average for the previous half year. Every two consecutive surveys have an overlapping quarter. For example, the 12.2 percent price rise in the last quarter of 1977 was obtained by dividing the average of the survey prices for the period 1.10.77-31.3.78 by the average for the period 1.7.77-31.12.77.

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

housing shortage those responsible for the administrative distribution tend to hoard many units. From every viewpoint, including that of the immigrants, helping newcomers to find a permanent housing solution by providing financial assistance seems to be the best method.

The declared intentions regarding new public construction starts did not materialize in 1978, largely due to objective difficulties in the administrative and financial planning stages, which are typical of government offices when making contractual business connec-

tions. However, the actual announcement of such intentions might have deterred private contractors from starting a larger number of units on their own initiative, because of growing uncertainty over the total supply likely to be put on the market.

4. FACTORS OF PRODUCTION

As stated before, because of the long time it takes to build homes, there was no change in total construction activity in 1978 despite the upturn in starts. The main indicators – employment and cement sales – point to stability. The withdrawal of Israeli workers from the sector continued, and in their stead came workers from the administered areas, whose number increased after three years of decline (see Table IX-4).

From experience of previous construction cycles, it can be unequivocally stated that a shortage in productive factors was not the cause of the housing shortage in 1978, although the transition from a declining to a rising trend is naturally characterized by a heavier demand for and an increase in the relative price of various inputs, including wages. However, the construction industry has not yet encountered difficulties in recruiting labor, as most construction workers do not require long and special training. Despite this, it has been the practice to impose administrative curbs on one segment of nonresidential construction or another whenever a housing shortage crops up. This has happened three times in the last 15 years – in 1965, 1969 and 1974; in addition, in 1973 an announcement was made regarding a mooted step in this direction. In all cases the restrictions failed to help alleviate the housing shortage but did succeed, to a greater or lesser extent, in disrupting construction activity. They prevented the construction of such public installations as telephone exchanges, and led to the conversion of residences into offices, including governmental, which involved a larger expenditure of money and productive factors. If undesirable construction activity is carried out – as is likely, given the heavy subsidization of investments – this should be prevented by abolishing the subsidy and withholding funds, rather than by administrative curbs.

With regard to labor, in previous boom periods the construction industry had at its disposal an abundant supply of unskilled labor drawn from among new immigrants and later on residents of the administered areas (after the Six Day War). The supply was so ample that builders refrained from adopting the modern labor-saving production methods widely used throughout the world (other than equipment possessing such an outstanding advantage as excavating equipment and cranes and premixed concrete). This resulted in an extraordinary decline in the amount of capital per employed in the early seventies when construction was booming.

TABLE IX-9

**CHANGES IN CONSTRUCTION ACTIVITY IN THE LATEST BUILDING
CYCLES, SELECTED YEARS**
(percent)

	Total construction output	Employed	Cement sales
1. 1967 compared to 1965	-28	-32	-38
2. 1977 compared to 1975	-30	-10	-19
3. 1971 compared to 1967	+108	+67	+157
4. 1971 compared to 1965	+50	+14	+60

NOTES:

- (a) 1965 and 1975 were the peak years of the construction booms; 1967 and 1977 were the low points.
- (b) Problems in measuring output were apparently partly responsible for upsetting the input-output ratios from 1975 to 1977. The growing volume of additions and alterations ties down workers, but for the most part is not included in output estimates. In addition, there has been a boom during the past few years in construction activity in Judaea, Samaria and the Gaza strip, but the available data do not permit the separation of total cement sales between Israeli construction, for which there are output estimates, and Arab construction in the administered areas.

SOURCE: The rates of change were calculated according to Central Bureau of Statistics data.

Such an abundant supply of unskilled manpower is not expected in the coming years unless the employment of workers from abroad is permitted. However, in view of the above, it is reasonable to assume that productivity could be boosted considerably by adopting the production methods and building materials in general use elsewhere. Furthermore, because of the employment of many unskilled workers in protected and subsidized, and therefore inefficient, local production, in industry, agriculture, and tourism, the manpower supply at the disposal of the construction industry could probably be increased if the policy of encouragement through tariff protection and subsidization of capital is stopped.