

## CHAPTER XIII

# CONSTRUCTION AND HOUSING

### 1. MAIN DEVELOPMENTS

CONSTRUCTION ACTIVITY fell off sharply in 1966, after five successive years of expansion. Investment<sup>1</sup> in building and other construction<sup>2</sup> amounted to IL 1.5 million, about 20 percent less than in 1965, with decreases being recorded in all types of construction.

The downtrend actually started in the second half of 1965, although the annual level of activity in 1965 was some 5 percent higher than in 1964. Apart from a small increase in the last quarter, the area of new construction started declined during 1966, continuing the downward movement which began in the second quarter of 1965. The reduction in the area of starts was greater than that in total activity—approximately 32 percent as compared with 1965, which in turn was down about 15 percent from the 1964 level. The relatively smaller decline in activity is mainly ascribable to the duration of the production process in this industry. In fact, a substantial part of the work in 1966 was on buildings started in the two preceding years, and the total area of construction completed during the year as a whole was similar to that of previous years, although here too the trend in the course of 1966 was downward.

Fluctuations in the level of construction activity are common in Israel and in other countries, and this mainly because of the long production process, and also owing to other factors hampering the adjustment of output to changes in the volume, composition, and geographical dispersion of demand. Even so, the decline in 1966 was exceptionally severe. In 1956, a year regarded as particularly slack, the reduction came to about 10 percent; and in 1960, also considered a slump year as far as building is concerned, the figure dropped by only 1 percent (see Tables XIII-2 and XIII-3).

The sharp retreat was reflected chiefly in the level of employment in the construction and allied industries. Owing to the big weight, compared with other

<sup>1</sup> Output of the construction sector includes, in addition to the investment estimates (value of construction put in place), defense construction and maintenance and repair work. However, owing to the lack of data on part of the latter activities, they have been excluded from this survey (according to various indicators, they account for about 10 percent of total output).

<sup>2</sup> E.g. roads, ports, water and electric power lines, etc.

**Table XIII-1**  
**VALUE OF NEW CONSTRUCTION, BY TYPE, 1965-66**  
 (IL million, at current prices<sup>a</sup>)

|  | 1965  | 1966  | Percent increase<br>or decrease (-) |
|--|-------|-------|-------------------------------------|
| <b>Residential</b>                     |       |       |                                     |
| Private                                | 621   | 515   | -17                                 |
| Public                                 | 353   | 261   | -26                                 |
| Total                                  | 974   | 776   | -20                                 |
| <b>Nonresidential</b>                  |       |       |                                     |
| Agriculture <sup>b</sup>               | 27    | 26    | -4                                  |
| Irrigation                             | 59    | 61    | 3                                   |
| Industry                               | 122   | 68    | -44                                 |
| Mining and quarrying                   | 32    | 19    | -40                                 |
| Electric power                         | 37    | 37    | —                                   |
| Transportation and com-<br>munications | 206   | 164   | -20                                 |
| Commercial premises, hotels,<br>etc.   | 82    | 57    | -30                                 |
| Public institutions and services       | 330   | 293   | -11                                 |
| Thereof:                               |       |       |                                     |
| Buildings                              | 290   | 264   | -9                                  |
| Other construction work                | 40    | 29    | -28                                 |
| Total nonresidential<br>construction   | 895   | 725   | -19                                 |
| Grand total                            | 1,869 | 1,501 | -20                                 |
| Thereof:                               |       |       |                                     |
| Buildings                              | 1,508 | 1,203 | -20                                 |
| Other construction<br>work             | 361   | 298   | -18                                 |

<sup>a</sup> There was no change in prices between 1965 and 1966, other than an increase of 1 percent for transportation and communications.

<sup>b</sup> Excluding work that does not come under the category of construction, such as afforestation, land reclamation, etc.

SOURCE: Central Bureau of Statistics.

countries, of construction in the national product, the marked decline in its activity contributed to the recession which hit the entire economy in 1966.<sup>1</sup>

The steep fall in the value of construction put in place in 1966 must be viewed in conjunction with developments in demand and supply conditions in this sector in previous years. In 1961-63 demand had grown steadily. As regards residential

<sup>1</sup> See Chapter II, "Resources, Uses, and Incomes"; Chapter IX, "Population, Labor Force, and Employment"; and Chapter XII, "Industry".

Table XIII-2

## VALUE OF NEW CONSTRUCTION, BY TYPE, 1955-66

(IL million, at 1964 prices)

|   | 1955 | 1956 | 1957 | 1958 | 1959  | 1960  | 1961  | 1962  | 1963  | 1964  | 1965  | 1966  |
|---|------|------|------|------|-------|-------|-------|-------|-------|-------|-------|-------|
| <b>Residential</b>                      |      |      |      |      |       |       |       |       |       |       |       |       |
| Private                                 | 263  | 233  | 224  | 247  | 287   | 305   | 359   | 416   | 484   | 544   | 592   | 490   |
| Public                                  | 187  | 158  | 254  | 224  | 237   | 206   | 266   | 371   | 296   | 322   | 336   | 249   |
| Total                                   | 450  | 391  | 478  | 471  | 524   | 511   | 625   | 787   | 780   | 866   | 928   | 739   |
| <b>Nonresidential</b>                   |      |      |      |      |       |       |       |       |       |       |       |       |
| Agriculture <sup>a</sup> and irrigation | 135  | 113  | 100  | 111  | 113   | 124   | 123   | 147   | 152   | 107   | 82    | 83    |
| Industry                                | 19   | 26   | 26   | 57   | 76    | 74    | 91    | 90    | 96    | 126   | 116   | 65    |
| Mining and quarrying                    | 23   | 13   | 11   | 6    | 12    | 12    | 15    | 34    | 49    | 47    | 30    | 18    |
| Electric power                          | 32   | 41   | 24   | 22   | 29    | 26    | 25    | 29    | 28    | 32    | 35    | 35    |
| Transportation and communications       | 32   | 28   | 72   | 48   | 69    | 47    | 65    | 76    | 105   | 166   | 196   | 154   |
| Commercial premises, hotels, etc.       | 20   | 22   | 26   | 25   | 29    | 44    | 61    | 53    | 59    | 69    | 78    | 55    |
| Public institutions and services        | 94   | 94   | 126  | 143  | 162   | 164   | 172   | 188   | 235   | 274   | 314   | 278   |
| Total                                   | 355  | 337  | 385  | 412  | 490   | 491   | 552   | 617   | 724   | 821   | 851   | 688   |
| Grand total                             | 805  | 728  | 863  | 883  | 1,014 | 1,002 | 1,177 | 1,404 | 1,504 | 1,687 | 1,779 | 1,427 |

<sup>a</sup> Excluding work that does not come under the category of construction, such as afforestation, land reclamation, etc.

SOURCE: Central Bureau of Statistics.

building, this stemmed from the doubling of immigration in 1961 and its continued expansion in 1962 and 1963, the growth of private incomes, and the devaluation early in 1962 which altered the profitability of holding foreign currency assets relative to real estate. The comparatively slow adaptation of the industry to mounting demand caused prices to soar, engendering on top of this a speculative demand fed by expectations of a further rise in prices. The much larger demand led to a marked expansion of production capacity in construction and allied industries and to an increase in output to meet the peak demand, including that of a speculative nature.

Just as advance and speculative buying, as long as it lasts, generates a demand greater than would be justified by real factors (growth of the population and private income), so its inevitable cessation depresses demand more than would be justified by such factors. This apparently happened in 1964, and, together with the substantial increase in the supply of completed housing units for the regular market and of other buildings (industrial, commercial, and office premises for sale or rental purposes), it led to a surplus of completed buildings in 1964. Despite this excess supply—which eliminated the motive for speculative purchases and caused a further slackening of demand owing to expectations of lower prices—the volume of starts continued to expand even more rapidly, as developments in taxation and legislation prevented supply from adjusting to the falling level of demand. At the beginning of 1965 the inventory of buildings in process reached a record 7 million sq. meters approximately, and in the second quarter the volume of starts began to fall precipitately—a development that had been held back till then because of the upsurge in starts induced by the impending administrative order restricting building.

These factors continued to operate and were even intensified in 1966. Immigration dropped off further, and for the first time there was even an absolute decrease in real private income per capita. In addition, uncertainty as to future income and expectations of lower prices and of concessions in mortgage loan terms led to the deferment of home purchases. Although building starts had begun to move downward in the second quarter of 1965, completions did not fall off in 1966 and exceeded the reduced demand. A further curtailment of building starts during 1966 was the inevitable consequence.

Nonresidential construction—industrial, commercial, and office premises—showed the same pattern as housing. Here too there had been excessive construction in 1962–64, due to speculative considerations and the general boom in real estate. An additional factor in the subsequent slump was the contractionary influence of the gradual completion of large-scale development projects, such as the National Water Carrier, the building of Ashdod Port and other harbor work, and the expansion of the Dead Sea Works and Timna copper mines, without any similar projects being launched in 1966. The slower growth of the national product in 1965 and 1966 and the decline in profitability dampened demand for buildings in the productive and service sectors. As a result, there was a 19

Table XIII-3

REAL CHANGE IN VALUE OF NEW CONSTRUCTION, BY TYPE, 1956-66<sup>a</sup>

(percentages)

|                                   | Increase or decrease (-) as against previous year |           |           |           |           |           |           |           |           |          |            |
|-----------------------------------|---|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|----------|------------|
|                                   | 1956  | 1957      | 1958      | 1959      | 1960      | 1961      | 1962      | 1963      | 1964      | 1965     | 1966       |
| <b>Residential</b>                |   |           |           |           |           |           |           |           |           |          |            |
| Private                           | -11   | -4        | 10        | 16        | 6         | 18        | 16        | 16        | 12        | 9        | -17        |
| Public                            | -16   | 61        | -12       | 6         | -13       | 29        | 39        | -20       | 9         | 4        | -26        |
| <b>Total</b>                      | <b>-13</b>  | <b>22</b> | <b>-2</b> | <b>11</b> | <b>-2</b> | <b>22</b> | <b>26</b> | <b>-1</b> | <b>11</b> | <b>7</b> | <b>-20</b> |
| <b>Nonresidential</b>             |   |           |           |           |           |           |           |           |           |          |            |
| Agriculture and irrigation        | -16   | -12       | 11        | 2         | 10        | -1        | 20        | 3         | -30       | -23      | 1          |
| Industry                          | 37  | —         | 119       | 33        | -3        | 23        | -1        | 7         | 31        | -8       | -44        |
| Mining and quarrying              | -44   | -15       | -46       | 100       | —         | 25        | 127       | 44        | -4        | -36      | -40        |
| Electric power                    | 28  | -42       | -8        | 32        | -10       | -4        | 16        | -3        | 14        | 9        | —          |
| Transportation and communications | -13   | 157       | -33       | 44        | -32       | 38        | 17        | 38        | 58        | 18       | -21        |
| Commercial premises, hotels, etc. | 10  | 18        | -4        | 16        | 52        | 39        | -13       | 11        | 17        | 13       | -30        |
| Public institutions and services  | —   | 34        | 13        | 13        | 1         | 5         | 9         | 25        | 17        | 15       | -11        |
| <b>Total</b>                      | <b>-5</b>   | <b>14</b> | <b>7</b>  | <b>19</b> | <b>—</b>  | <b>12</b> | <b>12</b> | <b>17</b> | <b>13</b> | <b>4</b> | <b>-19</b> |
| <b>Grand total</b>                | <b>-10</b>  | <b>19</b> | <b>2</b>  | <b>15</b> | <b>-1</b> | <b>17</b> | <b>19</b> | <b>7</b>  | <b>12</b> | <b>5</b> | <b>-20</b> |

<sup>a</sup> Calculated from Table XIII-2.

SOURCE: Central Bureau of Statistics.

percent decline in the value of nonresidential construction put in place and one of 26 percent in the area of starts.

With the development of the strong upward trend in construction activity from 1961 on, no serious attempt was made to keep demand in line with output. Together with the growth of publicly-sponsored immigrant housing and of private residential and nonresidential construction, there was a substantial increase in public building for the regular housing market and other purposes. Instead of a temporary curtailment of construction that could be postponed, a strong fillip was given to the expansion of the construction industry and of industries supplying it with inputs.<sup>1</sup>

This rapid expansion of the industry's productive capacity, and especially its growing share in total gainful employment during the years 1961 to 1963, made it necessary to restrain construction activity. The further expansion in 1964, mainly due to the increase in public building, caused a temporary labor shortage despite the enlarged capacity, and resulted in the publication in January 1965 of an administrative order restricting building. But this came too late, for construction activity was anyway on the point of declining owing to the excess supply of completed buildings in 1964. Moreover, knowledge of the impending curbs engendered expectations of a renewed shortage and touched off a final wave of new building at the end of 1964 and early in 1965 in types of construction scheduled to be most severely curtailed—housing, public buildings, and business and office premises. The enlarged stock of completed buildings and of those in process on the one hand, and the subsiding of demand on the other, caused a sharp drop in building starts as from the second quarter of 1965. Yet, one of the principal objects of the policy measures in 1966 was the deliberate contraction of the share of construction in total output, with a shifting of manpower to export industries.

The policy of economic restraint found expression, among other things, in the postponement of new Government offices and in the exertion of pressure on local authorities to trim their development budgets (devoted mostly to roads, schools, sewerage, etc.) However, no curbs were imposed on housing or structures for the different sectors of the economy. Moreover, the restrictions imposed by the administrative order of January 1965, which in any case were ineffective, were lifted in early 1966.

The economic slowdown policy affected construction activity in 1966 also in that it helped to further reduce demand because of the uncertainty as to future incomes. But its principal contribution lay in the refraining from undertaking new

<sup>1</sup> See M. Merhav, "Some Economic Consequences of Large-Scale Renewal of Immigration", Bank of Israel Bulletin No. 17, Jerusalem, January 1963. The article draws attention to the possibility of the excessive expansion of productive capacity and its consequences both on the construction industry itself, once the temporary boom passes, and on the structure of the economy in the long run, and recommends the temporary restraint of demand by taxation.

building projects in order to counteract the decline in the industry's regular activity. This restraint was confined to the first half of the year. In view of the deepening of the recession in the second half of 1966, plans were drawn up to engage unemployed building workers on repair work and renovations, and it was decided to increase building starts—a decision which was implemented only in the last quarter (see Diagram XIII-1). Other steps taken by the Government to overcome the slump were the purchase of new dwellings from building firms (however, these were in place of new residential building by the Ministry of Housing), the provision of credit to contractors with a stock of unsold completed units on their hands, and various tax concessions, mainly on building plots, by local authorities.

The surplus supply of completed buildings continued to expand, and various estimates place the number of unsold housing units in the hands of private contractors at the end of 1966 at about 6,000, and the number sponsored by the public sector for the regular market at approximately 2,500.<sup>1</sup> Sales of new units did not increase and probably even declined, as attested by the smaller number of mortgage loans granted to buyers of private housing. Builders attempted to avoid cutting prices, and preferred at first to stimulate sales by giving better purchase terms by way of instalment payments and larger mortgages with partial abolition of linkage, although in only a few cases was linkage abolished for long-term mortgages.<sup>2</sup> Nevertheless, price reductions grew more frequent during 1966, at first by small private contractors and firms, which could not expect the Government to buy their surplus units and which also experienced more difficulty in raising credit than did the others. The direct contact with potential customers, and the bargaining typically conducted with the small private contractor, may have been another factor.

The Saving-for-Housing scheme and the large and semi-public building concerns were slower to reduce prices and offer more favorable terms, and it appears that they made fewer sales than did their smaller competitors. Only in the second half of 1966 did they show any readiness to trim prices and offer better purchase terms. The influence of the lengthy production process is also apparent here, for it was the historical costs incurred in putting up the structures that prompted builders to try to stave off a price reduction, especially as the price of inputs continued to rise in 1965 and the beginning of 1966. According to the index of housing prices,<sup>3</sup> prices continued upward until mid-1965, and

<sup>1</sup> In addition, the public sector had a stock of more than 7,500 unoccupied units, intended mainly for immigrants. (The reference is to units actually vacant and for which no tenancy agreement had been signed.)

<sup>2</sup> A detailed discussion of the changes during 1966 in the linkage of mortgages will be found in Chapter XVII, "Financial Institutions".

<sup>3</sup> See also Chapter VI, "Prices", section 3(d). The index of housing prices is deficient in several respects, one of the principal ones being a lag of several months behind actual developments.

after levelling off for a while, began to retreat slowly in 1966. According to various other sources, the price advance came to a halt in 1964 and the trend began to turn downward in 1965. The prices of used dwellings presumably declined relatively faster, but there are no reliable data on this.

The curtailment of construction activity reduced, of course, the demand for inputs. Worst affected were industries and firms supplying materials for the early stages of construction—quarry products, cement, iron, and wood. In the second half of the year, when completions also began to fall off, additional industries began to suffer—glass, sanitary ceramics, plumbing accessories, etc.

Average annual employment dropped by 15 percent, and the total number of building workers dismissed between the peak period at the beginning of 1965 and the end of 1966 came to nearly 20,000. Despite this, monthly earnings of building workers averaged 14 percent higher in 1966, mainly because of institutional arrangements and the increase in the cost-of-living allowance at the start of the year, and also because of a marked change in the occupational structure of the sector. Toward the end of the year, wage rates began to fall.

## 2. VOLUME OF CONSTRUCTION

The value of new construction in 1966 amounted to about IL 1,500 million, compared with IL 1,870 million the year before—a reduction of approximately 20 percent. The data are in current prices, but as the cost of construction held steady between 1965 and 1966, they also reflect the real change. Data on the value of new construction (Table XIII-1) show a uniform decline in construction for the different destinations, and in comparison with 1965 there was practically no change in the breakdown between residential and nonresidential building.

The inventory of buildings under construction reached a peak in early 1965, and shrank noticeably in the second half of 1965 and during 1966, when the volume of completions was similar to that of 1965—i.e. considerably in excess of the volume of starts. The sharp fall in new construction started began in the second quarter of 1965 (see Diagrams XIII-1 and XIII-2), while the volume of completions began to move down only in the second half of 1966, and then only gradually. This development was, of course, a consequence of the lengthy production process which characterizes the construction industry.

Average construction time continued to increase in 1966. In this connection it should be noted that the freezing of work on buildings already in process applied mainly to office, commercial, and industrial premises. Contrary to various assessments regarding the freezing of residential building—particularly that started in order to circumvent the administrative order published at the beginning of 1965—there were in actual fact only a few cases of a significant slowdown or stoppage of work. There were, however, reports of both residential

Table XIII-4

**AREA OF CONSTRUCTION STARTED AND COMPLETED, BY TYPE, 1965-66**  
(thousand square meters)

|                                   | Construction started |       |                                  | Construction completed |       |                                  |
|-----------------------------------|----------------------|-------|----------------------------------|------------------------|-------|----------------------------------|
|                                   | 1965                 | 1966  | Percent increase or decrease (-) | 1965                   | 1966  | Percent increase or decrease (-) |
| <b>Residential</b>                |                      |       |                                  |                        |       |                                  |
| Private                           | 1,944                | 1,462 | -25                              | 1,893                  | 1,851 | -2                               |
| Public                            | 1,167                | 556   | -52                              | 1,232                  | 1,224 | -1                               |
| Total                             | 3,111                | 2,018 | -35                              | 3,125                  | 3,075 | -2                               |
| <b>Nonresidential</b>             |                      |       |                                  |                        |       |                                  |
| Agriculture and irrigation        | 106                  | 172   | 62                               | 191                    | 138   | -28                              |
| Industry                          | 417                  | 262   | -37                              | 587                    | 470   | -20                              |
| Commercial premises, hotels, etc. | 330                  | 213   | -35                              | 274                    | 243   | -11                              |
| Public buildings                  | 768                  | 550   | -28                              | 547                    | 763   | 39                               |
| Total                             | 1,621                | 1,197 | -26                              | 1,599                  | 1,614 | 1                                |
| Grand total                       | 4,732                | 3,215 | -32                              | 4,724                  | 4,689 | -1                               |
| Thereof:                          |                      |       |                                  |                        |       |                                  |
| Public building                   | 1,672                | 1,055 | -37                              | 1,523                  | 1,794 | 18                               |
| Private building                  | 3,060                | 2,160 | -29                              | 3,201                  | 2,895 | -10                              |

SOURCE: Central Bureau of Statistics.

and nonresidential projects being reduced in scope owing to the subsiding of demand for finished buildings.

(a) *Residential construction*

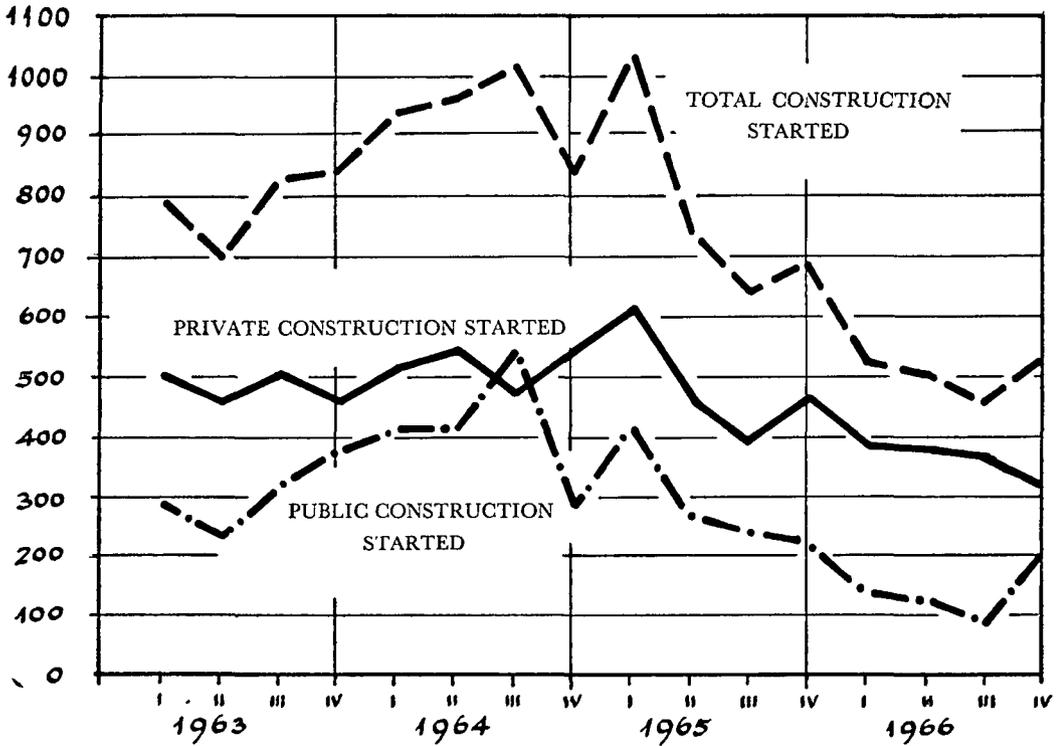
The value of new residential building was down 20 percent in 1966. Work was started on 22,000 units, as against 38,000 in 1965 and 48,000 in 1964. In the previous slump year in this industry—1960—27,000 units were started, and a number similar to that of the year reviewed was recorded only in 1956, also a poor year.

On the other hand, there was no significant change in the number of completed units—approximately 37,000 as compared with 38-39,000 in the four preceding years. This suggests a slow adaptation of the industry to changes in demand, for the latter had been falling since 1964 while the number of completions remained unchanged. This explains the retreat of prices, which started at the beginning of

Diagram XIII-1

RESIDENTIAL CONSTRUCTION STARTED, QUARTERLY, 1963-66

(thousand sq. meters)



SOURCE: Central Bureau of Statistics.

1965 and accelerated in the year reviewed. Despite the lower prices and other steps to boost sales,<sup>1</sup> the stock of unsold completed dwellings continued to grow, mainly that in public but apparently also in private hands.

The stock of vacant units in the hands of private builders at the end of 1966 is estimated at about 6,000, while that of the public sector for all purposes came to over 10,000, of which some 2,500 were for the regular market.

The reduction of nearly 20 percent in the value of new residential construction in 1966 was actually a response—after a two-year lag—to the downturn in housing demand in 1964, although housing starts reacted more quickly.

As noted at the beginning of this chapter, the substantial increase in demand and accompanying rise of prices led to a significant expansion of the industry's productive capacity. As a result, the number of completed dwellings put on the regular market rose from about 17,000 in 1961 to 20,500 in 1962 and in 1963

<sup>1</sup> Including the offer (complete with mortgage loans out of Government funds) of dwellings put up under the Saving-for-Housing scheme to young couples, evacuees of slum areas, and immigrants.

Table XIII-5

## RESIDENTIAL CONSTRUCTION, 1960-66

|                                | 1960   | 1961   | 1962   | 1963   | 1964   | 1965   | 1966   |
|--------------------------------|--------|--------|--------|--------|--------|--------|--------|
| <b>No. of units started</b>    |        |        |        |        |        |        |        |
| <b>For the regular market</b>  |        |        |        |        |        |        |        |
| Private                        | 14,960 | 15,260 | 17,620 | 19,530 | 21,080 | 19,080 | 13,580 |
| Public <sup>a</sup>            | 4,310  | 6,710  | 5,560  | 6,330  | 9,460  | 6,380  | 3,750  |
| Total                          | 19,270 | 21,970 | 23,180 | 25,860 | 30,540 | 25,460 | 17,330 |
| <b>For new immigrants etc.</b> |        |        |        |        |        |        |        |
| Immigrant housing              | 3,530  | 13,140 | 17,370 | 10,430 | 15,500 | 9,270  | 2,690  |
| Other housing <sup>b</sup>     | 4,120  | 6,470  | 5,160  | 2,130  | 2,340  | 3,330  | 2,050  |
| Total                          | 7,650  | 19,610 | 22,530 | 12,560 | 17,840 | 12,600 | 4,740  |
| <b>Grand total</b>             |        |        |        |        |        |        |        |
| Number of units                | 26,920 | 41,580 | 45,710 | 38,420 | 48,380 | 38,060 | 22,070 |
| Area ('000 sq. m.)             | 2,077  | 2,954  | 3,288  | 3,160  | 3,752  | 3,111  | 2,018  |
| <b>No. of units completed</b>  |        |        |        |        |        |        |        |
| <b>For the regular market</b>  |        |        |        |        |        |        |        |
| Private                        | 13,330 | 13,070 | 14,430 | 15,560 | 18,800 | 18,520 | 18,160 |
| Public <sup>a</sup>            | 6,010  | 3,850  | 6,120  | 5,100  | 6,300  | 6,630  | 8,240  |
| Total                          | 19,340 | 16,920 | 20,550 | 20,660 | 25,100 | 25,150 | 26,400 |
| <b>For new immigrants etc.</b> |        |        |        |        |        |        |        |
| Immigrant housing              | 6,320  | 1,680  | 11,560 | 16,530 | 10,720 | 11,150 | 8,180  |
| Other housing <sup>b</sup>     | 5,330  | 7,760  | 6,170  | 2,500  | 2,160  | 2,120  | 2,570  |
| Total                          | 11,650 | 9,440  | 17,730 | 19,030 | 12,880 | 13,270 | 10,750 |
| <b>Grand total</b>             |        |        |        |        |        |        |        |
| Number of units                | 30,990 | 26,360 | 38,280 | 39,690 | 37,980 | 38,420 | 37,150 |
| Area ('000 sq. m.)             | 2,195  | 2,029  | 2,739  | 2,915  | 2,964  | 3,125  | 3,075  |

<sup>a</sup> Popular Housing, Saving-for-Housing, for veteran settlers in development areas, young couples, and in Arab communities.

<sup>b</sup> Slum clearance projects, liquidation of transit camps, and housing in agricultural settlements.

(in both of these years the quantity demanded was still above that supplied, as attested by the steady soaring of prices) and to about 25,000 in 1964 (see Table XIII-5). The additional 4,500 units supplied to the regular market in 1964 brought about the turn in the housing market. Demand stabilized and even dropped slightly in 1964. Instead of advancing purchases (as in 1962-63) because of the expectation of a further strong price rise, potential buyers deferred purchases in the expectation of a fall in prices.<sup>1</sup> This applied equally to local and foreign investors and particularly to those motivated by speculative reasons, who became sellers rather than buyers. The latter were apparently also affected by the amended Land Betterment Tax Law of August 1963, which severely limited the possibilities for quick, large capital gains on property transactions. This development was apparently reflected also in the volume of foreign investments, a large part of which were made in property. Gross foreign investment increased rapidly from \$ 55 million in 1960 to \$ 173 million in 1963. In 1964 the upward trend halted, and in 1965 the figure fell off to \$ 124 million. On the other hand, there was an increase in foreign investments repatriated—from \$ 10 million in 1963 to \$ 17 million in 1964 and \$ 26 million in 1965.

Despite the slower growth of demand and the creation of a surplus of housing units in 1964, residential construction starts reached a new peak that year as a result of various factors, described below. In 1965 and 1966 demand continued to decline, and the inevitable result was a sharp fall in the volume of starts from the second quarter of 1965. However, owing to the length of the production process and the existence of a record stock of buildings in process, the curtailment of total output was delayed until the end of 1965, and its full impact became apparent only during 1966.

### *1. Private residential construction*

Despite the accumulation of a surplus of units during 1964, the increase in private residential construction starts accelerated (see Diagram XIII-1). Developments in the real estate market apparently contributed to this. The raising of taxes on vacant building plots made them more expensive to hold, and the amendment of the Land Betterment Tax Law in August 1963 reduced the profitability of holding them. As a consequence, the price of building plots firmed and then began to slip in the latter part of 1963 and the beginning of 1964. As the housing market was still booming, landowners hastened to build on their plots in order to dispose of them at a profit and to avoid the betterment tax. Toward the end of 1964 construction was further stimulated by advance know-

<sup>1</sup> A partial indicator of the development of demand is the change in the number of new registrations in the Saving-for-Housing scheme (less withdrawals), which accounts for about 20 percent of the total supply to the regular housing market, including private building. New registrations were as follows (for fiscal years): 1960—5,921, 1961—7,620; 1962—10,455; 1963—14,542; 1964—4,712; 1965— 413; 1966— -1,866 (April 1966 to February 1967).

**Table XIII-6**  
**DWELLINGS STARTED, BY NUMBER OF ROOMS, 1964-66**  
 (percentages)

| No. of rooms<br>per unit                              | Private construction |               |               | Public construction |               |               | Total construction |                |               |
|---|----------------------|---------------|---------------|---------------------|---------------|---------------|--------------------|----------------|---------------|
|   | 1964                 | 1965          | 1966          | 1964                | 1965          | 1966          | 1964               | 1965           | 1966          |
| 1   | 3                    | 3             | 4             | —                   | —             | 1             | 1                  | 2              | 3             |
| 2   | 19                   | 22            | 21            | 25                  | 31            | 21            | 22                 | 27             | 21            |
| 3   | 60                   | 55            | 54            | 73                  | 66            | 78            | 68                 | 60             | 63            |
| 4+  | 18                   | 20            | 21            | 2                   | 3             | —             | 9                  | 11             | 13            |
| <b>Total</b>  | <b>100</b>           | <b>100</b>    | <b>100</b>    | <b>100</b>          | <b>100</b>    | <b>100</b>    | <b>100</b>         | <b>100</b>     | <b>100</b>    |
| <b>Total units<br/>started</b>                        | <b>21,080</b>        | <b>19,080</b> | <b>13,580</b> | <b>27,300</b>       | <b>18,980</b> | <b>8,490</b>  | <b>48,380</b>      | <b>38,060</b>  | <b>22,070</b> |
| <b>Total number<br/>of rooms in<br/>units started</b> | <b>62,070</b>        | <b>56,440</b> | <b>40,110</b> | <b>75,760</b>       | <b>51,410</b> | <b>23,530</b> | <b>137,830</b>     | <b>107,850</b> | <b>63,640</b> |
| <b>Average number<br/>of rooms<br/>per unit</b>       | <b>2.9</b>           | <b>3.0</b>    | <b>3.0</b>    | <b>2.8</b>          | <b>2.7</b>    | <b>2.8</b>    | <b>2.8</b>         | <b>2.8</b>     | <b>2.9</b>    |
| <b>Average area<br/>per unit (m<sup>2</sup>)</b>      | <b>87.0</b>          | <b>90.3</b>   | <b>93.7</b>   | <b>60.1</b>         | <b>58.0</b>   | <b>61.2</b>   | <b>71.8</b>        | <b>74.1</b>    | <b>81.2</b>   |

SOURCE: Based on Central Bureau of Statistics data.

ledge of the Government's intention to impose curbs. Thus, in anticipation of a shortage in the wake of the order, which came into force in January 1965, there was a renewed upsurge in building starts in the last quarter of 1964, which carried over into the first quarter of 1965.

When it turned out that the quotas set by the order did not fall short of the demand for building permits, especially since the demand was anyway exaggerated in view of the existing stock of completed units, the anticipated decline in starts set in. It continued to the end of 1966, apart from a small increase in the final quarter of 1965, apparently because of devaluation rumors at the time of the elections, and subsequently when the Government announced its new economic policy.

The number of dwellings started in 1966 was about 13,500—apparently less than the secular demand and perhaps even current demand in 1966/67. This low level can be attributed to the large stock of unsold units—about 6,000 in the hands of private builders (including public but not Government companies), and 2,500 publicly financed units intended for the regular market.

Various steps taken by the Government and local authorities in 1966—the provision of credit to contractors holding unsold dwellings and the easing of

taxation on empty building plots—with the object of aiding private builders and encouraging construction, did not attain, at least in the short run, the anticipated result of stimulating building starts.

## 2. *Public residential construction*

Public residential construction started in 1966 amounted to less than half the 1965 volume, itself some 30 percent below that for 1964. As with private construction, activity was affected by the ebbing of demand in the regular market—which occurred concurrently with an increase in supply due to the excessive starts in 1964—but the decisive factor was the sharp curtailment of immigration.

Public residential construction displays a highly irregular pattern in the annual volume of starts and in its distribution over the year, and this even when exogenous factors—such as immigration, the dimensions of which cannot be controlled—remain constant. To understand the development of public construction in 1966, it is necessary to recall the situation in 1963 and perhaps even in 1962 (see Table XIII-5 and Diagram XIII-1).

Examination of the changes in public residential starts in the period 1963 to 1965 reveals a conspicuous expansion of construction for all purposes (except in agricultural settlements) between 1963 and 1964, and a corresponding drop in the volume of starts for all purposes (except slum clearance) between 1964 and 1965.

For one component of these fluctuations—immigrant housing, which is the most important from the aspect of magnitude—a partial explanation can be offered. The reference is to the unforeseen large reduction in the influx of new immigrants in 1965. Nevertheless, the area of starts was too low in 1963 (a shortage of immigrant housing was felt in 1964), and too high in 1964 (even relative to the envisaged volume of immigration in 1965/66). The large area of starts in 1964 occurred when there was a shortage of skilled labor (scaffolding erectors), and this led to difficulties in executing the early stages of construction and to the inefficient exploitation of the industry's capacity, for the productive factors were dispersed over a large number of starts.

As a consequence of this development and the unforeseen decline in immigration in 1965, the temporary shortage of immigrant housing at the end of 1964 turned into a large surplus during the course of 1965.

There was a sharp rise in public residential building for the regular market in 1964, which was reversed in 1965. As with private building, the area of starts in 1963 led to a surplus of units in the second half of 1964. Nevertheless, housing starts for the regular market continued upward during 1964 in anticipation of the aforementioned administrative order due to go into effect at the end of January 1965. The area of residential construction started for the regular market jumped by 50 percent in spite of sagging demand, as reflected in

the steep drop in the number of persons joining the Saving-for-Housing scheme in 1964. Thus, public residential construction for the regular market accentuated the swings in total construction, and the introduction of the administrative curbs found public construction with a large stock of housing in process—both for new immigrants and for the regular market—which far exceeded the anticipated demand. This made it possible to reduce public construction starts in 1965 in conformity with the restrictive policy, while at the same time maintaining and even increasing the share of public construction in the regular housing market.

As 1966 approached, the existence of excess housing for immigrants and others became apparent. The extent of the surplus became clearer as the year progressed, and as a consequence, only about 8,500 units were started, despite the fact that the 1966/67 budget (to the end of March 1967) originally provided for 18,000 starts. The figure was revised downward several times, to 15,900, but the number actually started (including projects scheduled for the first quarter of 1967) came to only 8,500.

In the last two years a larger percentage of new immigrants were directed to populated areas for various reasons, mainly because the composition of the immigration differed from that during 1962–64. For this purpose, surplus units built originally for the regular market, whether initiated by the public sector or by large private contractors, were used. In the course of the year, 1,500–2,000 homes were acquired in the urban centers for new immigrants, and it was decided to allocate about 5,000 units, either completed or in process and originally intended for immigrants in the development areas, for bettering housing conditions of veteran residents and young couples.

At the time of the budget debate, there was pressure for cutting expenditure as part of the policy of economic restraint; this mainly affected the slum-clearance program, which was reduced from 3,700 units in the original proposal to 2,090 in the approved budget. In the light of previous experience, even the reduced budget seemed excessive compared with the demand of slum-dwellers. And, in fact, toward the end of the year it was proposed to offer these homes to evacuees at a low subsidized rental, as they revealed little desire to purchase them even on the favorable terms offered.

With the intensification of the recession in the course of the year, the rapid rise in the number of jobless prompted the Government to plan an increase in construction work in order to alleviate their plight. An ambitious program was drawn up for improving and expanding existing housing and completing development work in projects sponsored by the public sector. These measures did not reach implementation stage during the year reviewed, but there was a significant increase in building starts in the last quarter, under the revised 1966/67 program. The volume of starts continued to fall sharply during 1966, reaching a low of 88,000 sq. meters, compared with a record 545,000 sq. meters in the third quarter of 1964. As stated, this was the outcome of the large stock of completed units and of units in process, for which there was no demand. The afore-

mentioned decision to allocate 5,000 units for raising housing standards in the development areas rendered it easier for the Ministry of Housing to decide on the renewed expansion of building starts. In the last quarter of 1966 the area of starts totalled about 200,000 sq. meters; however, according to preliminary data, the figure dropped again in the first quarter of 1967, even though it still exceeded the average for the same quarter of 1966.

(b) *Nonresidential construction*

The value of new construction for the productive and service sectors fell to the same extent as that of housing—19 percent—and this too after five years of expansion (see Table XIII-3).

Nearly all sectors showed lower figures, except for irrigation and electricity. The sharpest drops were in industry and crafts (44 percent) and in commercial and office buildings and hotels (30 percent).

In view of the more sluggish growth of demand and GNP in 1965 and 1966, this reduction of nearly 20 percent is not surprising. Nevertheless, it does not fully explain the steeper declines in industrial and commercial premises, especially since investment plans take a long time to implement, and it is reasonable to assume an interval of a year or more between the investment decision and the actual start of construction.

The reduction can be partly attributed to the completion in the last two years of several large investment projects initiated and financed by the Govern-

**Table XIII-7**  
**AREA OF NONRESIDENTIAL CONSTRUCTION, 1960-66**  
(thousand sq. meters)

|   | 1960  | 1961  | 1962  | 1963  | 1964  | 1965  | 1966  |
|---|-------|-------|-------|-------|-------|-------|-------|
| <b>Construction started</b>                   |       |       |       |       |       |       |       |
| Agriculture and irrigation                    | 268   | 177   | 204   | 177   | 194   | 106   | 172   |
| Industry and crafts                           | 464   | 506   | 553   | 542   | 720   | 417   | 262   |
| Commercial and office buildings, hotels, etc. | 259   | 295   | 182   | 214   | 315   | 330   | 213   |
| Public buildings                              | 365   | 477   | 447   | 456   | 628   | 768   | 550   |
| Total   | 1,356 | 1,455 | 1,386 | 1,389 | 1,857 | 1,621 | 1,197 |
| <b>Construction completed</b>                 |       |       |       |       |       |       |       |
| Agriculture and irrigation                    | 358   | 218   | 170   | 174   | 175   | 191   | 138   |
| Industry and crafts                           | 374   | 551   | 456   | 476   | 560   | 587   | 470   |
| Commercial and office buildings, hotels, etc. | 134   | 233   | 194   | 110   | 206   | 274   | 243   |
| Public buildings                              | 424   | 375   | 392   | 403   | 460   | 547   | 763   |
| Total   | 1,290 | 1,377 | 1,212 | 1,163 | 1,401 | 1,599 | 1,614 |

SOURCE: Central Bureau of Statistics.

ment (the National Water Carrier, Ashdod Port and extensions to the ports of Haifa and Eilat, and the expansion of the Dead Sea Works), without any new projects being launched in 1966.

As to industrial and commercial premises and public buildings, the explanation is more complex. There are signs that the real estate boom also had an effect here: some of the building for this market as well was of a speculative nature, and this resulted in excess supply in 1964.

The soaring of land prices enabled some enterprises to finance much of the cost of moving to new premises by disposing of sites in the urban centers at a big profit. Building firms, some of them owned by the Government and municipalities, were quick to meet part of this demand, and they began to erect industrial and commercial premises for sale or rental and not in response to specific orders. A partial estimate of the area of new construction in this category shows an increase from 40,000 sq. meters in 1962 to 84,000 in 1963 and 166,000 in 1964. To this should be added construction undertaken by existing industrial concerns themselves; only part of this construction represented net expansion, the bulk of it replacing existing structures due to be demolished.

From Table XIII-7 it can be seen that the results of this activity, in the form of completed buildings, became apparent in 1964, after a two-year interval, and were reflected in a surplus of industrial, commercial, and office premises. However, throughout most of 1964 the area of such building started continued to increase. Large projects generally involve complicated financial arrangements, and even before construction is started substantial sums are invested in planning, licenses, fees, and site preparation. The surplus supply which began to be felt in 1964 led to a reduction in the area of new construction started, but the completion of buildings in process further enlarged this surplus, which pressed on the market during the whole of 1965 and 1966. Some of the building for these purposes was frozen or only partially completed. As regards commercial and office premises, which were due to be severely hit by the administrative restriction of construction, the area of starts continued upward at the end of 1964 and the beginning of 1965. Only from the second quarter of 1965, when it became obvious that the curbs would not be effective and so there was no reason to expect a renewed shortage, did the volume of starts begin to fall, a trend that continued in 1966.

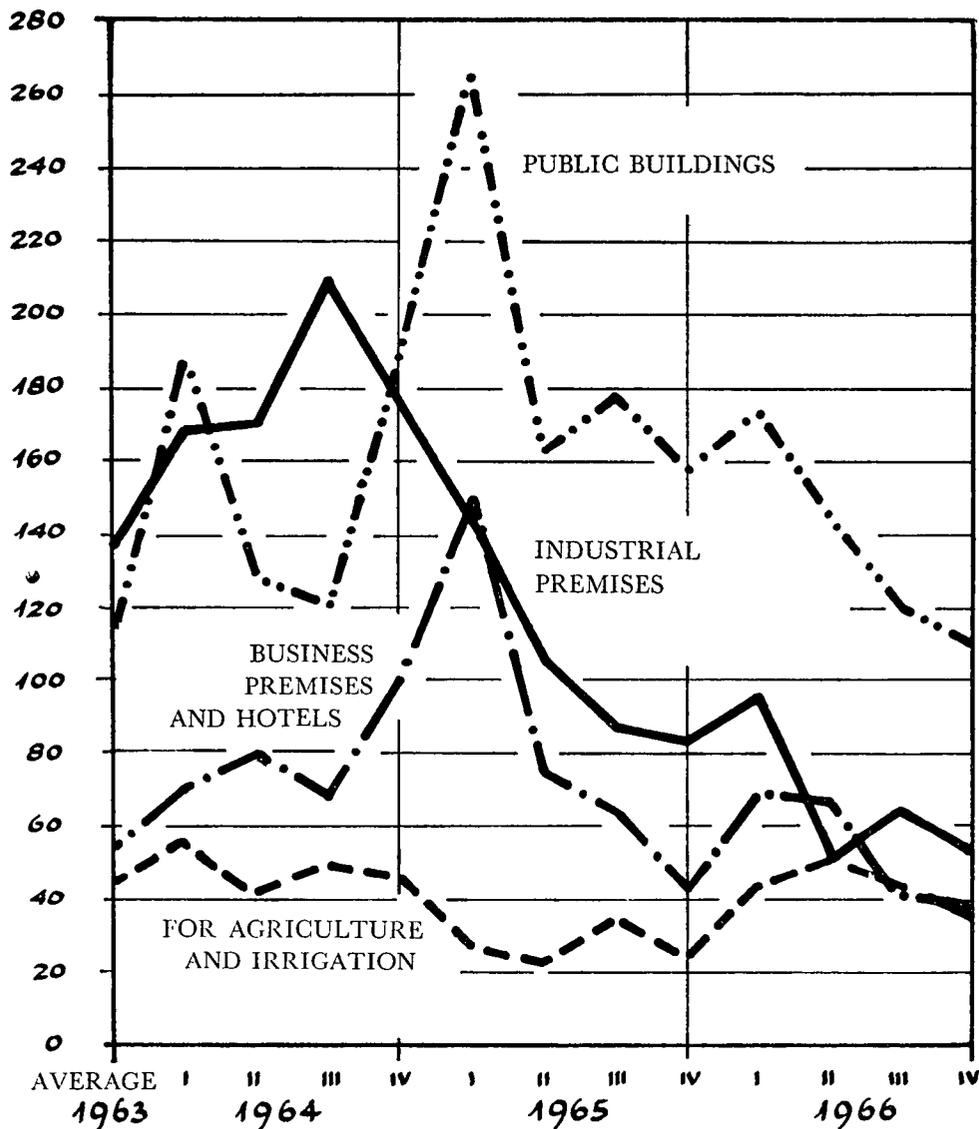
The influence of the aforementioned order was also felt in public buildings; these too were subject to stringent curbs, which in practice proved to be ineffective here as well (see Diagram XIII-2).

The decline in the value of new construction for these purposes must therefore be viewed against the boom of the years 1962-64, which in some cases carried over into the early months of 1965 as a consequence of the administrative restriction of building.

In the transportation and communications sector there was a 20 percent drop,

Diagram XIII-2

NONRESIDENTIAL CONSTRUCTION STARTED, QUARTERLY, 1964-66  
(thousand sq. meters)



due primarily to the gradual completion of port development work and an unforeseen curtailment of road construction, after a steady and rapid increase in previous years. The smaller outlay on road construction in 1966 cannot by any means be attributed to diminished needs, but apparently was the result of budgetary cuts by local authorities under pressure from the Ministry of the Interior to trim their deficits.

It should be noted that the Government did not adopt any countervailing measures, and only toward the end of the year, with the mounting of unemployment, did it begin to speed up road-construction projects. On the other hand, the value of new building for postal services and communications continued to rise, and that for Israel Railways remained at the relatively high level of 1965.

The figure for agriculture and irrigation was about the same as in 1965. In contrast to the general decline in new construction starts, there was an increase in the agricultural sector; this was apparently connected with the greatly expanded use of permanent hothouses, the growing branch specialization which entailed the erection of new structures, and the rapid expansion of dairy farming.

### 3. INPUTS

The decline in construction activity left its impress on industries connected therewith. About 10 percent of industrial output is intended for the construction sector, and the building slump was largely responsible for the slowdown or reduction of output in a number of industries for which it is the principal customer. It will be recalled that the decrease in construction starts began in the second quarter of 1965, but its repercussions began to be felt in various industries only toward the end of 1965 and early 1966, with the first to be affected being cement and cement products, quarry materials, iron, and lime and clay products. On the other hand, the volume of completions continued to expand until the end of 1965 and the beginning of 1966, the trend turning only in the second half of 1966. It was at this time that demand also began to shrink for materials required in the final stages of construction—building carpentry, plumbing equipment, electric wire and fittings, sanitary ceramics, etc. Despite the diminishing market for various products, the majority of manufacturers tried to avoid cutting back on production and preferred to build up stocks during 1966. Nevertheless, output began to gradually fall off. In order to cope with the curtailment of the home market, the concerns attempted to organize themselves for the export of building materials.

The weakening of demand for building materials had a restraining effect on their prices. The industrial wage hikes at the beginning of the year generated upward pressure on prices, and there were some rises, especially in the case of products for the later stages of building. In the course of the year, the advance was halted and the trend began to turn downward, even affecting prices that had initially been increased. The exceptions were firms enjoying a monopolistic position, which upped their prices and have not yet begun to lower them. The reference is to cement (but not cement products, where there is considerable competition), structural steel shapes. Ytong blocks, and steel pipes. Even in these cases the rise was moderate. The import of building inputs was

down 45 percent in 1966, one of the reasons apparently being the fact that stocks of locally produced building materials were drawn on.

The slackening of demand for building inputs stands out all the more when viewed against the vigorous growth of the five preceding years, which led to a rapid increase in the capacity of the construction industry and of industries serving it. Investment in construction equipment reached some IL 50 million per annum in the years 1962–65. The construction industry underwent a process of mechanization, and factories for prefabricated building were established with Government aid and encouragement.<sup>1</sup>

Much of the investment in plant came to fruition in the years 1964 and 1965, when demand was already beginning to fall off. Examples are Neshet's cement kiln at Ramle, which was decided upon in 1962 and put into operation in October 1964, and the addition of a cement kiln at the Haifa plant, which was decided upon in the summer of 1964 and put into operation in 1966. At the same time, the Shimshon works had to suspend production following a 17 percent drop in local consumption of cement in 1966. In the year reviewed the erection of three new factories for prefabricated building materials was completed, but because of the recession it was decided not to operate two of them while the third is working at only partial capacity; moreover, production was cut back in several existing factories of this type.

The index of residential construction input prices moved up by 8.1 percent on an annual average between 1965 and 1966, and by 6.3 percent in the course of 1966; most of the increase—about 5 percent—took place between January and April 1966. Excluding the rise in the wage bill, the advance was only 1.5 percent in the course of the year, and there is reason to suspect that even this did not actually occur, as discounts and price reductions below the official tariffs are known to have been granted, especially in the second half of the year, and these are not reflected in the index. At any rate, various sources attest to a decline in actual building costs,<sup>2</sup> which was largely made possible at the expense of contractors' profits and by forgoing provision for depreciation and imputed return on capital for equipment with no alternative use. In some enterprises the cost of labor also declined, and the differential price of the labor input was the principal reason for the sharp competition in bidding on construction tenders. The wage bill of the large concerns with a permanent labor force was apparently higher in 1966 than in the previous year. On the other hand, wage costs did not go up to the same extent in the case of contractors with no permanent staff of workers, who were sometimes able to

<sup>1</sup> See the note on p. 320.

<sup>2</sup> In view of the conflicting information on building costs (including a price decline in work carried out under Government and municipal tenders), it has been assumed that building costs held steady between 1965 and 1966. This does not necessarily mean that the average level was unchanged, but the assumption reflects the uncertainty as to the actual trend. At any rate, the trend in the course of 1966 was downward.

hire labor on a daily basis below the official wage tariff, not to mention the non-payment of wages in excess of the official tariff, which was the practice in preceding years. This applies also to the earnings of contract labor: the decline in 1966 can be ascribed to the big bonuses paid formerly. Despite these reductions, the wages of some contract workers are still above the official scale.

#### 4. EMPLOYMENT AND WAGES

The average annual number of gainfully employed in construction dropped by 15 percent, from 90,000 in 1965 to 76,000. National Insurance data show a similar decline in the number of hired workers.

Manpower survey data indicate that from the beginning of the building slump, in the second or third quarter of 1965, until the end of 1966, the number of gainfully employed dismissed totalled nearly 20,000 (from 96,300 to 76,300).

As regards hired labor, the peak employment was recorded in August 1965 (76,500), but by November 1966 the number had fallen to 56,900—here too a decline of 20,000. This last datum appears to be less reliable as regards the date when the high was reached.

The first to be laid off were temporary and unskilled laborers, and among them, those working away from their homes (many Arab workers returned to their villages). From the occupational aspect, the principal sufferers were scaffolding erectors and building laborers; this was due to the fact that most of the decline in construction activity occurred in the volume of starts, whereas the volume of completions for the year as a whole was unchanged from previous years and even increased at the end of 1965 and the beginning of 1966, beginning to decline only in the middle of the year reviewed.

The marked rise in the number of building workers laid off occurred despite the institutional difficulties which this involves in Israel. Beginning in the latter part of 1965, there was, in addition to the outright dismissals, considerable underemployment of building workers who, while they were not discharged, were not fully employed. This was reflected in the granting of simultaneous extended annual leave to the entire staff of the firm, the rotation of contract workers, and the reduction of overtime. At the beginning of 1967 attempts were even made to introduce a five-day working week. The decline in the total labor input was therefore greater than that in the number employed, and was roughly the same as the drop in the value of new construction—i.e. about 20 percent.

The decline in employment followed several years of continuous expansion as from 1961, accompanied by the increasing weight of the industry in total employment and a shortage of labor, which *inter alia* pushed up wages steeply.

The developments in employment in 1966 are not reflected in National Insurance data on wage changes. These indicate a 14 percent rise in the average

level of pay in 1966 as compared with 1965. While the raising of wages in other sectors at the beginning of 1966 may be explained by the fact that they had not yet been hit by the recession, this does not apply to construction. There were apparently institutional factors at work here which resulted in building workers being included in the general revision of wage rates. The rise in basic rates and in the cost-of-living allowance led to an increase in labor costs of 13.4 percent on an annual average and of 10 percent in the course of the year, according to the labor item in the index of residential construction input prices (which measures official wage scales). National Insurance data show that wages began to turn downward in the second half of the year.

However, actual developments were apparently more complex. One of the contributory factors in the growth of average monthly earnings per employee was doubtless the structural change in the sector's labor force, for the first to be discharged were those with low wages, and this alone brought up the average wage. On the basis of additional data, building workers may be classified into two subgroups as regards developments in 1966. Unskilled daily workers enjoyed an effective wage increase, corresponding to that in the official tariff and the cost-of-living allowance. On the other hand, skilled daily workers who had previously received a bonus above the official scale did not get any effective wage rise—or else got a much smaller rise—as the increase in the official tariff was offset by the total or partial abolition of above-scale payments.

The abolition of the bonuses was of course resisted, particularly by permanent skilled workers. As a result, at the end of 1966 there were still groups of workers, including those on a contract basis, who were paid in excess of the official rates, but the difference between the official and actual pay was smaller than in previous years.