



Bank of Israel \* Research Department

## Companies Survey

Third quarter of 2008

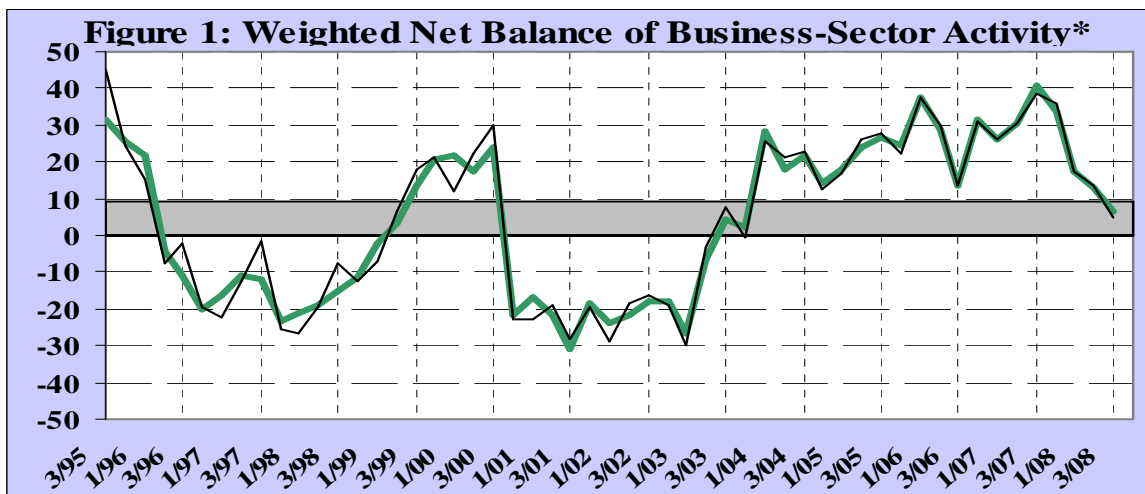
Jerusalem, November 2008  
[www.bankisrael.gov.il](http://www.bankisrael.gov.il)



## Companies Survey - Third Quarter of 2008 – Main Results

Reports from companies and businesses indicate that the slowdown of business-activity growth, first evidenced in data from the Companies Survey at the beginning of the year, became perceptible in the third quarter. Activity slowed further in this quarter, lowering the net balance of business-sector activity to a level at which one cannot draw any significant conclusion about where the economy is positioned in the business cycle (see Note 2 to Figure 1). Furthermore, for the first time since 2004, the leading index reflects expectations of an additional downturn. Amid the expectations of a slump in activity, the expected inflation rate for the next twelve months fell but continued to overshoot the upper bound of the price-stability range as defined. The slowdown of activity growth in the review quarter encompassed trade, manufacturing, and services. However, transport and communications activity continued to grow, and while the rate of increase in hotel activity slowed somewhat relative to the year-earlier quarter, the level of activity in this industry remained high.

In manufacturing, the slowdown in output that began in the first quarter of the year continued. The deceleration of manufacturing activity was more significant among small and medium companies than among large ones, possibly reflecting the onset of a trend of greater severity in these companies' borrowing constraints. Notably, small companies usually encounter tougher borrowing constraints to begin with. Orders for the next quarter suggest that manufacturing activity is continuing to slow and its growth may stop altogether. In trade, sales were down for the second straight quarter and are expected to worsen considerably in the coming quarter. Business services companies reported a further decline in the growth rate of turnover on the heels of decelerations in the two previous quarters. Although they expect activity vis-à-vis abroad to recover slightly in the next quarter, overall they expect the slowing of sector activity to continue. Hotels reported an increase in activity relative to the year-earlier quarter but at a slower rate than in the previous quarter. The level of industry activity remains high due to an increase in inbound tourism, but the upward trend in reservations for the next quarter has stopped. Transport and communications activity grew but orders for the next quarter suggest that the growth rate will fall. Construction remains slack and expectations for the next quarter point to more of the same. Average inflation expectations for the coming twelve months declined slightly but continued to overshoot the upper bound of the price-stability range, at 3.5 percent as against 3.7 percent in the previous survey. The companies expect the average exchange rate twelve months ahead to be NIS 3.9 to the dollar as against NIS 3.8 in the previous survey.



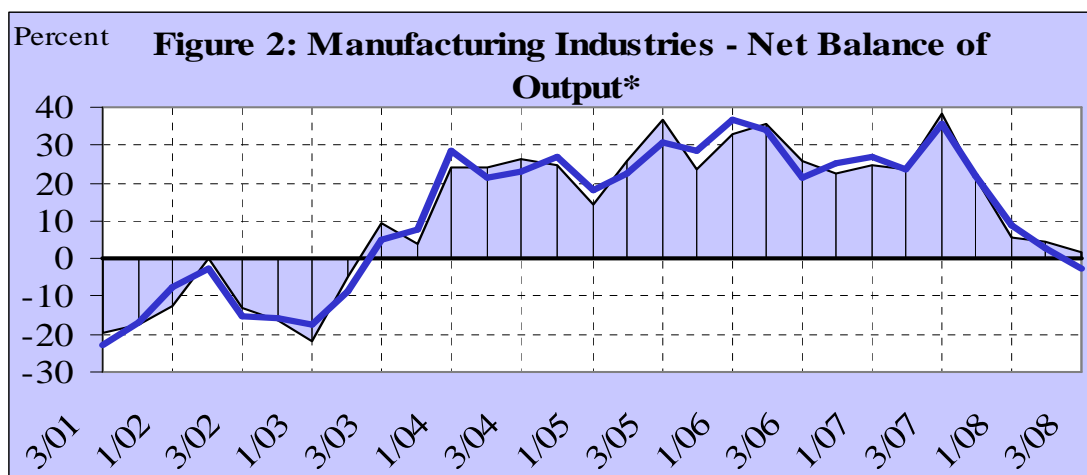
## 1. Macroeconomic developments

Analysis of the reports of all companies and businesses that participated in the survey, weighted by each industry's net balance according to its share in business-sector product, shows that the growth rate of activity slowed for the second consecutive quarter (Figure 1). The deceleration of activity was evident in trade, manufacturing, and services. However, transport and communications activity continued to grow, and while the rate of increase in hotel activity slowed somewhat relative to the year-earlier quarter, the level of activity in this industry remained high.

The leading index of business-sector activity foresees, for the first time since the second quarter of 2004, another downturn in business-sector activity. Analysis of the index by specific industries shows that this expectation originates in manufacturing, trade, and services (excluding high-tech).

## 2. Industry developments

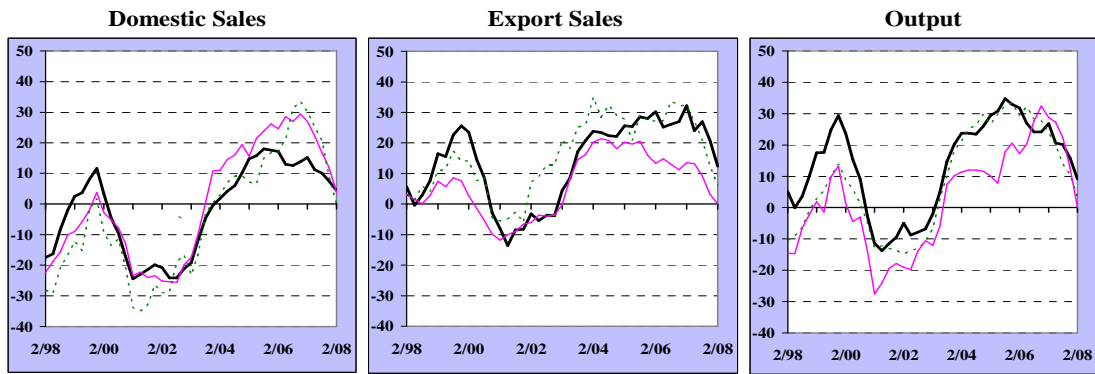
Reports from manufacturing firms indicates that the slowdown evidenced by the Companies Survey data since the first quarter of 2008 (Table 3 and Figure 2) continued in the third quarter. The deceleration of activity was especially evident in the weakness of sales to both domestic and export markets. The behavior of factor inputs provided a further reflection of the same development, as the companies reported declines in the number of employees and continued moderate decreases in utilization of machinery and equipment. They also reported increased severity of demand constraints relative to supply constraints in the industry. The companies expect domestic and export activity to fall in the next quarter as well, and at a faster pace.



The classification of manufacturing firms by their level of technical innovativeness—low-, medium-, and high-tech—shows that the output and sales of low-tech and high-tech companies decelerated. Medium-tech industries, in contrast, showed higher levels of output and sales, mainly due to buoyant growth in the chemical industry. Low-tech firms reported a decline in orders for the next quarter, medium-tech firms reported a decrease in export and domestic orders, and high-tech companies reported no meaningful change in orders for both markets (Table 1.1 and Figure 3). An examination of manufacturing by subindustries (Table 15) shows that the slump was relatively mild in mining, quarrying, building materials, and lumber, and skipped over the chemical and rubber-and-plastic industries, in which growth was powered by exports. However, both of these manufacturing subindustries foresee a slight downturn in the next quarter, as indicated by data on domestic and export orders for the coming quarter.

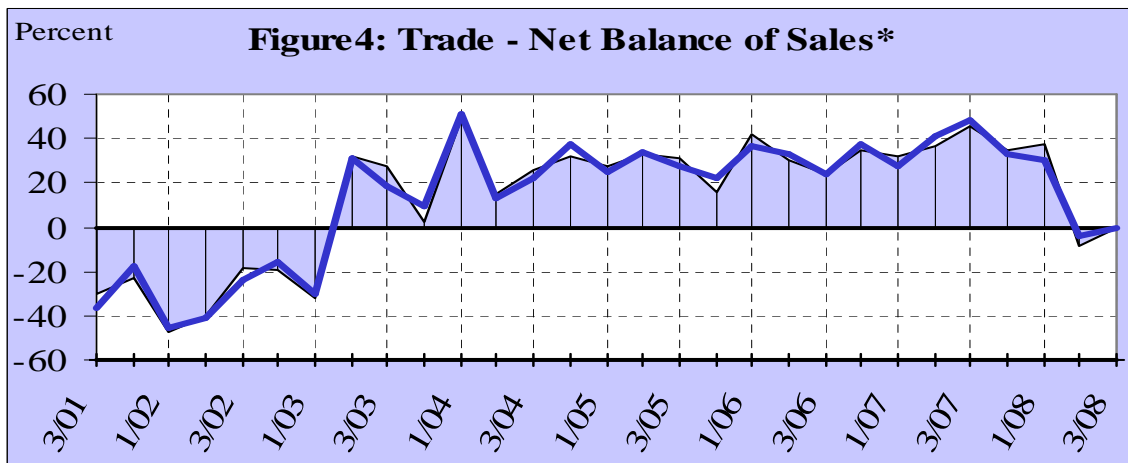
The classification of manufacturing firms by size (headcount) shows that the deceleration was most noticeable among small and medium enterprises, possibly reflecting the onset of a trend of greater severity in these companies' borrowing constraints. Notably, borrowing constraints are usually more severe among small enterprises, and the gap between small and large establishments in the severity of this restraint widened in past activity slowdowns as well.

**Figure 3: Net Balances of Manufacturing Companies, by Human Capital and Innovation<sup>a</sup>**

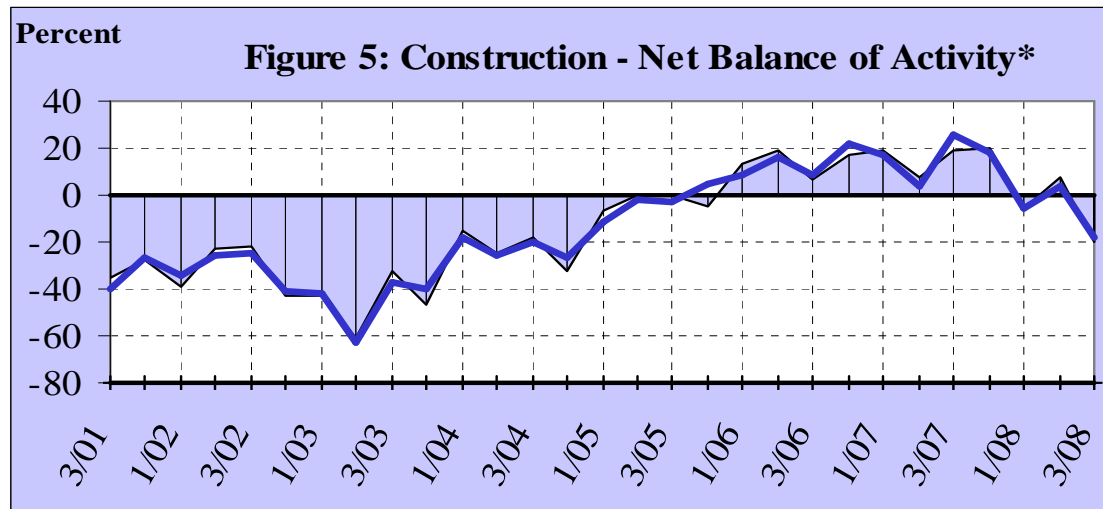


<sup>a</sup> Moving average, outlying observations - unadjusted data  
 Thick line - advanced industries  
 Thin line - traditional industries  
 Dotted line - mixed industries

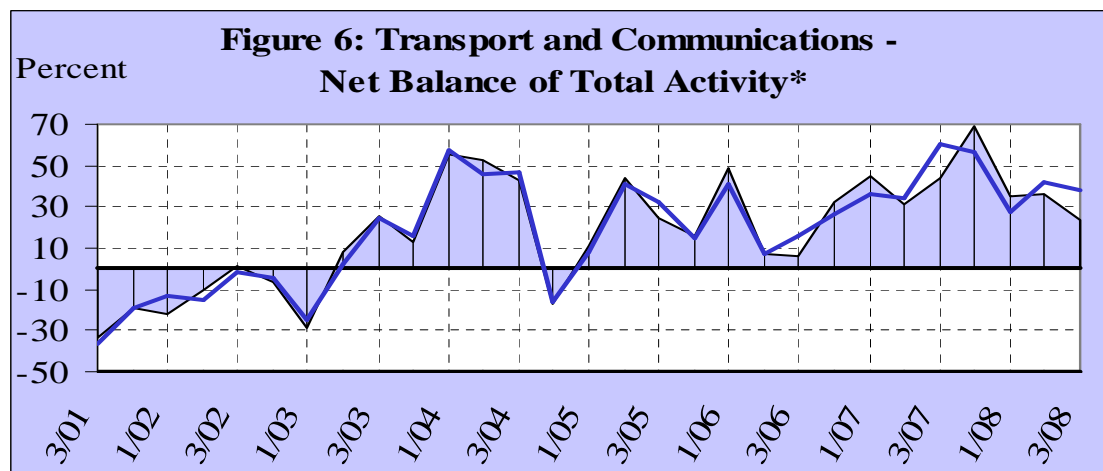
According to reports from companies in **trade**, sales slumped in the third quarter after a downturn in the second quarter and contrary to the companies' outlook in the previous quarter, which indicated that sales growth would resume. The decline in sales in back-to-back quarters prompted the companies to predict a decline in headcount. Furthermore, unlike in the previous quarter, the companies foresee another decrease in sales in the coming quarter (Table 5 and Figure 4). They reported that the demand constraint worsened to such an extent that it exceeded the supply constraint for the first time since the third quarter of 2006 (Table 17 and Figure 9).



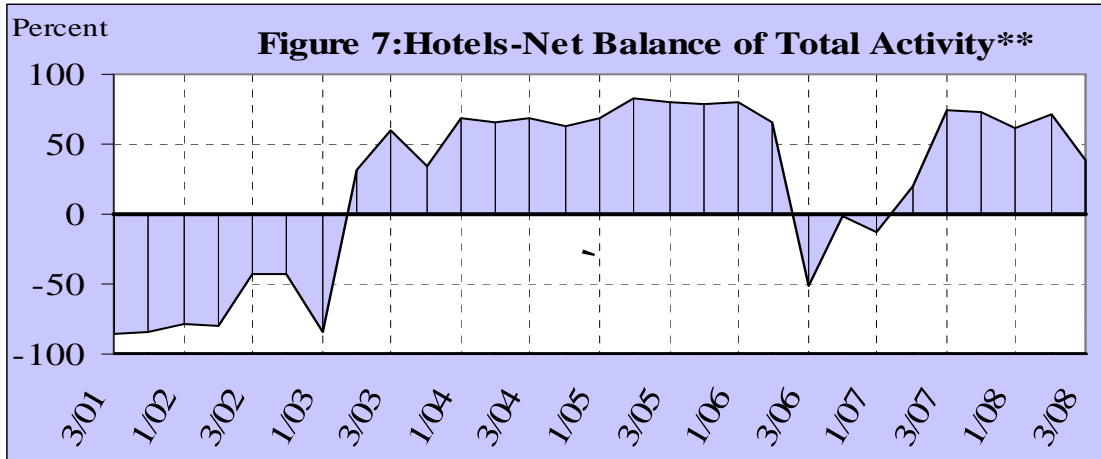
The reports of construction companies pointed to continued contraction of activity in the review quarter (Table 7 and Figure 5), pursuant to the industry's lengthy stagnation. Although most of the decrease originated in a decline in infrastructure construction, construction of buildings also decreased slightly. The companies reported a standstill in building completions, a steep decrease in building starts, and an upturn in construction time. The companies related the continued decrease in activity to a supply constraint occasioned by a combination of higher factor-input prices, financing difficulties, and difficulties in recruiting skilled workers. Notably, the construction companies have long been reporting difficulty in the last-mentioned respect. The companies expect the standstill in the industry to persist in the next quarter.



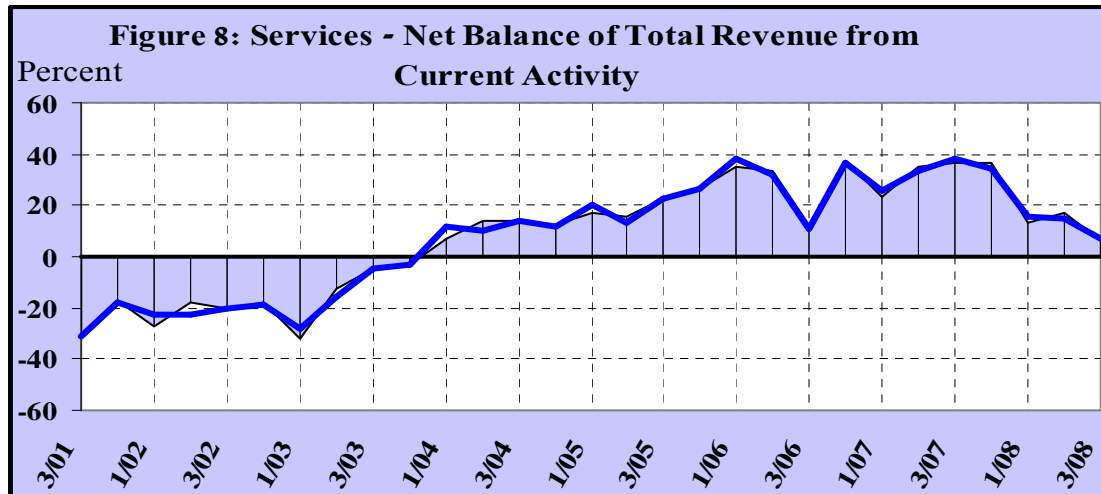
Reports from **transport and communications** companies indicate that activity continued to grow in the review quarter, mainly due to sales of overland-transport and communications services to Israelis (Table 9 and Figure 6). Analysis of the constraints to further activity growth indicates that constraints on both the supply and the demand sides have worsened. The demand constraint became tougher due to financing difficulties and hardships in recruiting skilled workers; the demand constraint, which took an especially steep turn for the worse, is a product of the domestic and global economic situation (Table 17 and Figure 9). Due to these constraints, the companies expect the pace of increase in their overall activity to head downward in the next quarter.



Companies in the **hotel** industry reported a slowdown in their activity growth rate (relative to the year-earlier quarter—Table 11 and Figure 7) after four consecutive quarters of very high overall balances. The increase in activity had been powered by continued buoyant growth in inbound-tourist bed-nights and a modest recovery in Israelis' bed-nights after a protracted slump since 2006. The companies reported only a gentle upturn in reservations for the next quarter.



**Business services** companies reported a perceptible slowdown in activity growth due to slumps in both domestic and export sales (Table 13 and Figure 8). Another reflection of the slowdown was the leveling off of industry headcount after steady increases in previous quarters. According to the companies' reports, orders from abroad for the next quarter increased but overall expectations of total activity in the next quarter continued to fall. The reports on activity constraints indicate a slight increase in the severity of the demand constraint, tracing to the global economic situation (Table 17 and Figure 9).



|  | 2005 | 2006 |    |     |    | 2007 |    |     |    | 2008 |     |      |
|--|------|------|----|-----|----|------|----|-----|----|------|-----|------|
|  | IV   | I    | II | III | IV | I    | II | III | IV | I    | II  | III  |
| <b>Industry (output)</b>                               | 24   | 33   | 36 | 26  | 22 | 24   | 24 | 38  | 21 | *6   | *4  | *2   |
| seasonally adjusted                                    | 28   | 37   | 34 | 21  | 25 | 27   | 24 | 35  | 22 | 9    | *3  | *-3  |
| <b>Trade (sales)</b>                                   | *16  | 42   | 31 | *24 | 34 | 32   | 37 | 46  | 34 | 38   | *-8 | *0   |
| seasonally adjusted                                    | *22  | 37   | 33 | *24 | 38 | 27   | 41 | 49  | 33 | 30   | *-4 | *0   |
| <b>Construction (total activity)</b>                   | *-5  | *13  | 19 | *7  | 18 | 19   | *7 | 19  | 20 | *-6  | *8  | -20  |
| seasonally adjusted                                    | *5   | *9   | 17 | *7  | 22 | 18   | *4 | 24  | 19 | *-5  | *4  | *-18 |
| <b>Transport and communications (total activity)**</b> | 16   | 48   | 7  | 6   | 32 | 44   | 31 | 44  | 69 | 35   | 37  | 33   |
| seasonally adjusted                                    | 15   | 41   | 7  | 16  | 27 | 36   | 35 | 60  | 57 | 28   | 42  | 33   |
| <b>Hotels (total activity)***</b>                      | 78   | 80   | 66 | -51 | -2 | -13  | 20 | 75  | 73 | 61   | 72  | 39   |
| Service industries                                     | 27   | 35   | 34 | 10  | 37 | 23   | 35 | 37  | 36 | 14   | 17  | 6    |
| seasonally adjusted                                    | 26   | 38   | 32 | *11 | 36 | 26   | 33 | 38  | 35 | 16   | 15  | *7   |
| <b>Total business sector</b>                           | 22   | 37   | 30 | 14  | 31 | 26   | 30 | 39  | 36 | 17   | 13  | 7    |
| seasonally adjusted                                    | 25   | 37   | 29 | 14  | 31 | 26   | 30 | 41  | 34 | 17   | 13  | 8    |

table 1.1: The net balance of manufacturing companies, classified by human-capital intensity and innovation<sup>2</sup>

|                              | 2005 | 2006 |    |     |    | 2007 |    |     |     | 2008 |     |     |
|------------------------------|------|------|----|-----|----|------|----|-----|-----|------|-----|-----|
|                              | IV   | I    | II | III | IV | I    | II | III | IV  | I    | II  | III |
| <b>Advanced companies</b>    | 42   | 36   | 33 | 17  | 31 | 18   | 22 | 33  | 30  | *9   | 16  | *6  |
| <b>Mixed companies</b>       | *9   | *12  | 39 | *18 | *8 | 24   | 49 | 63  | *14 | *0   | *3  | 24  |
| <b>Traditional companies</b> | 16   | 37   | 37 | 36  | 20 | 30   | 17 | 35  | 17  | *5   | *-5 | *-2 |

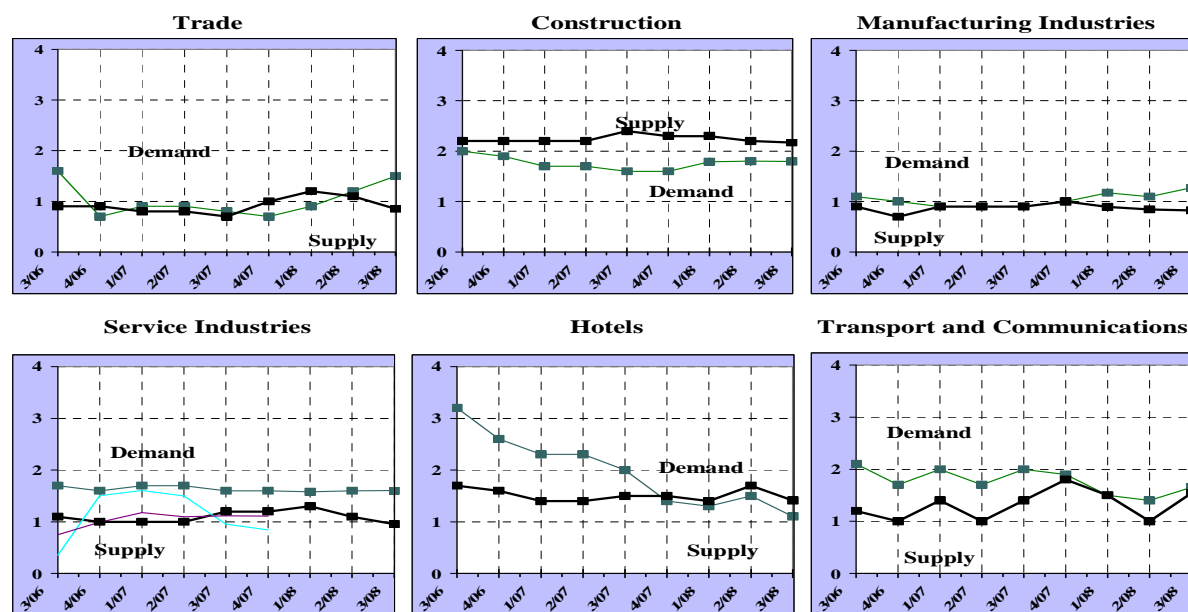
\* Not significant (at the 10% level).

\*\* The significance test is less effective in this industry due to the small number of firms.

\*\*\* Compared with the same quarter in the previous year.

**Figure 9: The severity of constraints on carrying out planned activity (average)<sup>1</sup>**

1-Slight, 2-Moderate, 3-Severe, 4-Very severe

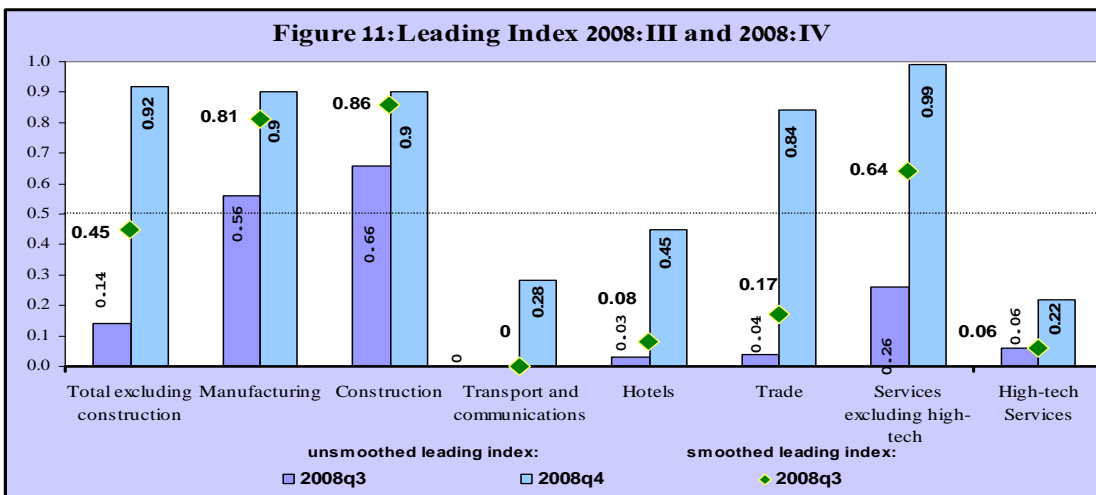
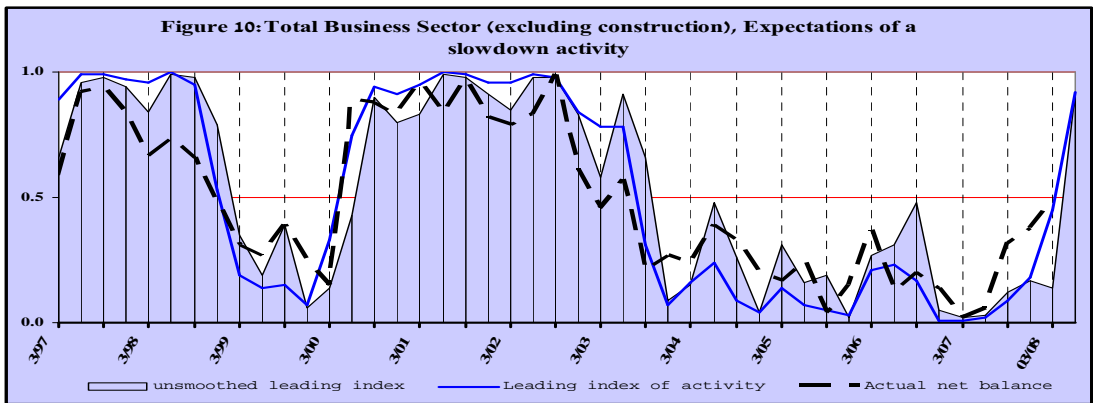
1) For every quarter the most severe constraint on the demand side and on the supply side is chosen.  
Source: Table 17.<sup>1</sup>The business-services industry is composed of food, insurance, real-estate, business, and legal services; education and healthcare; and other personal services.

### The leading index

The leading index (excluding construction) in this survey expects business-sector activity to slow again in the fourth quarter of 2008, beyond the downturn already represented by the actual net balance. The index crossed the threshold value of 0.5<sup>1</sup> for the first time since the second quarter of 2004, reflecting the downturn in orders and expectations for the next quarter relative to the net balances of activity in the current quarter, which were sluggish to begin with.

The leading index is calculated for the business sector at large (Figure 11), for each of the six industries covered in the survey, and for the high-tech-services industry (Figures A–H in the Appendix). The industry-level indices in this survey suggest that most industries, including manufacturing, trade, and business services other than high-tech, will continue to decelerate. The leading index in construction does not augur a recovery of this industry in the next quarter.

Several changes in the method of calculating the leading index were introduced in the second quarter of 2007, which enhanced the statistical significance of the findings for the various industries and took account of the asymmetry (the positive bias) in companies' responses to the survey questionnaire.<sup>2</sup> The major improvement is that two leading indices are provided, based on 1) a smoothed probability (as was given until now), in which there is inter-quarter dependence so that the index for the current quarter is updated every quarter and relates to the forecast for the next quarter; and 2) an unsmoothed probability, with no retroactive adjustment of the leading index. The combined use of the two indices shows whether there has been a significant change (i.e., not a one-off change) in the rate of growth (e.g., from a rapid to a moderate rate of growth).



<sup>1</sup> As long as the leading index remains under the 0.5 threshold, one cannot state with certainty that the growth rate will slow in the following quarter. If the index crosses the threshold, a deceleration of activity in the next quarter is implied.

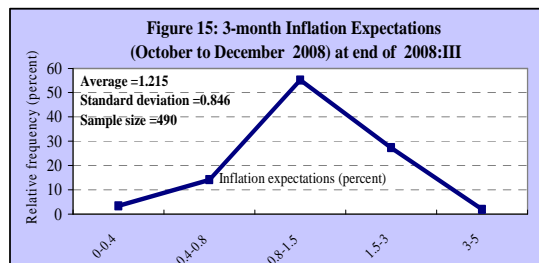
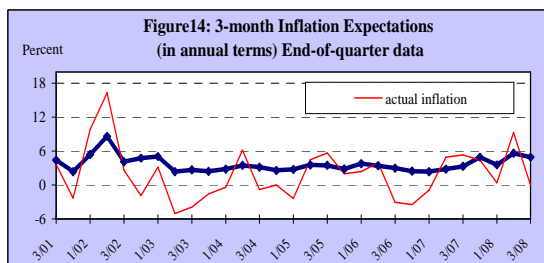
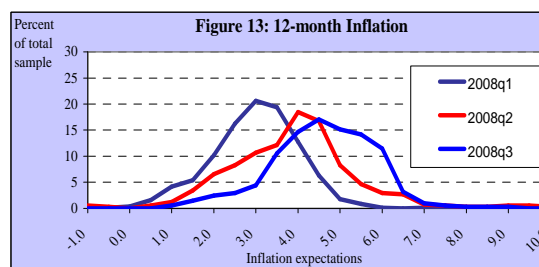
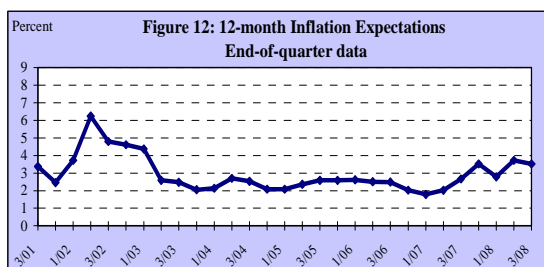
<sup>2</sup> Companies' responses regarding the state of their activities tend to be optimistic and upwardly biased.

## Survey of inflation expectations

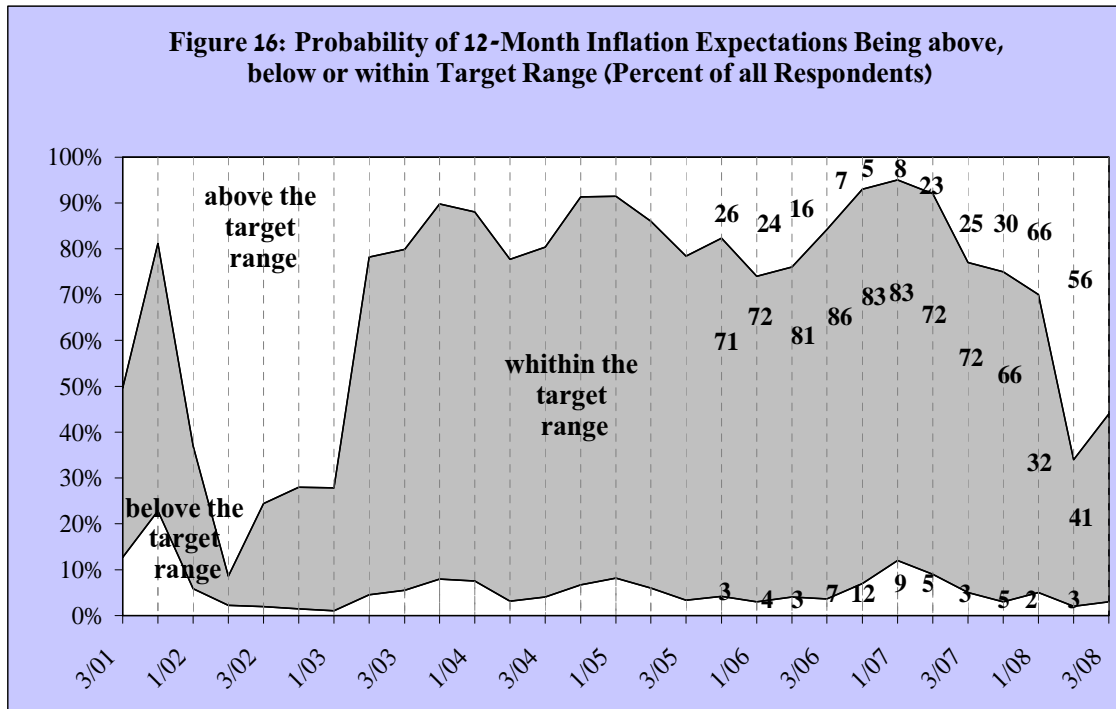
Companies' expectations about the cumulative rate of price increases during the next twelve months (October 2008–September 2009) eased slightly, to 3.5 percent on average as against 3.7 percent in the previous quarter (Figure 12), still overshooting the upper bound of the price-stability target (1–3 percent).

Concurrent with the falling rate of average inflation expectations for the coming twelve months, the inflation-expectations distribution also turned downward, the median distribution in the review quarter declining to 3.5 percent and the mode to 3 percent. The variance of expectations, however, remained high for the second straight quarter (Figure 13).

The expected rate of price increases in the coming quarter (September–December 2008) fell to 4.9 percent in annual terms as against 5.6 percent in the previous quarter but far from the 3.5 percent level reported in the first quarter (Figure 14). Furthermore, a smaller share of companies expected inflation to overshoot the upper bound of the price-stability range,<sup>3</sup> at 56 percent in the review quarter as against 66 percent in the previous quarter—still indicative of a much higher inflation environment than had long prevailed (the uppermost field in Figure 16). Concurrently, the proportion of companies that expected inflation in the next twelve months to fall within the price-stability range increased from 32 percent in the previous quarter to 41 percent in the review quarter (the middle field in Figure 16) and only 3 percent of companies expected inflation in the next twelve months to undershoot the range (the bottom field in the figure).



<sup>3</sup> The target range for the inflation rate to twelve months ahead is 1–3 percent.



The lower area denotes the share of respondents who expect 12-month inflation to be below the target range.  
 The middle area denotes the share of respondents who expect 12-month inflation to be within the target range.  
 The upper area denotes the share of respondents who expect 12-month inflation to exceed the target range.

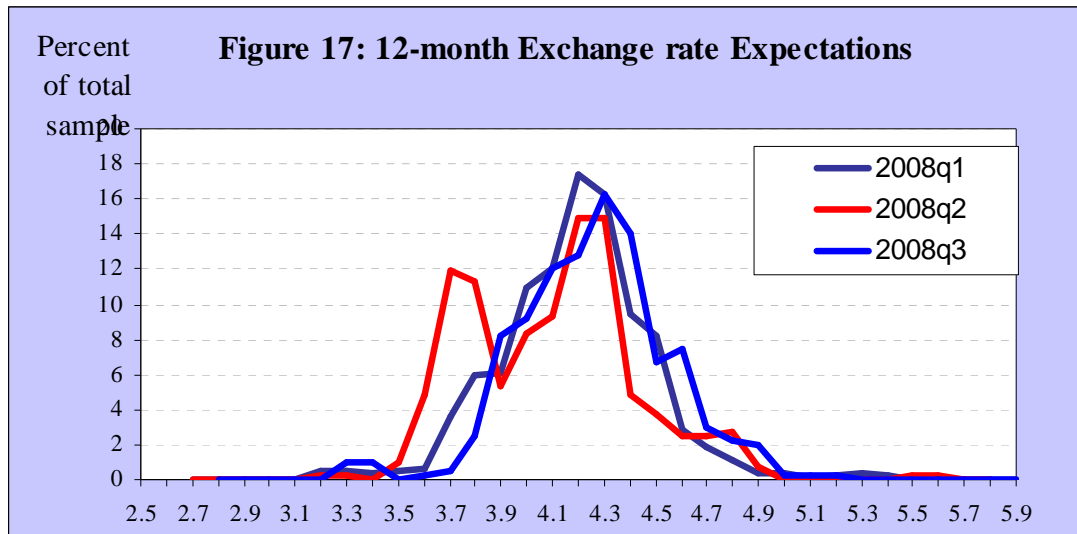
**Table 2: Statistic Analysis of 12-month Inflation Expectations**

|                                | 2005 | 2006  |       |      |      | 2007  |      |       |       | 2008  |       |      |
|--------------------------------|------|-------|-------|------|------|-------|------|-------|-------|-------|-------|------|
|                                | IV   | I     | II    | III  | IV   | I     | II   | III   | IV    | I     | II    | III  |
| 1. Mode                        | 2.00 | 3.00  | 3.00  | 2.00 | 2.00 | 2.00  | 2.00 | 3.00  | 3.00  | 3.00  | 4.00  | 3.00 |
| 2. Median                      | 2.50 | 2.70  | 2.50  | 2.50 | 2.00 | 1.70  | 2.00 | 2.50  | 2.80  | 2.90  | 3.80  | 3.50 |
| 3. Average                     | 2.59 | 2.77  | 2.65  | 2.47 | 2.01 | 1.78  | 2.02 | 2.67  | 2.77  | 2.69  | 3.70  | 3.52 |
| 4. Standart Deviation          | 1.05 | 1.11  | 1.10  | 1.02 | 0.99 | 0.91  | 0.93 | 1.09  | 0.92  | 1.04  | 1.42  | 1.44 |
| 5. Skewness                    | 0.59 | -0.23 | -0.35 | 0.47 | 0.01 | -0.22 | 0.02 | -0.33 | -0.23 | -0.31 | -0.30 | 0.52 |
| Number of responding companies | 553  | 517   | 519   | 469  | 469  | 456   | 487  | 413   | 504   | 483   | 472   | 490  |

is the difference between average and mode \*

### Expectations regarding changes in the NIS/dollar exchange rate

The companies and businesses participating in the survey were asked about their expectations of the level of the NIS/USD exchange rate at the end of the next quarter (December 31, 2008) and one year from the end of the survey period (September 30, 2009). The expected exchange rate to twelve months ahead (end of September 2009) is NIS 3.9 to the dollar as against NIS 3.8 in the previous survey. The variation of twelve-months-ahead exchange-rate expectations declined (Figure 17). The average NIS/USD exchange rate that the companies expect to see at the end of the next quarter is NIS 3.67, similar to the previous quarter. Notably, the average exchange rate as of the reporting day of companies that participated in the survey was NIS 3.54.



## Manufacturing Industries

**Table 3**  
**Net balance ( percent of all responding industrial companies) <sup>1</sup>**

|   | 2005 |     |     |     | 2006 |     |     |     | 2007 |     |     |     | 2008 |  |  |
|---|------|-----|-----|-----|------|-----|-----|-----|------|-----|-----|-----|------|--|--|
|   | IV   | I   | II  | III | IV   | I   | II  | III | IV   | I   | II  | III | IV   |  |  |
| 1. Output   | 24   | 33  | 36  | 26  | 22   | 24  | 24  | 38  | 21   | *6  | *4  | *2  |      |  |  |
| 2. Sales  | 21   | 31  | 36  | 27  | 25   | 23  | 26  | 33  | 26   | *-1 | *7  | *0  |      |  |  |
| 3. Domestic sales                                 | 14   | 22  | 21  | 23  | 22   | 19  | 26  | 31  | 17   | *-1 | *0  | *-4 |      |  |  |
| 4. Export   | 23   | 22  | 32  | 11  | 22   | 16  | 25  | 29  | 26   | *5  | *8  | *-4 |      |  |  |
| 5. Stocks of finished goods                       | 7    | 10  | 16  | 10  | 9    | 12  | 15  | 22  | 18   | 9   | 9   | *4  |      |  |  |
| 6. Stocks of raw materials                        | 11   | 9   | 13  | 12  | *4   | 7   | *6  | 17  | 11   | 10  | *6  | 11  |      |  |  |
| 7. Rate of utilization of machinery and equipment | 13   | 19  | 22  | 13  | 14   | 14  | 17  | 25  | 8    | *-2 | *-3 | *-7 |      |  |  |
| 8. Number of employees                            | *5   | 18  | 17  | 9   | 11   | 10  | 15  | 15  | 16   | *2  | *-3 | *-5 |      |  |  |
| 9. Domestic orders                                | *7   | 17  | 13  | 9   | *6   | 12  | 16  | 15  | 10   | *5  | *-2 | -23 |      |  |  |
| 10. Export orders                                 | 15   | 26  | 23  | 10  | 17   | 21  | 22  | 28  | 15   | *4  | 9   | -10 |      |  |  |
| Number of responding companies                    | 282  | 283 | 304 | 261 | 250  | 251 | 237 | 220 | 252  | 270 | 265 | 269 |      |  |  |

<sup>1</sup> The difference between the percentage of companies reporting an increase and those reporting a decrease.

\* Not significant (at the 10% level).

**Table 4**  
**Manufacturing Industries in 2008:III**  
**(percent of all responding companies in each category)**

|  | Net balance |            | Significant Increase | Moderate Increase | No Change | Moderate Decrease | Significant Decrease |
|--|-------------|------------|----------------------|-------------------|-----------|-------------------|----------------------|
|  | 2008 II     | 2008 III   |                      |                   |           |                   |                      |
| <b>A. Activity in the quarter</b>                      |             |            |                      |                   |           |                   |                      |
| 1. Output  | 4<br>(5)    | 2<br>(5)   | 4                    | 29                | 36        | 23                | 8                    |
| 2. Sales   | 7<br>(5)    | 0<br>(5)   | 5                    | 30                | 30        | 26                | 9                    |
| 3. Domestic sales                                      | 0<br>(5)    | -4<br>(5)  | 3                    | 27                | 36        | 29                | 5                    |
| 4. Export  | 8<br>(6)    | -4<br>(6)  | 3                    | 27                | 36        | 17                | 17                   |
| 5. Stocks of raw materials                             | 9<br>(5)    | 4<br>(4)   | 4                    | 22                | 52        | 19                | 3                    |
| 6. Stocks of finished goods                            | 6<br>(4)    | 11<br>(4)  | 4                    | 25                | 53        | 15                | 3                    |
| 7. Rate of utilization of machinery and equipment      | -3<br>(4)   | -7<br>(5)  | 3                    | 21                | 45        | 25                | 6                    |
| 8. Number of employees                                 | -3<br>(3)   | -5<br>(4)  | 2                    | 13                | 65        | 17                | 3                    |
| <b>B. Expected activity in the following quarter**</b> |             |            |                      |                   |           |                   |                      |
| 9. Domestic orders                                     | -2<br>(4)   | -23<br>(4) | 2                    | 13                | 47        | 28                | 10                   |
| 10. Export orders                                      | 9<br>(5)    | -10<br>(5) | 3                    | 20                | 44        | 18                | 15                   |
| Number of responding companies                         | 265         | 269        |                      |                   |           |                   |                      |

\*\* Orders received in the quarter reviewed.

Figures in brackets are standard deviations. Values smaller (in absolute terms) than 1.64 standard deviations are not statistically significant at the 10% level.

## Trade

**Table 5**  
**Net balance (percent of all responding trading companies)<sup>1</sup>**

|  | 2005 | 2006 |     |     |     | 2007 |    |     |    | 2008 |     |      |
|--|------|------|-----|-----|-----|------|----|-----|----|------|-----|------|
|  | IV   | I    | II  | III | IV  | I    | II | III | IV | I    | II  | III  |
| <b>A. Activity in the quarter</b>                    |      |      |     |     |     |      |    |     |    |      |     |      |
| 1. Sales   | *16  | 42   | 31  | *24 | 34  | 32   | 37 | 46  | 34 | 38   | *-8 | *0   |
| 2. End-of-quarter stock                              | *0   | *11  | 26  | *18 | *17 | 24   | 37 | 30  | 34 | *16  | *17 | *6   |
| 3. Percent of credit sales                           | 17   | 20   | *11 | *-3 | *3  | 21   | 27 | 17  | 22 | 25   | 19  | *12  |
| 4. Supply period                                     | 21   | *6   | *9  | *4  | 0   | 15   | 15 | 14  | *3 | *6   | *0  | *3   |
| <b>B. Expected activity in the following quarter</b> |      |      |     |     |     |      |    |     |    |      |     |      |
| 5. Forecast change in number of permanent employees  | 21   | 14   | *0  | *3  | *0  | 9    | *7 | *8  | 16 | *9   | *6  | *-14 |
| 6. Sales expectations                                | 32   | 42   | 50  | *-3 | 39  | 47   | 73 | 57  | 63 | *22  | 53  | *-11 |
| Number of responding companies                       | 31   | 36   | 36  | 29  | 29  | 34   | 30 | 24  | 32 | 32   | 36  | 35   |

<sup>1</sup> The difference between the percentage of companies reporting an increase and those reporting a decrease.

\* Not significant (at the 10% level).

**Table 6**  
**Trade in 2008:III**  
**(percent of all responding companies in each category)**

|  | Net balance |             | Significant Increase | Moderate Increase | No Change | Moderate Decrease | Significant Decrease |
|--|-------------|-------------|----------------------|-------------------|-----------|-------------------|----------------------|
|  | 2008 II     | 2008 III    |                      |                   |           |                   |                      |
| <b>A. Activity in the quarter</b>                    |             |             |                      |                   |           |                   |                      |
| 1. Sales   | -8<br>(15)  | 0<br>(15)   | 6                    | 31                | 26        | 26                | 11                   |
| 2. End-of-quarter stock                              | 17<br>(11)  | 6<br>(12)   | 0                    | 29                | 48        | 20                | 3                    |
| 3. Percent of credit sales                           | 19<br>(8)   | 12<br>(8)   | 6                    | 12                | 76        | 6                 | 0                    |
| 4. Supply period                                     | 0<br>(7)    | 3<br>(5)    | 3                    | 3                 | 91        | 3                 | 0                    |
| <b>B. Expected activity in the following quarter</b> |             |             |                      |                   |           |                   |                      |
| 5. Forecast change in number of permanent employees  | 6<br>(9)    | -14<br>(11) | 3                    | 11                | 58        | 25                | 3                    |
| 6. Sales expectations for following quarter          | 53<br>(12)  | -11<br>(15) | 6                    | 28                | 21        | 39                | 6                    |
| Number of responding companies                       | 36          | 35          |                      |                   |           |                   |                      |

Figures in brackets are standard deviations. Values smaller (in absolute terms) than 1.64 standard deviations are not statistically significant at the 10% level.

## Construction

**Table 7**  
**Net balance (percent of all responding construction companies)<sup>1</sup>**

|  | 2005 | 2006 |     |      |     | 2007 |     |      |     | 2008 |     |     |
|--|------|------|-----|------|-----|------|-----|------|-----|------|-----|-----|
|  | IV   | I    | II  | III  | IV  | I    | II  | III  | IV  | I    | II  | III |
| <b>A. Activity in the quarter</b>                      |      |      |     |      |     |      |     |      |     |      |     |     |
| 1. Total activity                                      | *-5  | *13  | 19  | *7   | 18  | 19   | *7  | 19   | 20  | *-6  | *8  | -20 |
| of which 2. Buildings                                  | *-8  | *0   | 21  | *10  | 21  | 23   | *-3 | *13  | 17  | *3   | *0  | *-6 |
| 3. Infrastructure                                      | -23  | *17  | *15 | *-12 | 23  | 33   | 30  | *8   | 24  | *-7  | *9  | -30 |
| 4. Output prices in dollar terms                       | 26   | 43   | 28  | 24   | 21  | 21   | 23  | 30   | 38  | 40   | 49  | 26  |
| 5. Area of building starts (sq. m.)                    | *-20 | *2   | *-3 | *-5  | *0  | 26   | *-8 | *-10 | *-3 | *-12 | *-5 | -40 |
| 6. Area of building completions (sq. m.)               | *-15 | *-7  | *-8 | *0   | *-8 | *6   | *10 | *-10 | *0  | *9   | *5  | *-3 |
| 7. Building time                                       | 28   | 17   | *16 | 33   | 16  | 28   | 21  | 27   | 15  | 18   | *8  | 26  |
| <b>B. Expected activity in the following quarter**</b> | *5   | 33   | 22  | 23   | 20  | 34   | 23  | *6   | 25  | *3   | *-5 | -22 |
| Number of responding companies                         | 44   | 46   | 42  | 43   | 41  | 37   | 42  | 33   | 44  | 36   | 41  | 36  |

<sup>1</sup> The difference between the percentage of companies reporting an increase and those reporting a decrease.

\* Not significant (at the 10% level).

\*\* Orders or expectations of construction in the following quarter.

**Table 8**  
**Construction in 2008:III**  
**(percent of all responding companies in each category)**

|  | Net balance |             | Significant Increase | Moderate Increase | No Change | Moderate Decrease | Significant Decrease |
|--|-------------|-------------|----------------------|-------------------|-----------|-------------------|----------------------|
|  | 2008        | 2008        |                      |                   |           |                   |                      |
| <b>A. Activity in the quarter</b>                    |             |             |                      |                   |           |                   |                      |
| 1. Total activity                                    | 8<br>(11)   | -20<br>(12) | 3                    | 14                | 46        | 23                | 14                   |
| of which Buildings                                   | 0<br>(11)   | -6<br>(13)  | 6                    | 18                | 46        | 15                | 15                   |
| Infrastructure                                       | 9<br>(12)   | -30<br>(11) | 0                    | 7                 | 56        | 26                | 11                   |
| 2. Output prices in dollar terms                     | 49<br>(11)  | 26<br>(12)  | 14                   | 26                | 46        | 14                | 0                    |
| 3. Area of building starts (sq. m.)                  | -5<br>(12)  | -40<br>(13) | 6                    | 11                | 26        | 31                | 26                   |
| 4. Area of building completions (sq. m.)             | 5<br>(10)   | -3<br>(12)  | 0                    | 23                | 51        | 17                | 9                    |
| 5. Building time                                     | 8<br>(8)    | 26<br>(10)  | 6                    | 29                | 56        | 9                 | 0                    |
| <b>B. Expected activity in the following quarter</b> | -5<br>(12)  | -22<br>(12) | 3                    | 16                | 40        | 27                | 14                   |
| Number of responding companies                       | 41          | 36          |                      |                   |           |                   |                      |

Figures in brackets are standard deviations. Values smaller (in absolute terms) than 1.64 standard deviations are not statistically significant at the 10% level.

## Transport and Communications

**Table 9**  
Weighted net balance as percentage of all responding transport and communications companies

|  | 2005 |     |     |      | 2006 |     |     |     | 2007 |     |      |     | 2008 |  |  |
|--|------|-----|-----|------|------|-----|-----|-----|------|-----|------|-----|------|--|--|
|  | IV   | I   | II  | III  | IV   | I   | II  | III | IV   | I   | II   | III |      |  |  |
| <b>A. Activity in the quarter</b>                        |      |     |     |      |      |     |     |     |      |     |      |     |      |  |  |
| 1. Total activity  | *16  | 48  | *7  | *6   | *32  | 44  | *31 | 44  | 69   | *35 | 37   | *24 |      |  |  |
| 2. Sales of services to residents                        | *18  | 37  | *16 | 31   | 48   | 47  | *38 | 44  | 68   | *32 | *38  | *32 |      |  |  |
| 3. Sales of services to nonresidents                     | *-2  | *17 | *12 | 27   | *1   | 42  | *9  | *13 | *20  | *-6 | *-10 | 17  |      |  |  |
| 4. Utilization of equipment (capacity utilization, etc.) | *24  | 44  | *21 | *-15 | 38   | *49 | 58  | 41  | 45   | *39 | 36   | *19 |      |  |  |
| <b>B. Expected activity in the following quarter**</b>   | *11  | 43  | *38 | 61   | *45  | *48 | *35 | 46  | 59   | 72  | 34   | 6   |      |  |  |
| Number of responding companies                           | 27   | 23  | 21  | 18   | 22   | 24  | 21  | 21  | 24   | 28  | 20   | 22  |      |  |  |

<sup>1</sup> The difference between the percentage of companies reporting an increase and those reporting a decrease.

See Appendix for explanation of the weighting.

\*\* Orders or expectations of total activity in the following quarter.

**Table 10**  
Transport and Communications in 2008:III  
(percent of all responding companies in each category)

|  | Net balance |             | Significant Increase | Moderate Increase | No Change | Moderate Decrease | Significant Decrease |
|--|-------------|-------------|----------------------|-------------------|-----------|-------------------|----------------------|
|  | 2008<br>II  | 2008<br>III |                      |                   |           |                   |                      |
| <b>A. Activity in the quarter</b>                        |             |             |                      |                   |           |                   |                      |
| 1. Total activity  | 37          | 24          | 4                    | 38                | 37        | 5                 | 13                   |
| 2. Sales of services to residents                        | *38         | 32          | 8                    | 39                | 37        | 5                 | 10                   |
| 3. Sales of services to nonresidents                     | *-10        | 17          | 0                    | 17                | 80        | 0                 | 0                    |
| 4. Utilization of equipment (capacity utilization, etc.) | 36          | 19          | 8                    | 30                | 40        | 19                | 0                    |
| <b>B. Expected activity in the following quarter</b>     | 34          | 6           | 0                    | 32                | 39        | 19                | 8                    |
| Number of responding companies                           | 20          | 22          |                      |                   |           |                   |                      |

Due to the small number of companies in this field, a high standard deviation does not necessarily indicate non-significance.

## Hotels

**Table 11**  
**Net balance (percent of all responding hotel companies)<sup>1</sup>**  
**(compared with equivalent period last year)**

|  | 2005 |    |     |     | 2006 |      |      |     | 2007 |     |    |     | 2008 |  |  |
|--|------|----|-----|-----|------|------|------|-----|------|-----|----|-----|------|--|--|
|  | IV   | I  | II  | III | IV   | I    | II   | III | IV   | I   | II | III |      |  |  |
| <b>A. Activity in the quarter</b>                      |      |    |     |     |      |      |      |     |      |     |    |     |      |  |  |
| 1. Total activity                                      | 78   | 80 | 66  | -51 | *-2  | *-13 | *20  | 75  | 73   | 61  | 72 | 39  |      |  |  |
| 2. Number of bed-nights: Tourists                      | 80   | 78 | 64  | -78 | -44  | -31  | *-4  | 65  | 70   | 70  | 85 | 46  |      |  |  |
| 3. Number of bed-nights: Israelis                      | *8   | 22 | *-2 | -25 | *-12 | *-2  | *-11 | *0  | *-18 | *-8 | *0 | *13 |      |  |  |
| 4. Average revenue per room                            | 69   | 78 | 62  | *-6 | *18  | 36   | 23   | 67  | 49   | 24  | 26 | 24  |      |  |  |
| <b>B. Expected activity in the following quarter**</b> | 63   | 64 | 35  | -57 | -22  | 23   | *21  | 62  | 46   | 76  | 63 | *2  |      |  |  |
| Number of responding companies                         | 51   | 55 | 47  | 49  | 50   | 48   | 45   | 40  | 40   | 37  | 39 | 46  |      |  |  |

<sup>1</sup> The difference between the percentage of companies reporting an increase and those reporting a decrease.

\* Not significant (at the 10% level).

\*\* Orders or expectations of total activity in the following quarter.

**Table 12**  
**Hotels in 2008:III**  
**(percent of all responding companies in each category)**

|  | Net balance |            | Significant Increase | Moderate Increase | No Change | Moderate Decrease | Significant Decrease |
|--|-------------|------------|----------------------|-------------------|-----------|-------------------|----------------------|
|  | 2008 II     | 2008 III   |                      |                   |           |                   |                      |
| <b>A. Activity in the quarter</b>                    |             |            |                      |                   |           |                   |                      |
| 1. Total activity                                    | 72<br>(10)  | 39<br>(11) | 15                   | 41                | 27        | 17                | 0                    |
| 2. Number of bed-nights: Tourists                    | 85<br>(7)   | 46<br>(11) | 17                   | 44                | 24        | 11                | 4                    |
| 3. Number of bed-nights: Israelis                    | 0<br>(11)   | 13<br>(11) | 0                    | 35                | 43        | 20                | 2                    |
| 4. Average revenue per room                          | 26<br>(13)  | 24<br>(12) | 7                    | 41                | 28        | 24                | 0                    |
| <b>B. Expected activity in the following quarter</b> | 63<br>(11)  | 2<br>(12)  | 4                    | 31                | 32        | 28                | 5                    |
| Number of responding companies                       | 39          | 46         |                      |                   |           |                   |                      |

Figures in brackets are standard deviations. Values smaller (in absolute terms) than 1.64 standard deviations are not statistically significant at the 10% level.

## Service industries

**Table 13**  
**Net balance (percent of all responding transport and communications companies)<sup>1</sup>**

|  | 2005 | 2006 |     |     |     | 2007 |     |     |     | 2008 |     |     |
|--|------|------|-----|-----|-----|------|-----|-----|-----|------|-----|-----|
|  | IV   | I    | II  | III | IV  | I    | II  | III | IV  | I    | II  | III |
| <b>A. Activity in the quarter</b>                      |      |      |     |     |     |      |     |     |     |      |     |     |
| 1. Total revenue from current activity                 | 22   | 27   | 35  | 34  | *10 | 37   | 23  | 37  | 36  | 14   | 17  | *6  |
| 2. Sales of services in Israel                         | 26   | 33   | 36  | 33  | *8  | 36   | 20  | 27  | 33  | 10   | 16  | *3  |
| 3. Sales of services abroad                            | 41   | 26   | 29  | 21  | *26 | 46   | *0  | 33  | 36  | 18   | 21  | *2  |
| 4. Number of employees                                 | 16   | 17   | 24  | 19  | 10  | 13   | 15  | 22  | 25  | 21   | 12  | 8   |
| 5. of which: trained                                   | 17   | 21   | 27  | 12  | *8  | 17   | 17  | 26  | 29  | 24   | 14  | *6  |
| 6. Number of Israeli workers abroad                    | *9   | 22   | 29  | 12  | *0  | 16   | 15  | *7  | *6  | 9    | *3  | *2  |
| <b>B. Expected activity in the following quarter**</b> |      |      |     |     |     |      |     |     |     |      |     |     |
| 7. Total orders  | 28   | 31   | 46  | 39  | 26  | 27   | 42  | 41  | 40  | 23   | 25  | *2  |
| 8. Export orders                                       | 31   | 30   | 31  | *17 | *6  | *13  | 32  | 52  | 29  | 36   | 22  | *7  |
| Number of responding companies                         | 195  | 163  | 178 | 150 | 155 | 151  | 202 | 163 | 188 | 197  | 191 | 183 |

<sup>1</sup>The difference between the percentage of companies reporting an increase and those reporting a decrease.

\* Not significant (at the 10% level).

\*\* Orders or expectations of total activity in the following quarter.

**Table 14**  
**Service industries in 2008:III**  
**(percent of all responding companies in each category)**

|  | Net balance |           | Significant Increase | Moderate Increase | No Change | Moderate Decrease | Significant Decrease |
|--|-------------|-----------|----------------------|-------------------|-----------|-------------------|----------------------|
|  | 2008 II     | 2008 III  |                      |                   |           |                   |                      |
| <b>A. Activity in the quarter</b>                      |             |           |                      |                   |           |                   |                      |
| 1. Total revenue from current activity                 | 17<br>(5)   | 6<br>(6)  | 7                    | 26                | 40        | 22                | 5                    |
| 2. Sales of services in Israel                         | 16<br>(5)   | 3<br>(6)  | 5                    | 23                | 47        | 21                | 4                    |
| 3. Sales of services abroad                            | 21<br>(10)  | 2<br>(8)  | 6                    | 17                | 56        | 18                | 3                    |
| 4. Number of employees                                 | 12<br>(5)   | 8<br>(4)  | 1                    | 20                | 66        | 12                | 1                    |
| 5. of which: trained                                   | 14<br>(4)   | 6<br>(4)  | 1                    | 17                | 70        | 11                | 1                    |
| 6. Number of Israeli workers abroad                    | -3<br>(5)   | -2<br>(4) | 0                    | 3                 | 92        | 3                 | 2                    |
| <b>B. Expected activity in the following quarter**</b> |             |           |                      |                   |           |                   |                      |
| 7. Total orders  | 25<br>(5)   | -2<br>(6) | 3                    | 27                | 38        | 26                | 6                    |
| 8. Export orders                                       | 22<br>(9)   | 7<br>(10) | 7                    | 25                | 43        | 18                | 7                    |
| Number of responding companies                         | 191         | 183       |                      |                   |           |                   |                      |

\* Not significant (at the 10% level)

\*\* Orders received in the quarter reviewed.

Figures in brackets are standard deviations. Values smaller (in absolute terms) than 1.64 standard deviations are not statistically significant at the 10% level.

Table 15: Manufacturing Industries in 2008:II and 2008:III

|  |      |     | Number of  | Total  | Domestic | Domestic            | Actual  | Export              | Finished | Number    |
|--|------|-----|------------|--------|----------|---------------------|---------|---------------------|----------|-----------|
|  | 2008 | III | responding | output | sales    | orders <sup>1</sup> | exports | orders <sup>1</sup> | goods    | of        |
|  | 2008 | III | companies  |        |          |                     |         |                     |          | employees |
| Mining, quarrying,<br>construction materials, and wood | 2008 | III | 24         | *8     | *-4      | -43                 | *-20    | *-29                | *17      | *-13      |
|  | 2008 | II  | 22         | *0     | *0       | *-5                 | *-17    | *-9                 | *0       | *-14      |
| Food and beverages                                     | 2008 | III | 38         | *19    | *11      | -18                 | *4      | *-5                 | *11      | *3        |
|  | 2008 | II  | 33         | *24    | 44       | *15                 | *-17    | *12                 | *-6      | 15        |
| Textiles, clothing,<br>and leather                     | 2008 | III | 20         | *-21   | -42      | -32                 | *-33    | -38                 | *0       | -40       |
|  | 2008 | II  | 19         | *-22   | *-17     | *-17                | *-33    | *-21                | *5       | -26       |
| Chemicals, rubber,<br>and plastic                      | 2008 | III | 52         | *13    | *-4      | -27                 | 20      | *2                  | *14      | *6        |
|  | 2008 | II  | 47         | *17    | *-2      | *9                  | 28      | 20                  | 35       | *4        |
| Metals and machinery                                   | 2008 | III | 39         | -28    | *-13     | -26                 | *-24    | *-21                | *13      | *-5       |
|  | 2008 | II  | 42         | *-2    | -29      | *-13                | *-3     | *-3                 | *0       | *0        |
| Electronics, electricity,<br>and transport equipment   | 2008 | III | 66         | *14    | *6       | *-5                 | *6      | *6                  | 19       | *5        |
|  | 2008 | II  | 64         | *14    | *7       | *7                  | 27      | 33                  | *2       | *-3       |
| Paper, printing, and other                             | 2008 | III | 23         | *9     | *14      | -23                 | *-7     | *-14                | *-14     | -13       |
|  | 2008 | II  | 31         | -23    | *-7      | -23                 | *0      | -20                 | *-3      | *-10      |
| Total manufacturing industries<br>excluding diamonds   | 2008 | III | 262        | *5     | *-2      | -22                 | *-2     | *-8                 | 11       | *-3       |
|  | 2008 | II  | 258        | *5     | *0       | *-2                 | *7      | 10                  | *6       | *-2       |
| Diamonds   | 2008 | III | 7          | -100   | -100     | -67                 | -71     | -86                 | *0       | -57       |
|  | 2008 | II  | 7          | -29    | *0       | -33                 | *14     | *-14                | *0       | -29       |
| Total manufacturing<br>industries                      | 2008 | III | 269        | *2     | *-4      | -23                 | *-4     | -10                 | 11       | *-5       |
|  | 2008 | II  | 265        | *4     | *0       | *-2                 | *8      | 9                   | *6       | *-3       |

<sup>1</sup> Orders received in quarter reviewed.

\* Not significant (at the 10% level).

**Table 16**  
Net balance of the principal industries and construction  
by size of company, 2008:III

|                     | Manufacturing companies |       |        |       | Construction companies |       |        |       |      |
|---------------------|-------------------------|-------|--------|-------|------------------------|-------|--------|-------|------|
|                     | Total                   | Small | Middle | Large | Total                  | Small | Middle | Large |      |
| Output              | *2                      | *12   | *-10   | 15    | Total activity         | -20   | -75    | *-6   | *0   |
| Total sales         | *0                      | *8    | -18    | 14    | Area of starts         | -40   | *-50   | -33   | *-40 |
| Domestic sales      | *-4                     | *-12  | *-13   | *10   | Area of completions    | *-3   | *-25   | *11   | *-10 |
| Export              | *-4                     | *7    | -23    | *10   | Output prices in \$    | 26    | *-25   | *28   | *27  |
| Number of companies | 269                     | 26    | 91     | 130   | Area of completions    | 36    | 4      | 18    | 11   |

<sup>1</sup> According to number of employees (small company - 1-19 employees, medium size company - 20-99 employees, large company - 100 employees or more).

\* Not significant (at the 10% level).

**Table 17**  
**The severity of constraints on carrying out planned activity (average)**  
**1-Minimal, 2-Moderate, 3-Significant, 4-Very significant**

| Manufacturing Industries         |            |            |            |            |            |            | Transport and Communications               |            |            |            |            |            |            |
|----------------------------------|------------|------------|------------|------------|------------|------------|--|------------|------------|------------|------------|------------|------------|
|                                  | 2007       |            |            | 2008       |            |            |  | 2007       |            |            | 2008       |            |            |
|                                  | II         | III        | IV         | I          | II         | III        |  | II         | III        | IV         | I          | II         | III        |
| <b>Demand constraints</b>        |            |            |            |            |            |            | <b>Demand constraints</b>                  |            |            |            |            |            |            |
| Volume of export orders          | <b>0.9</b> | <b>0.9</b> | <b>1.0</b> | <b>1.2</b> | <b>1.1</b> | <b>1.3</b> | Booking by foreign tourists                | 1.4        | 1.0        | 0.7        | 0.5        | 0.5        | 0.8        |
| Volume of domestic orders        | <b>0.9</b> | 0.8        | 0.9        | 1.1        | 1.0        | <b>1.3</b> | Booking by Israelis                        | 0.7        | 0.4        | 0.6        | 0.4        | 0.3        | 0.5        |
| <b>Supply constraints</b>        |            |            |            |            |            |            | <b>Supply constraints</b>                  |            |            |            |            |            |            |
| Machinery and equipment shortage | 0.5        | 0.4        | 0.5        | 0.4        | 0.4        | 0.4        | Economic and political situation in Israel | 1.5        | 1.1        | 1.0        | 0.7        | 0.8        | 1.2        |
| Financing difficulties           | 0.5        | 0.5        | 0.5        | 0.6        | 0.7        | <b>0.8</b> | Intensification of competition             | <b>1.7</b> | <b>2.0</b> | <b>1.9</b> | <b>1.5</b> | <b>1.4</b> | <b>1.7</b> |
| Labour shortage                  | <b>0.9</b> | <b>0.9</b> | <b>1.0</b> | <b>0.9</b> | <b>0.8</b> | <b>0.8</b> | <b>Supply constraints</b>                  |            |            |            |            |            |            |
|                                  |            |            |            |            |            |            | Financing difficulties                     | 0.8        | 0.7        | 0.8        | 0.5        | 0.7        | 0.9        |
|                                  |            |            |            |            |            |            | Labour shortage                            | <b>1.0</b> | <b>1.4</b> | <b>1.8</b> | <b>1.5</b> | <b>1.0</b> | <b>1.5</b> |

| Construction                     |            |            |            |            |            |            | Hotels                                     |            |            |            |            |            |            |
|----------------------------------|------------|------------|------------|------------|------------|------------|--|------------|------------|------------|------------|------------|------------|
|                                  | 2007       |            |            | 2008       |            |            |  | 2007       |            |            | 2008       |            |            |
|                                  | II         | III        | IV         | I          | II         | III        |  | II         | III        | IV         | I          | II         | III        |
| <b>Demand constraints</b>        |            |            |            |            |            |            | <b>Demand constraints</b>                  |            |            |            |            |            |            |
| Volume of demand                 | <b>1.7</b> | <b>1.6</b> | <b>1.6</b> | <b>1.8</b> | <b>1.8</b> | <b>1.8</b> | Booking by foreign tourists                | <b>2.3</b> | <b>2.0</b> | <b>1.4</b> | <b>1.3</b> | <b>1.5</b> | <b>1.1</b> |
| <b>Supply constraints</b>        |            |            |            |            |            |            | <b>Supply constraints</b>                  |            |            |            |            |            |            |
| Input prices                     | 1.2        | 1.1        | 1.4        | 1.4        | 1.8        | 1.7        | Booking by Israelis                        | 1.0        | 1.2        | 0.9        | 1.1        | 1.3        | 1.0        |
| Financing difficulties           | 1.2        | 1.1        | 1.0        | 1.6        | 1.2        | 1.7        | Economic and political situation in Israel | 1.5        | 1.5        | 1.1        | 1.0        | 1.3        | 1.0        |
| Labour shortage                  | <b>2.2</b> | <b>2.4</b> | <b>2.3</b> | <b>2.3</b> | <b>2.2</b> | <b>2.2</b> | <b>Supply constraints</b>                  |            |            |            |            |            |            |
| Machinery and equipment shortage | 0.3        | 0.4        | 0.2        | 0.4        | 0.5        | 0.5        | Financing difficulties                     | 1.1        | 1.0        | 1.3        | 1.3        | 1.4        | 1.0        |
|                                  |            |            |            |            |            |            | Labour shortage                            | <b>1.4</b> | <b>1.5</b> | <b>1.5</b> | <b>1.4</b> | <b>1.7</b> | <b>1.4</b> |

| Trade                                      |            |            |            |            |            |            | Service Industries                         |            |            |            |            |            |            |
|--|------------|------------|------------|------------|------------|------------|--|------------|------------|------------|------------|------------|------------|
|  | 2007       |            |            | 2008       |            |            |  | 2007       |            |            | 2008       |            |            |
|  | II         | III        | IV         | I          | II         | III        |  | II         | III        | IV         | I          | II         | III        |
| <b>Demand constraints</b>                  |            |            |            |            |            |            | <b>Demand constraints</b>                  |            |            |            |            |            |            |
| Volume of orders                           | 0.4        | <b>0.8</b> | 0.6        | 0.6        | 0.9        | 0.5        | Economic and political situation in Israel | 0.9        | 0.7        | 0.7        | 0.7        | 0.9        | 0.9        |
| Economic and political situation in Israel | <b>0.9</b> | 0.7        | <b>0.7</b> | <b>0.9</b> | 1.1        | 1.3        | Global Economic situation                  | 0.5        | 0.5        | 0.8        | 0.8        | 1.3        | <b>1.6</b> |
| Economic situation in the world            | 0.5        | 0.4        | 0.6        | <b>0.9</b> | <b>1.2</b> | <b>1.5</b> | Intensification of competition             | <b>1.7</b> | <b>1.6</b> | <b>1.6</b> | <b>1.6</b> | <b>1.6</b> | 1.5        |
| <b>Supply constraints</b>                  |            |            |            |            |            |            | <b>Supply constraints</b>                  |            |            |            |            |            |            |
| Financing difficulties                     | <b>0.8</b> | <b>0.7</b> | 0.9        | 0.9        | 0.7        | <b>0.9</b> | Financing difficulties                     | 0.8        | 0.9        | 0.7        | 0.6        | 0.8        | 0.8        |
| Labour shortage                            | 0.5        | <b>0.7</b> | <b>1.0</b> | <b>1.2</b> | <b>1.1</b> | 0.8        | Labour shortage                            | <b>1.0</b> | <b>1.2</b> | <b>1.2</b> | <b>1.3</b> | <b>1.1</b> | <b>1.0</b> |

## APPENDIX

### Notes to the Survey

#### *Net balance*

This quarterly survey relates to developments in the third quarter of 2008 and includes assessments and expectations regarding the fourth quarter. The survey findings are based on responses to questionnaires received from companies in six industries: manufacturing, trade, construction, hotels, transport and communications, and business services. The questions are qualitative, that is, the companies are asked to report on the direction of changes in the different variables (increase, decrease, or no change) and on the degree of change (great, slight). The survey is intended to serve decision-makers as an analytical tool that updates and complements the quantitative data.

In all industries except hotels, companies are asked to indicate the actual change compared with the previous quarter, without seasonal or other adjustments. In the hotel industry, companies are asked to report the change relative to the year-earlier quarter.

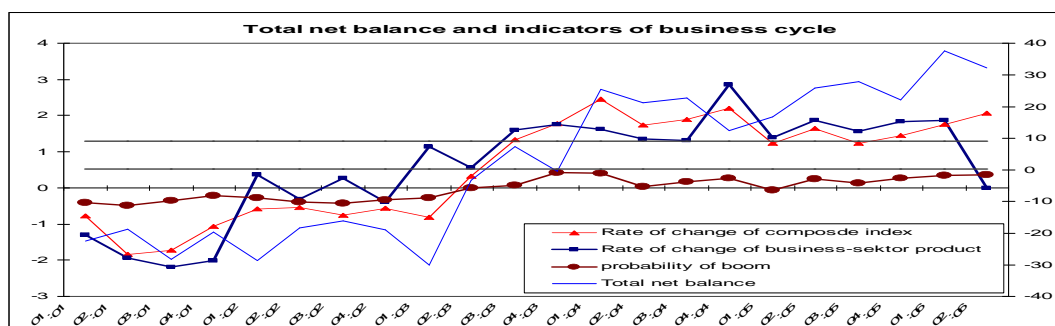
Although the results are not weighted by company size, in the analysis of the results in manufacturing industries and construction the main results are also shown with the companies grouped by size.

The results are analyzed by means of the net balance, defined as the difference between the percentage of companies reporting an increase and the percentage of those reporting a decrease. A net balance of zero in a particular category shows that there was no change in the level of that category compared with the previous quarter. A negative balance indicates a decrease; a positive balance indicates an increase.

The standard deviation is affected by, among other things, the number of observations in the sample and the distribution of responses in each category. The fewer observations there are, the greater the standard deviation.

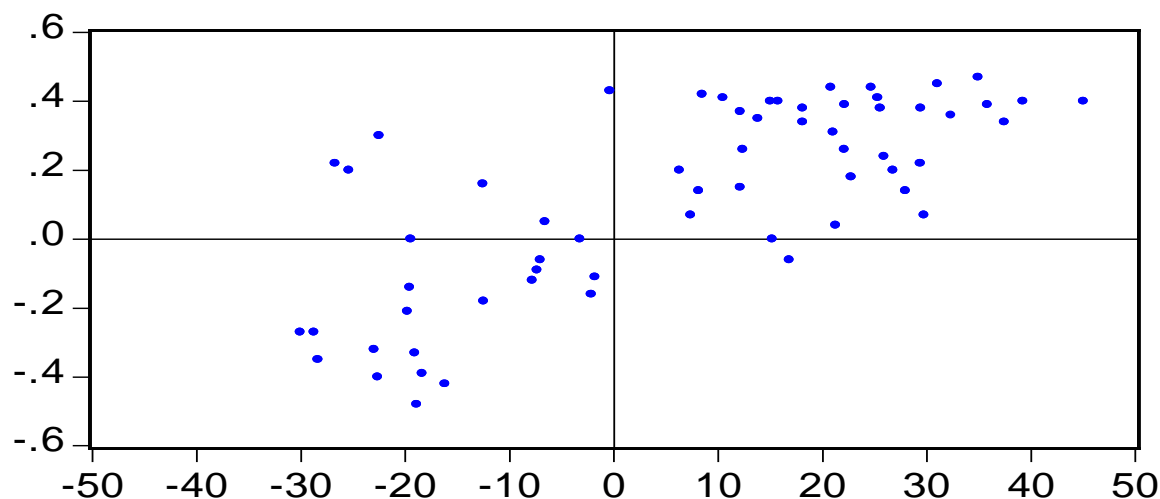
The data on net balances are based on totaling the answers of all companies that respond to the survey at large and not only those that participated in recent surveys. The data in all tables are given in terms of the percent of companies that responded.

The total net balance is calculated from the seasonally adjusted net balance of the activity in all industries weighted by the share of each industry in total business-sector product. This balance enables the indicators of the business cycle to be predicted successfully. These indicators are classified each quarter into one of three categories: economic recession, economic upturn, or undefined.



The field between 0.25% and 9.05% indicates the area in which the balance does not indicate significant development in either direction. The field above it denotes an economic upturn; the field below signals a recession.

Total net balance of business- sektor product  
and the probability of boom (1991q1 to 2006q2)



The survey findings show a clear connection between the net balance of activity in the various industries and the change in their activity as published later by the Central Bureau of Statistics. The figures below illustrate this with regard to the overall balance. When the net balance is positive, the composite State-of-the-Economy Index and the probability of economic recession indicate that an upturn is taking place and the trend of business-sector product is positive.

**Rate of success in using total net balance to predict indicators of the business cycle**  
(percent)

| Quarter tending toward | Composite index | Probability of recession | Trend of business-sektor product |
|------------------------|-----------------|--------------------------|----------------------------------|
| Recession              | 72              | 76                       | 64                               |
| Boom                   | 68              | 79                       | 63                               |

Sample period: 1983 III to 2003 IV

The net balances of activities in the transport and communications industry are calculated as the weighted average of the net balances of the separate components of the industry, with each net balance weighted by the share of that component' product in the product of the industry at large. Since the standard deviation of the weighted balance is unobtainable, neither the standard deviation nor the significance of the weighted net balances is shown.

The net balances of manufacturing companies, classified by the share of skilled workers in each industry and its degree of technological innovation (Table 2.10 on page 53 of the Bank of Israel 1999 *Annual Report*), are shown in Figure 9. The high-tech industries (chemicals, machinery, electrical and electronic equipment) account for 30 percent of the sample. The low-tech industries (food, beverages and tobacco, clothing, textiles and leather, wood, paper and printing, non-metallic minerals, iron, steel and metal products, transport equipment, and diamonds) constitute 55 percent of the sample. The remaining 15 percent consist of medium-tech industries (mining and quarrying, rubber and plastics, and miscellaneous).

## Leading index

The leading index obtained from the Companies Survey estimates the probability of a slowdown in activity in the following quarter as against the current quarter or the probability of a recession in terms of growth cycles. The index is based on a Markov chain statistical model that expresses two situations—a high growth rate or a recession—and four transition possibilities between these situations: from a high rate of growth to a moderate rate, from a moderate to a moderate rate, from a moderate to a high growth rate, and from a high to a high growth rate. The leading index describes the two probabilities of a slowdown in accordance with two possible developments: continued activity at a moderate pace or a switch from rapid growth to slowdown.

To estimate the probability that the pace of growth will slow, each company's expectations for the following quarter are crossed with their assessment regarding the current quarter, and four dependent modes expressing the change in the existing situation are calculated (Table 1). Accordingly, from the companies that reported an increase in activity for the current quarter, a calculation is made of the percentage of companies expecting the increase to continue in the next quarter and the percentage of companies expecting their activity to decrease. From the companies reporting a decrease in their activity in the current quarter, a calculation is made of the percentage of companies expecting the decrease to continue in the next quarter and of the percentage of companies expecting their activity to increase. The companies reporting an improvement in their current activity include those that reported an improvement one or two quarters previously and then reported no change. Similarly, the companies reporting a decrease in their current activity include those that reported a decrease one or two quarters previously and then reported no change. This makes it possible to monitor gradual rather than sudden shifts in activity that develop over two or three quarters and not within a single quarter.

Probabilities of a change in the pace of growth are calculated from the normal probability function based on the parameters in Table 1. In addition, the model assumes dependency between the quarters, so that the forecast for the following quarter is dependent on the estimate obtained for the current quarter.

To conclude, the leading index provides an indication of the state of activity in the next quarter.

**Table 1: Averages and Standard Deviations of Dependent Frequencies by Industries in the survey** (sample: 1991-2005)

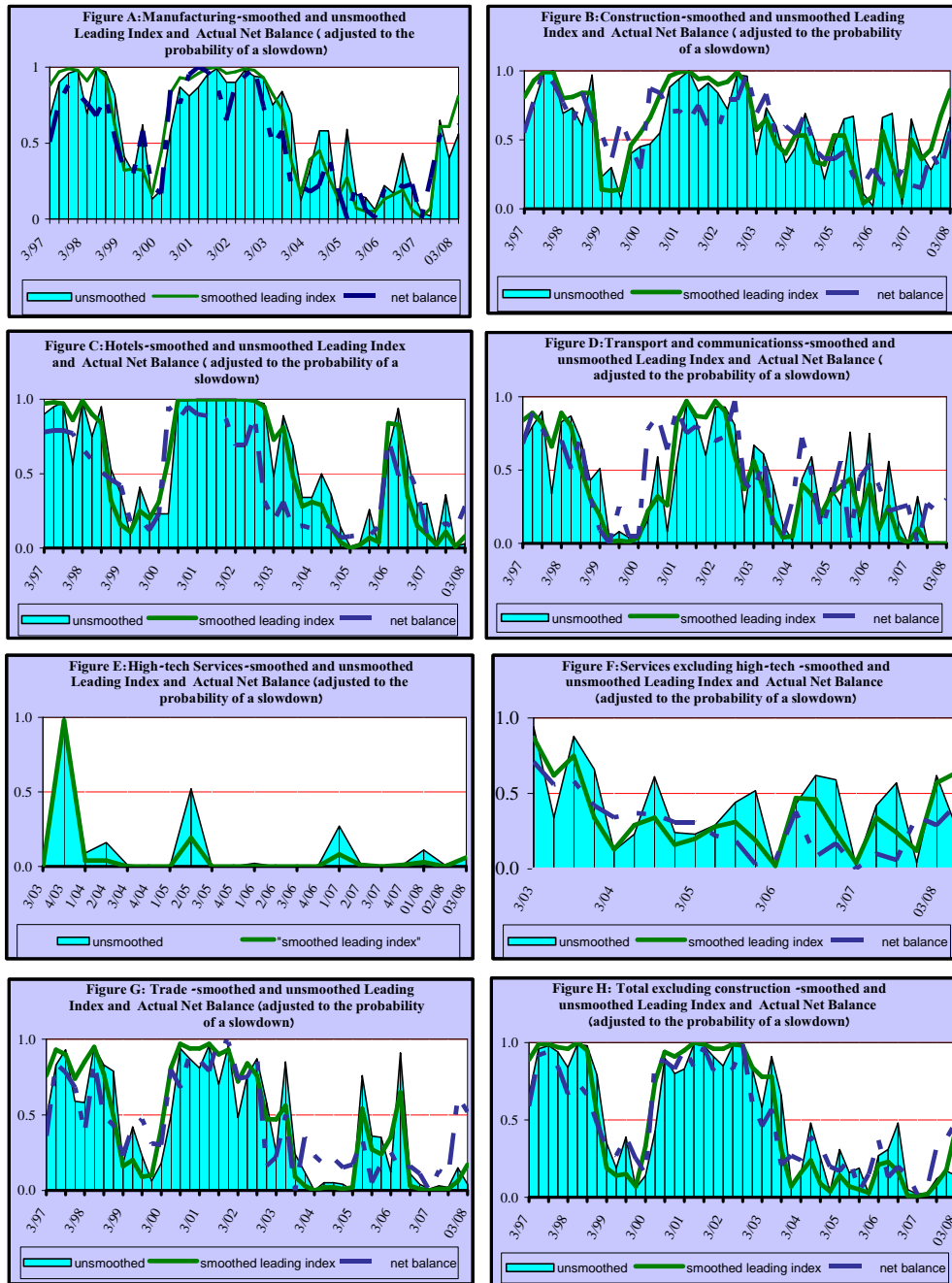
| Number of companies <sup>b</sup> | Continued slowdown |                    | slowdown-acceleration |                    | Acceleration-slowdown |                    | Continued acceleration |                    | Industry              |
|----------------------------------|--------------------|--------------------|-----------------------|--------------------|-----------------------|--------------------|------------------------|--------------------|-----------------------|
|                                  | average            | standard deviation | average               | standard deviation | average               | standard deviation | average                | standard deviation |                       |
| 257                              | 0.45               | 0.07               | 0.11                  | 0.04               | 0.14                  | 0.04               | 0.30                   | 0.06               | Manufacturing         |
| 33                               | 0.23               | 0.13               | 0.25                  | 0.11               | 0.15                  | 0.08               | 0.37                   | 0.11               | Trade                 |
| 46                               | 0.42               | 0.16               | 0.10                  | 0.10               | 0.12*                 | 0.11               | 0.36                   | 0.14               | Hotels                |
| 20                               | 0.26*              | 0.17               | 0.19*                 | 0.14               | 0.12*                 | 0.10               | 0.43                   | 0.19               | Transport             |
| 41                               | 0.42               | 0.15               | 0.12*                 | 0.09               | 0.06*                 | 0.06               | 0.40                   | 0.13               | Construction          |
| 144                              | 0.35               | 0.10               | 0.15                  | 0.07               | 0.09*                 | 0.06               | 0.41                   | 0.08               | Services <sup>a</sup> |
| 541                              | 0.41               | 0.08               | 0.13                  | 0.05               | 0.13                  | 0.04               | 0.33                   | 0.07               | Total survey          |

<sup>a</sup> In services the sample is from 1998 only.

The number of companies in this table does not necessarily match that published in the Bank of Israel

<sup>b</sup> Review, as companies that did not report on expectations alongside their report on current activity were excluded.

\* Indicates non-significant result (at 10 percent level).



Actual Net Balance, adjusted to the probability scale, is represented by the hatched line graph and the probability of a slowdown in activity is represented by the line graph and the unsmoothed leading index is represented by the shaded area