



Bank of Israel \* Research Department

## Companies Survey

Fourth quarter of 2008

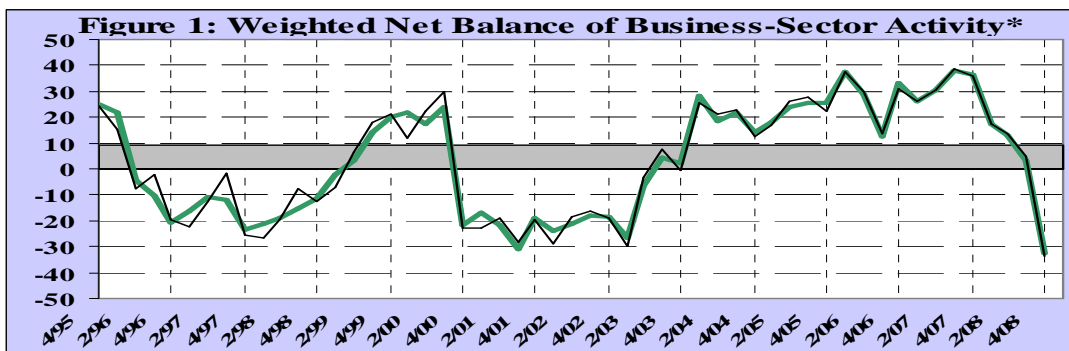
Jerusalem, January 2009  
[www.bankisrael.gov.il](http://www.bankisrael.gov.il)



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

Reports from companies and businesses indicate that the slowdown in business-activity growth became more serious, and activity actually decreased during the fourth quarter of 2008. This marked the continuation of a trend apparent since the beginning of the year and which became significant in the third quarter of 2008. Activity slowed in that quarter in all industries reviewed, and the net balance of business-sector activity became negative for the first time since the second quarter of 2003. Moreover, the leading index for the quarter quite clearly reflects expectations of a more serious activity slowdown compared with the previous quarter. Although the decline in activity reported in most industries in the fourth quarter of 2008 matches the expectations of the previous Companies Survey, the extent of the decline was greater than expected. An analysis of the constraints in manufacturing and trade shows that as in the previous quarter, demand-side constraints became more serious as a result of the slowdown. On the supply side, the quarter was notable for companies' increasing financing difficulties (principally in the case of large and medium-size enterprises) in all industries and especially in trade, construction and transport and communications industries. The slump in demand and business activity are also reflected by a large drop in inflation expectations for the coming twelve months, which after some considerable time are now within the targeted range of price stability. The downturn in demand and activity during the quarter encompassed all industries except for transport and communications. A standstill in activity was recorded at hotels. In all the industries reviewed, activity is expected to remain at a reduced level. In the construction, services and hotel industries, a more serious activity slowdown is expected.

In manufacturing most companies reported an initial decline in output after several years of growth in activity. The decline in activity in manufacturing during the quarter reflects a fall in domestic sales and a considerable decrease in exports, as well as a drop in the number of workers. Orders for the next quarter, especially domestic orders, reveal a continued downturn in activity. In trade a large drop in sales was recorded following a slowdown in the previous quarter and a further decline in sales is expected for the next quarter. Business services companies reported a decrease in turnover following a continual rise in turnover. Companies expect a more considerable decline in activity in the next quarter. In an initial development, hotels reported a standstill in activity compared with 2007:Q4, due to a decrease in the number of bed-nights by Israelis, this despite an increase in tourists' bed-nights. The hotels industry expects activity to fall appreciably due to the deteriorating economic situation in Israel and worldwide, and to the turn for the worse in the security situation in Israel. In transport and communications the decline in activity and orders in the quarter is indicative of a continued downtrend in activity. Construction remains slack and expectations for the next quarter point to a more severe downturn in activity in the industry. After some considerable time, average inflation expectations for the coming twelve months are now close to the middle of the targeted range of price stability, and fell to 1.7 percent compared with 3.5 percent in the previous survey, concurrent with a large rise in the ratio of companies expecting inflation be within the targeted range—from 41 percent in the previous quarter to 70 percent in the quarter reviewed. Companies expect the average exchange rate twelve months ahead to be NIS 4.14 to the dollar as against NIS 3.9 in the previous survey. The average exchange rate as of the date when the companies participating in the survey reported amounted to NIS 3.806 to the dollar.



## 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 fell considerably in the fourth quarter following the slowdown in activity that began at the beginning of the year (Figure 1). The decline activity was evident in both domestic activity and activity abroad. The activity decline was apparent in nearly all the industries reviewed. In services, the decline during the quarter was smaller than in the other industries, and hotels reported a standstill in activity. The severity of the restriction imposed by financing difficulties increased in all types of industries as classified by size (from the aspect of the number of their employees) (Figure 9.b).

The leading index of business-sector activity foresees a distinct downturn in business-sector activity for the next quarter. Analysis of the index by specific industries shows that an expectation of an activity slowdown for the first quarter of 2009 is apparent in all industries, except for transport and communications, hotels and high-tech services, where a slowdown had not been expected until now.

## 2. Industry developments

Reports from manufacturing firms show large declines in activity in the fourth quarter of 2009 compared with the previous quarter (Table 3 and Figure 2). The declines in activity are reflected by weakness in domestic and export sales. The extent of the activity downturn is also apparent from a growing decline in the number of workers and in the utilization rate of machinery and equipment. Companies expect the downturn in domestic and export activity to continue in the next quarter as well.



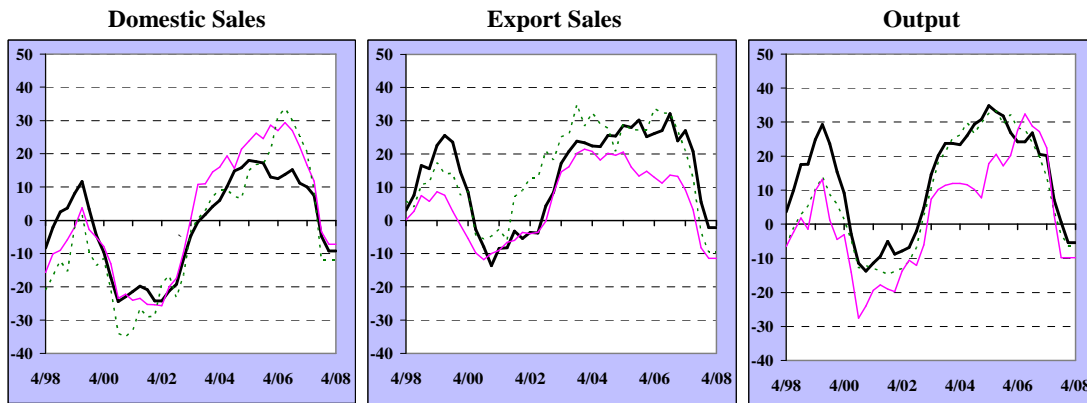
The classification of manufacturing firms by their level of technical innovativeness—low, medium, and high-tech—shows a decline in output and sales at all types of companies. All types of

manufacturing firms reported reduced domestic and export orders for the quarter (Table 1.1 and Figure 3).

An examination of manufacturing by sub-industries (Table 15) shows that the downturn in output, domestic sales and exports encompassed all industries. Large declines in output and sales were recorded in the mining and quarrying, metals, machinery, textiles, leather and clothing sub-industries. Companies in all sub-industries reported substantial reductions in export orders and orders for the local market.

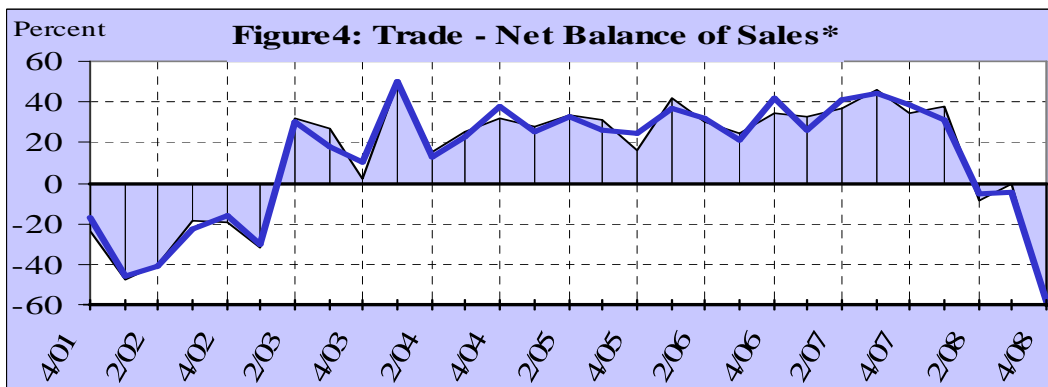
The classification of manufacturing firms by size (headcount) shows that while all company types experienced a drop in output and sales, the decrease was most noticeable among small and medium enterprises. Although export orders were down at all company types, the downturn was particularly notable among medium enterprises.

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



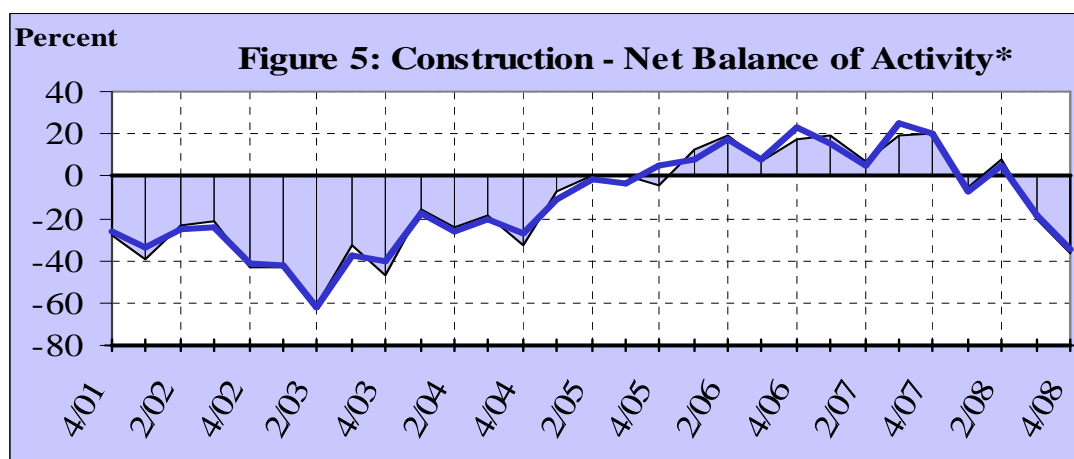
<sup>a</sup> Moving average, outlying observations - unadjusted data  
 Thick line - advanced industries  
 Thin line - traditional industries  
 Dotted line - mixed industries

According to reports from companies in trade, sales dipped in the third quarter after remaining stable in the third quarter and following a slight decrease in the second quarter of 2008. The larger decrease in the fourth quarter is reflected in expectations regarding sales volume in the next quarter and in forecasts regarding changes in the number of workers in the industry (Table 5 and Figure 4). Companies reported growing demand-side constraints as a result of the deterioration in the global economic situation and in the economic and security situation in Israel. Concurrently, on the supply side an appreciable increase was recorded in financing difficulties (Table 17 and Figure 9.a).

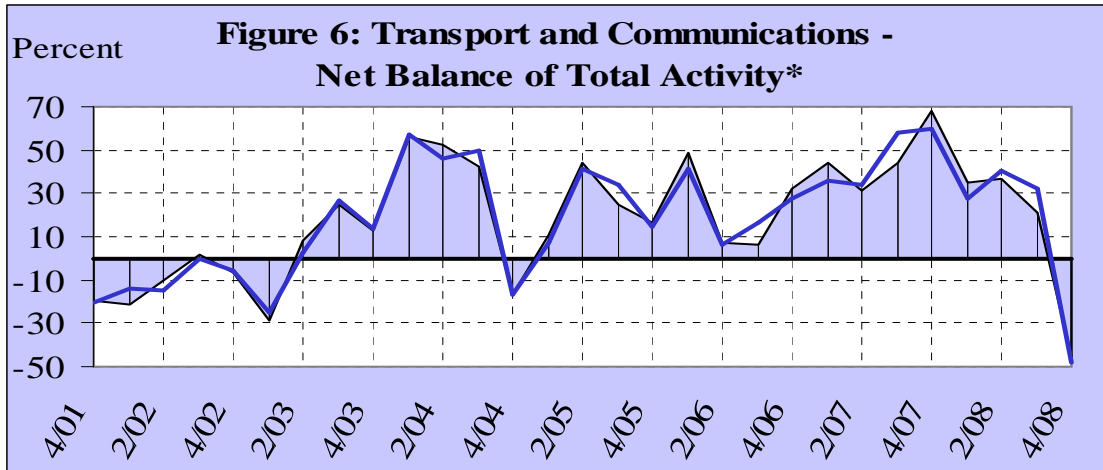


The reports of construction companies revealed a continued contraction of activity in the quarter reviewed (Table 7 and Figure 5). The decrease during the quarter reflected a decline in the construction of buildings and infrastructure. Companies reported a decrease in building completions, a large decrease in building starts and a decrease in the prices of output in dollar terms. Company reports point to an initial (major) increase in the severity of the demand-side constraints in the industry, with the result that these exceeded the severity of supply-side constraints. With respect to supply-side constraints, a substantial decrease was recorded in input prices concurrent with an increase in financing difficulties. Construction companies are expecting a more serious downturn in activity in the industry during the next quarter.

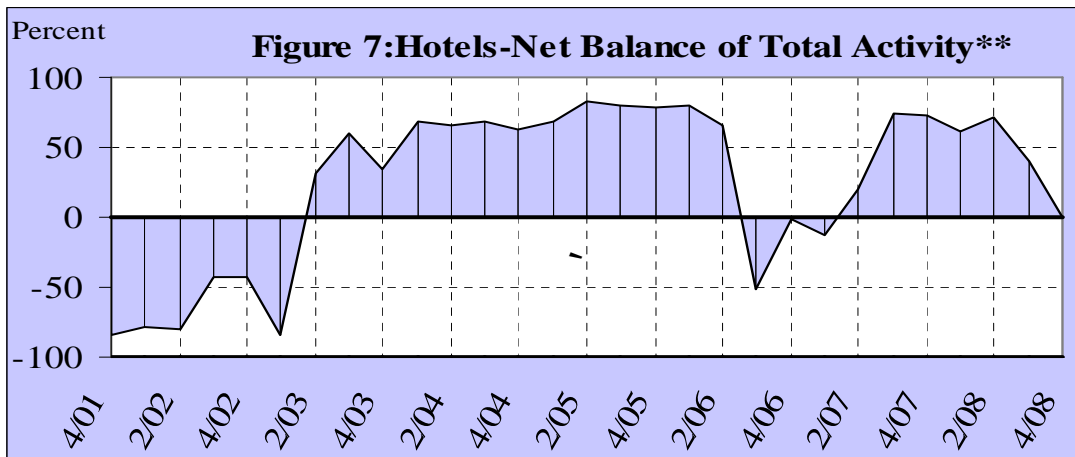
The classification of firms by size (headcount) shows that the quarterly decline in activity encompassed all company types and was especially notable at small enterprises. While all the companies are expecting a continued downturn in the next quarter, a particularly large decrease is expected among small enterprises (Table 16).



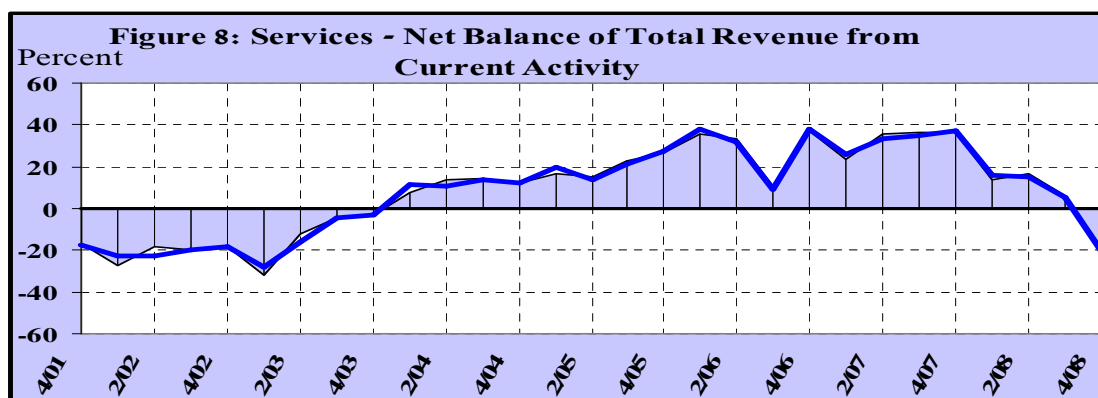
Reports from transport and communications companies show an initial downturn in activity in the quarter following a continued expansion during recent years (Table 9 and Figure 6). The activity downturn during the quarter was recorded mainly in sales of services to Israelis, and was centered in land and sea transportation. After expanding in previous quarters, stable activity was recorded for the quarter in communications, land transportation and sales of services to nonresidents. Signs of a recession during the quarter were also apparent from the utilization rate of equipment in transport and communications, where an initial downturn was recorded following a long period of expansion. Analysis of the constraints to further activity growth indicates that constraints on both the supply and the demand sides have worsened. The increasing severity of supply-side constraints derived from a large increase in financing difficulties, while a demand-side constraint that worsened considerably was the economic and security situation in Israel (Table 17 and Figure 9.a). Because of these constraints, companies expect a further major downturn in their overall activity during the next quarter.



Companies in the hotel industry reported stable activity compared with the third quarter of 2007 (Table 11 and Figure 7) after a year and a half of rises in the companies' net balances. The standstill in activity resulted from a large drop in Israeli bed-nights, which was offset by an increase in inbound-tourist bed-nights. Companies expect the deterioration in the economic and security situation in Israel on the demand side and the worsening of financing difficulties on the supply side to lead to a considerable decrease in forecast activity as apparent from the amount of orders received for the next quarter.



Business service companies reported a downturn in activity as the result of reduced sales at home and abroad (Table 12 and Figure 8). The downturn was accompanied by a decrease in the industry headcount following a consistent increase. According to the companies' reports, export orders for the next quarter fell heavily, and the downturn in overall activity during the next quarter is expected to become more serious. Reports on activity constraints indicate an increase in the severity of demand-side constraints due to the global economic situation, and as a result of the economic and security situation in Israel (Table 17 and Figure 9.a).



**Table 1**  
Economic activity in the principal industries, based on the net balance of returns from companies

	2006				2007				2008			
	I	II	III	IV	I	II	III	IV	I	II	III	IV
<b>Industry (output)</b>	<b>33</b>	<b>36</b>	<b>26</b>	<b>22</b>	<b>24</b>	<b>24</b>	<b>38</b>	<b>21</b>	<b>*6</b>	<b>*4</b>	<b>*1</b>	<b>-38</b>
seasonally adjusted	38	35	18	27	28	24	32	24	10	*4	*-7	-34
<b>Trade (sales)</b>	<b>42</b>	<b>31</b>	<b>*24</b>	<b>34</b>	<b>32</b>	<b>37</b>	<b>46</b>	<b>34</b>	<b>38</b>	<b>*-8</b>	<b>*0</b>	<b>-61</b>
seasonally adjusted	37	32	*21	42	26	41	45	38	31	*-5	*-5	-59
<b>Construction (total activity)</b>	<b>*13</b>	<b>19</b>	<b>*7</b>	<b>18</b>	<b>19</b>	<b>*7</b>	<b>19</b>	<b>20</b>	<b>*-6</b>	<b>*8</b>	<b>-20</b>	<b>-37</b>
seasonally adjusted	*8	17	*8	23	16	*5	25	20	*-7	*5	*-18	-35
<b>Transport and communications (total activity)**</b>	<b>48</b>	<b>7</b>	<b>6</b>	<b>32</b>	<b>44</b>	<b>31</b>	<b>44</b>	<b>69</b>	<b>35</b>	<b>37</b>	<b>33</b>	<b>-46</b>
seasonally adjusted	41	6	16	28	36	34	58	60	28	41	33	-46
<b>Hotels (total activity)***</b>	<b>80</b>	<b>66</b>	<b>-51</b>	<b>-2</b>	<b>-13</b>	<b>20</b>	<b>75</b>	<b>73</b>	<b>61</b>	<b>72</b>	<b>40</b>	<b>0</b>
<b>Service industries</b>	<b>35</b>	<b>34</b>	<b>10</b>	<b>37</b>	<b>23</b>	<b>35</b>	<b>37</b>	<b>36</b>	<b>14</b>	<b>17</b>	<b>6</b>	<b>-21</b>
seasonally adjusted	38	32	*9	38	26	34	35	37	16	15	*5	-21
<b>Total business sector</b>	<b>37</b>	<b>30</b>	<b>14</b>	<b>31</b>	<b>26</b>	<b>30</b>	<b>39</b>	<b>36</b>	<b>17</b>	<b>13</b>	<b>5</b>	<b>-32</b>
seasonally adjusted	37	29	13	33	26	30	39	36	17	13	4	-31

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

	2006				2007				2008			
	I	II	III	IV	I	II	III	IV	I	II	III	IV
<b>Advanced companies</b>	<b>36</b>	<b>33</b>	<b>17</b>	<b>31</b>	<b>18</b>	<b>22</b>	<b>33</b>	<b>30</b>	<b>*9</b>	<b>16</b>	<b>*2</b>	<b>-43</b>
<b>Mixed companies</b>	<b>*12</b>	<b>39</b>	<b>*18</b>	<b>*8</b>	<b>24</b>	<b>49</b>	<b>63</b>	<b>*14</b>	<b>*0</b>	<b>*3</b>	<b>*18</b>	<b>-49</b>
<b>Traditional companies</b>	<b>37</b>	<b>37</b>	<b>36</b>	<b>20</b>	<b>30</b>	<b>17</b>	<b>35</b>	<b>17</b>	<b>*5</b>	<b>*-5</b>	<b>*-6</b>	<b>-32</b>

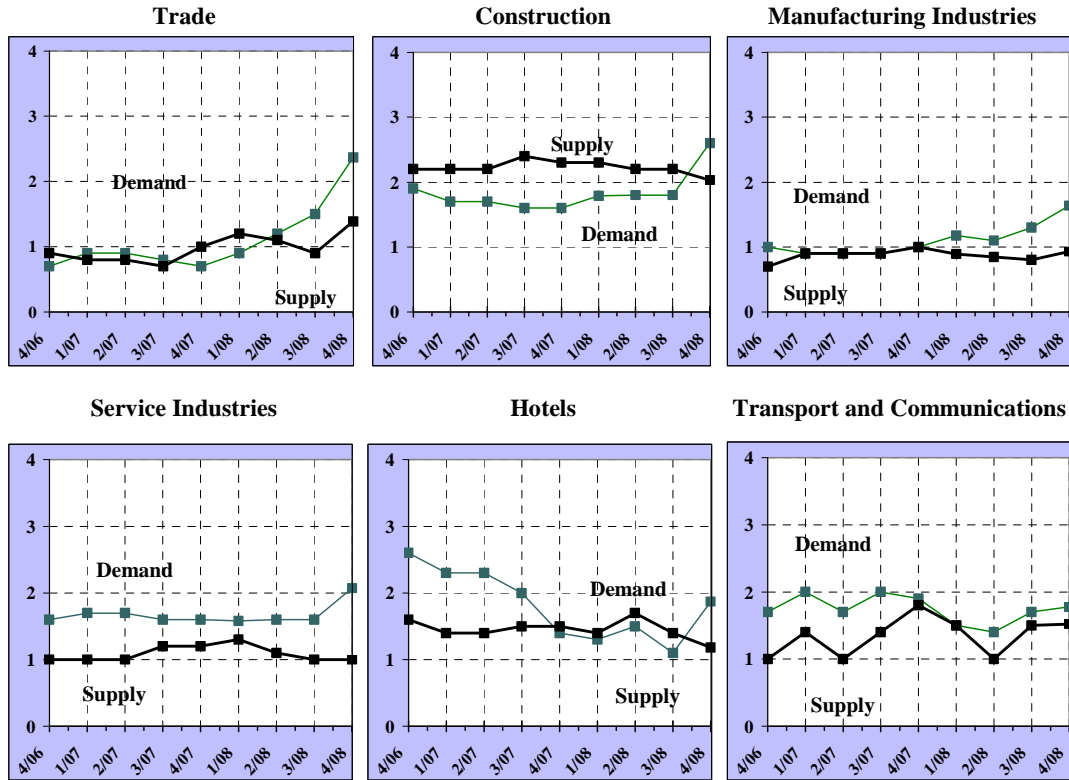
\* Not significant (at the 10% level).

\*\* 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.

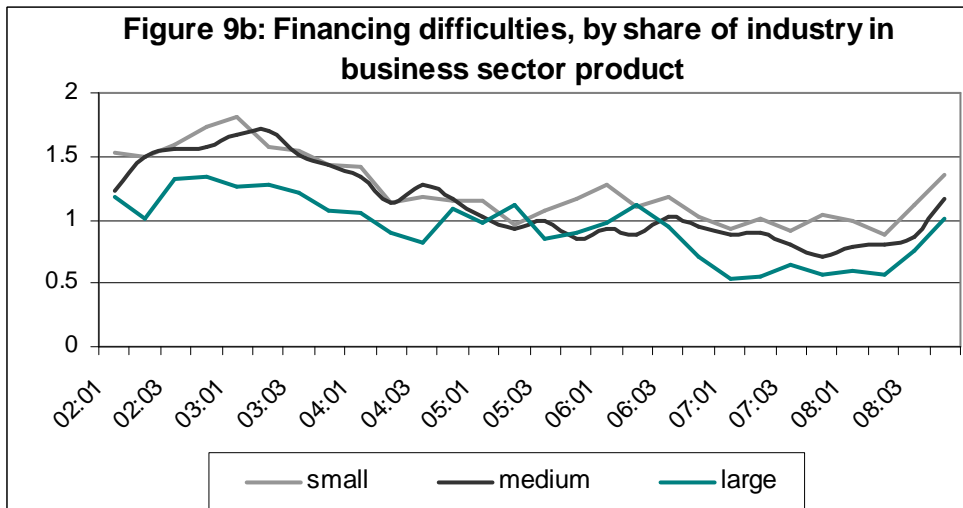
**Figure 9a: The severity of constraints on carrying out planned activity (average)<sup>1</sup>**

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.



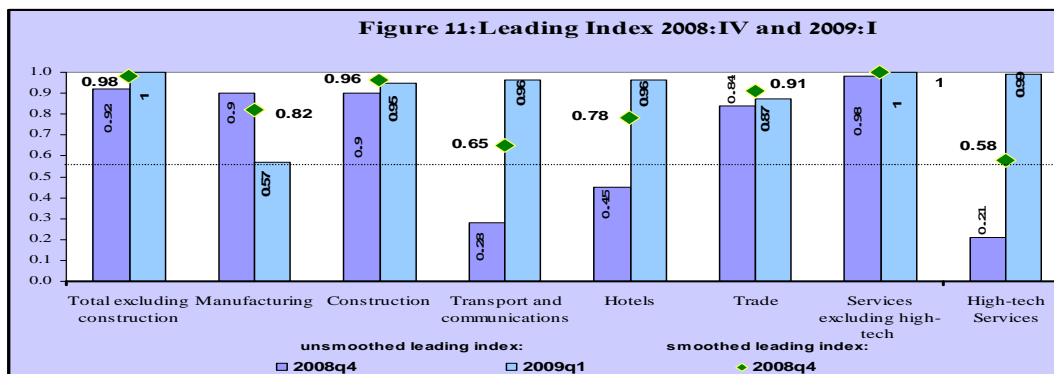
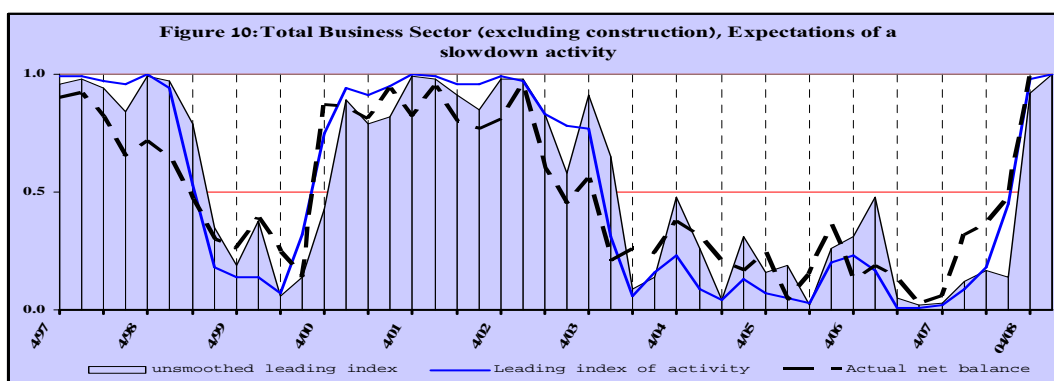


## The leading index

The leading index (excluding construction) in this survey expects a notable slowdown in business-sector activity in the first quarter of 2009, in excess of the downturn already represented by the actual net balance. The value of the leading index is considerably higher than the threshold value of 0.51 and that in the previous quarter. This reflects a deterioration in the orders item and the next quarter expectations item compared with the net balances of activity in the present quarter, which already showed a downturn, and the fact that firms in additional industries are joining those that expect an activity slowdown for the next quarter.

Apart from the leading index that is calculated for the business sector as a whole (Figure 11), the index is calculated for each of the six industries covered in the survey, and for the high-tech-services industry (Figure 10 and Figures A–H in the Appendix). The industry-level indices in this survey suggest a continued slowdown in all the industries including transport and communications, hotels, and high-tech services, where a slowdown had not been expected in the previous 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, with the result 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).

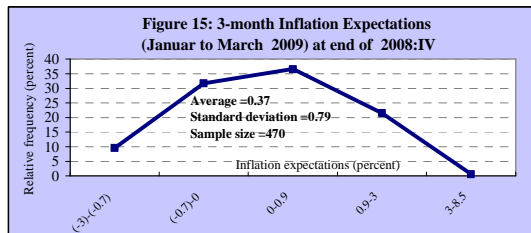
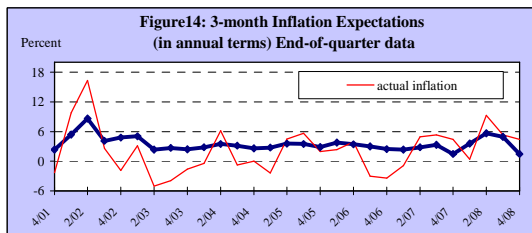
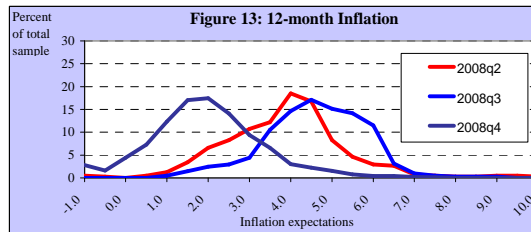
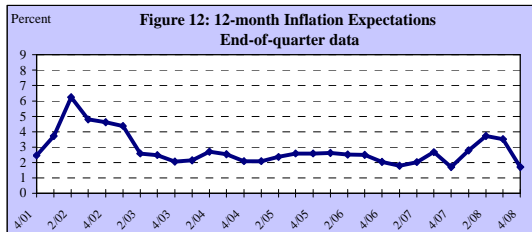


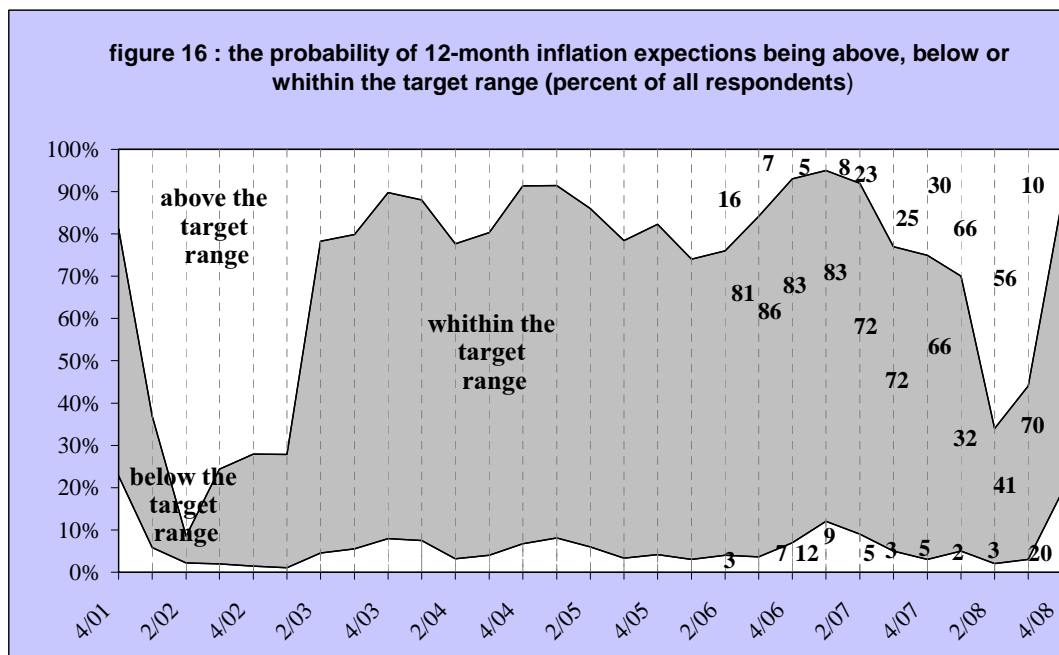
### Survey of inflation expectations

Companies' expectations regarding the cumulative rate of price increases during the next twelve months (January 2009–December 2009) fell considerably, to an average of 1.7 percent compared with a level of 3.5 percent in the previous quarter (Figure 12), and after two quarters reverted to within the range of price stability (1–3 percent).

Concurrent with the large decline in inflation expectations for the coming twelve months, the inflation-expectations distribution is also indicative of expectations of far more moderate price indices, with the median distribution in the review quarter declining to 1.5 percent and the mode to 2 percent. However, the variability of expectations declined to a minor extent compared with its level in the previous quarter (Figure 13).

The expected rate of price increases in the coming quarter (January 2009–March 2009) fell dramatically, to 1.5 percent in annual terms compared with 4.8 percent in the previous quarter (Figure 14). The variability of the expectations declined to a minor extent compared with its level in the previous quarter. The survey of inflation expectations also shows a considerable decrease in the proportion of companies expecting inflation to exceed the upper limit of the range defined as price stability, and this ratio amounted to 10 percent in the quarter compared with 56 percent in the previous quarter and 66 percent in the second quarter of 2008 (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 rose sharply, from 41 percent in the previous quarter to 70 percent in the review quarter (the middle field in Figure 16). The proportion of companies expecting inflation in the next twelve months to fall below the price stability target also increased considerably, to 20 percent compared with only 3 percent in the previous quarter (the bottom field in the diagram).





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.

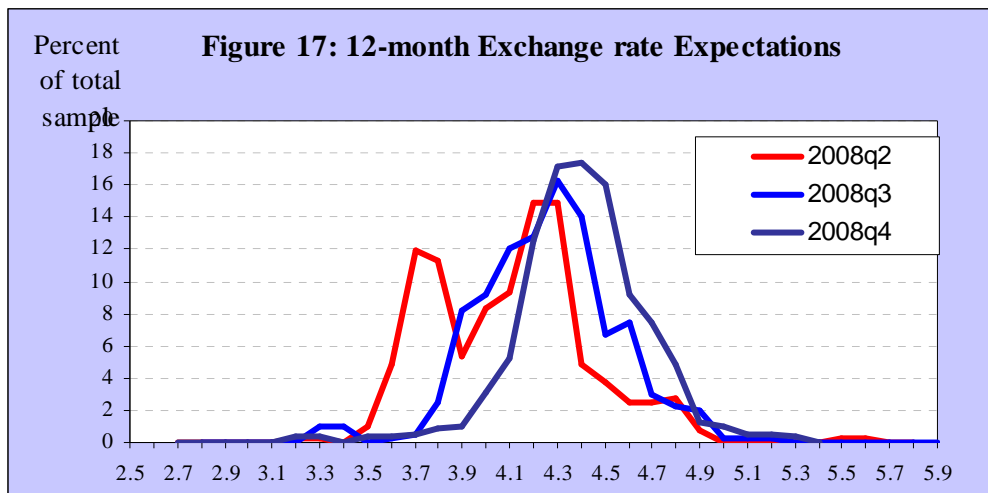
**Table 2: Statistic Analysis of 12-month Inflation Expectations**

	2006				2007				2008			
	I	II	III	IV	I	II	III	IV	I	II	III	IV
1. Mode	3.00	3.00	2.00	2.00	2.00	2.00	3.00	3.00	3.00	4.00	3.00	2.00
2. Median	2.70	2.50	2.50	2.00	1.70	2.00	2.50	2.80	2.90	3.80	3.50	1.50
3. Average	<b>2.77</b>	<b>2.65</b>	<b>2.47</b>	<b>2.01</b>	<b>1.78</b>	<b>2.02</b>	<b>2.67</b>	<b>2.77</b>	<b>2.69</b>	<b>3.70</b>	<b>3.52</b>	<b>1.70</b>
4. Standart Deviation	1.11	1.10	1.02	0.99	0.91	0.93	1.09	0.92	1.04	1.42	1.44	1.37
5. Skewness	-0.23	-0.35	0.47	0.01	-0.22	0.02	-0.33	-0.23	-0.31	-0.30	-0.30	-0.30
Number of responding companies	517	519	469	469	456	487	413	504	483	472	490	470

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 (March 31, 2009) and one year from the end of the survey period (December 31, 2009). The exchange rate expected for twelve months ahead (end of December 2009) is NIS 4.14 to the dollar compared with NIS 3.9 in the previous survey. The variability of exchange-rate expectations for 12 months ahead decreased slightly (Figure 17). The average NIS/USD exchange rate which the companies expect to see at the end of the next quarter is NIS 3.96 compared with NIS 3.67 in the previous quarter. The average exchange rate as of the reporting date of the companies participating in the survey amounted to NIS 3.806.



## Manufacturing Industries

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

	2006				2007				2008			
	I	II	III	IV	I	II	III	IV	I	II	III	IV
1. Output	33	36	26	22	24	24	38	21	*6	*4	*1	-38
2. Sales	31	36	27	25	23	26	33	26	*-1	*7	*-1	-44
3. Domestic sales	22	21	23	22	19	26	31	17	*-1	*0	*-5	-43
4. Export	22	32	11	22	16	25	29	26	*5	*8	*-4	-39
5. Stocks of finished goods	10	16	10	9	12	15	22	18	9	9	*4	-11
6. Stocks of raw materials	9	13	12	*4	7	*6	17	11	10	*6	11	*0
7. Rate of utilization of machinery and equipment	19	22	13	14	14	17	25	8	*-2	*-3	-8	-40
8. Number of employees	18	17	9	11	10	15	15	16	*2	*-3	*-5	-36
9. Domestic orders	17	13	9	*6	12	16	15	10	*5	*-2	-23	-51
10. Export orders	26	23	10	17	21	22	28	15	*4	9	-11	-41
Number of responding companies	283	304	261	250	251	237	220	252	270	265	272	236

<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:IV**  
**(percent of all responding companies in each category)**

	Net balance		Significant Increase	Moderate Increase	No Change	Moderate Decrease	Significant Decrease
	2008	2008					
	III	IV					
<b>A. Activity in the quarter</b>							
1. Output	1 (5)	-38 (5)	2	14	30	35	19
2. Sales	-1 (5)	-44 (5)	3	15	20	39	23
3. Domestic sales	-5 (5)	-43 (5)	3	12	27	41	17
4. Export	-4 (6)	-39 (6)	3	11	33	29	24
5. Stocks of raw materials	4 (4)	-11 (5)	5	20	39	29	7
6. Stocks of finished goods	11 (4)	0 (5)	6	22	44	24	4
7. Rate of utilization of machinery and equipment	-8 (5)	-40 (4)	0	9	42	30	19
8. Number of employees	-5 (4)	-36 (4)	0	6	52	35	7
<b>B. Expected activity in the following quarter**</b>							
9. Domestic orders	-23 (4)	-51 (4)	1	7	33	39	20
10. Export orders	-11 (5)	-41 (6)	2	11	33	28	26
Number of responding companies	272	236					

\*\* 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>**

	2006				2007				2008			
	I	II	III	IV	I	II	III	IV	I	II	III	IV
<b>A. Activity in the quarter</b>												
1. Sales	42	31	*24	34	32	37	46	34	38	*-8	*0	-61
2. End-of-quarter stock	*11	26	*18	*17	24	37	30	34	*16	*17	*9	*-10
3. Percent of credit sales	20	*11	*-3	*3	21	27	17	22	25	19	*12	*-3
4. Supply period	*6	*9	*4	0	15	15	14	*3	*6	*0	*3	-14
<b>B. Expected activity in the following quarter</b>												
5. Forecast change in number of permanent employees	14	*0	*3	*0	9	*7	*8	16	*9	*6	*-17	-48
6. Sales expectations	42	50	*-3	39	47	73	57	63	*22	53	*-3	-35
Number of responding companies	36	36	29	29	34	30	24	32	32	36	36	31

<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:IV**  
**(percent of all responding companies in each category)**

	Net balance		Significant Increase	Moderate Increase	No Change	Moderate Decrease	Significant Decrease
	2008 III	2008 IV					
<b>A. Activity in the quarter</b>							
1. Sales	0 (15)	-61 (13)	0	16	7	48	29
2. End-of-quarter stock	9 (12)	-10 (15)	13	19	26	39	3
3. Percent of credit sales	12 (8)	-3 (11)	14	3	63	10	10
4. Supply period	3 (5)	-14 (7)	0	0	86	11	3
<b>B. Expected activity in the following quarter</b>							
5. Forecast change in number of permanent employees	-17 (11)	-48 (10)	0	3	46	44	7
6. Sales expectations for following quarter	-3 (15)	-35 (16)	7	19	13	42	19
Number of responding companies	36	31					

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>

	2006				2007				2008			
	I	II	III	IV	I	II	III	IV	I	II	III	IV
<b>A. Activity in the quarter</b>												
1. Total activity	*13	19	*7	18	19	*7	19	20	*-6	*8	-20	-37
of which 2. Buildings	*0	21	*10	21	23	*-3	*13	17	*3	*0	*-6	-29
3. Infrastructure	*17	*15	*-12	23	33	30	*8	24	*-7	*9	-30	-36
4. Output prices in dollar terms	43	28	24	21	21	23	30	38	40	49	26	*-16
5. Area of building starts (sq. m.)	*2	*-3	*-5	*0	26	*-8	*-10	*-3	*-12	*-5	-40	-39
6. Area of building completions (sq. m.)	*-7	*-8	*0	*-8	*6	*10	*-10	*0	*9	*5	*-3	-21
7. Building time	17	*16	33	16	28	21	27	15	18	*8	26	*-3
<b>B. Expected activity in the following quarter**</b>	33	22	23	20	34	23	*6	25	*3	*-5	-22	-39
Number of responding companies	46	42	43	41	37	42	33	44	36	41	36	31

<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:IV  
(percent of all responding companies in each category)

	Net balance		Significant Increase	Moderate Increase	No Change	Moderate Decrease	Significant Decrease
	2008 III	2008 IV					
<b>A. Activity in the quarter</b>							
1. Total activity	-20 (12)	-37 (13)	6	7	37	27	23
of which Buildings	-6 (13)	-29 (12)	7	3	51	21	18
Infrastructure	-30 (11)	-36 (12)	0	8	48	16	28
2. Output prices in dollar terms	26 (12)	-16 (12)	3	13	52	29	3
3. Area of building starts (sq. m.)	-40 (13)	-39 (12)	7	0	47	25	21
4. Area of building completions (sq. m.)	-3 (12)	-21 (12)	0	13	53	20	14
5. Building time	26 (10)	-3 (8)	3	4	83	10	0
<b>B. Expected activity in the following quarter</b>	-22 (12)	-39 (12)	0	9	43	29	19
Number of responding companies	36	31					

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

	2006				2007				2008			
	I	II	III	IV	I	II	III	IV	I	II	III	IV
<b>A. Activity in the quarter</b>												
1. Total activity	48	*7	*6	*32	44	*31	44	69	*35	37	*21	-46
2. Sales of services to residents	37	*16	31	48	47	*38	44	68	*32	*38	*30	-47
3. Sales of services to nonresidents	*17	*12	27	*1	42	*9	*13	*20	*6	*10	16	-15
4. Utilization of equipment (capacity utilization, etc.)	44	*21	*-15	38	*49	58	41	45	*39	36	*17	-49
<b>B. Expected activity in the following quarter**</b>	43	*38	61	*45	*48	*35	46	59	72	34	*7	-45
Number of responding companies	23	21	18	22	24	21	21	24	28	20	25	24

<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:IV  
(percent of all responding companies in each category)

	Net balance		Significant Increase	Moderate Increase	No Change	Moderate Decrease	Significant Decrease
	2008 III	2008 IV					
<b>A. Activity in the quarter</b>							
1. Total activity	*21	-46	0	9	36	34	21
2. Sales of services to residents	*30	-47	0	17	20	37	26
3. Sales of services to nonresidents	16	-15	3	0	80	0	17
4. Utilization of equipment (capacity utilization, etc.)	*17	-49	0	3	45	36	16
<b>B. Expected activity in the following quarter</b>	*7	-45	0	6	42	25	27
Number of responding companies	25	24					

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)**

	2006				2007				2008			
	I	II	III	IV	I	II	III	IV	I	II	III	IV
<b>A. Activity in the quarter</b>												
1. Total activity	80	66	-51	*-2	*-13	*20	75	73	61	72	40	*0
2. Number of bed-nights: Tourists	78	64	-78	-44	-31	*-4	65	70	70	85	45	*21
3. Number of bed-nights: Israelis	22	*-2	-25	*-12	*-2	*-11	*0	*-18	*-8	*0	*13	-38
4. Average revenue per room	78	62	*-6	*18	36	23	67	49	24	26	26	33
<b>B. Expected activity in the following quarter**</b>	64	35	-57	-22	23	*21	62	46	76	63	*2	-38
Number of responding companies	55	47	49	50	48	45	40	40	37	39	47	24

<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:IV**  
**(percent of all responding companies in each category)**

	Net balance		Significant Increase	Moderate Increase	No Change	Moderate Decrease	Significant Decrease
	2008 III	2008 IV					
<b>A. Activity in the quarter</b>							
1. Total activity	40 (11)	0 (19)	4	38	16	33	9
2. Number of bed-nights: Tourists	45 (11)	21 (18)	4	46	21	17	12
3. Number of bed-nights: Israelis	13 (11)	-38 (16)	4	16	22	54	4
4. Average revenue per room	26 (12)	33 (14)	0	46	41	9	4
<b>B. Expected activity in the following quarter</b>	2 (12)	-38 (14)	0	12	38	17	33
Number of responding companies	47	24					

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>**

	2006				2007				2008			
	I	II	III	IV	I	II	III	IV	I	II	III	IV
<b>A. Activity in the quarter</b>												
1. Total revenue from current activity	27	35	34	*10	37	23	37	36	14	17	*6	-21
2. Sales of services in Israel	33	36	33	*8	36	20	27	33	10	16	*4	-17
3. Sales of services abroad	26	29	21	*26	46	*0	33	36	18	21	*1	-20
4. Number of employees	17	24	19	10	13	15	22	25	21	12	*7	-16
5. of which: trained	21	27	12	*8	17	17	26	29	24	14	*6	-11
6. Number of Israeli workers abroad	22	29	12	*0	16	15	*7	*6	9	*3	*0	*4
<b>B. Expected activity in the following quarter**</b>												
7. Total orders	31	46	39	26	27	42	41	40	23	25	*2	-38
8. Export orders	30	31	*17	*6	*13	32	52	29	36	22	*8	-37
Number of responding companies	163	178	150	155	151	202	163	188	197	191	188	175

<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:IV**  
**(percent of all responding companies in each category)**

	Net balance		Significant Increase	Moderate Increase	No Change	Moderate Decrease	Significant Decrease
	2008 III	2008 IV					
<b>A. Activity in the quarter</b>							
1. Total revenue from current activity	6 (6)	-21 (6)	0	19	41	28	12
2. Sales of services in Israel	4 (5)	-17 (6)	0	19	45	26	10
3. Sales of services abroad	1 (8)	-20 (11)	4	19	34	31	12
4. Number of employees	7 (4)	-16 (5)	1	9	64	21	5
5. of which: trained	6 (4)	-11 (5)	1	11	65	17	6
6. Number of Israeli workers abroad	0 (4)	-4 (5)	0	4	88	6	2
<b>B. Expected activity in the following quarter**</b>							
7. Total orders	-2 (6)	-38 (6)	4	9	36	35	16
8. Export orders	8 (10)	-37 (10)	4	8	39	29	20
Number of responding companies	188	175					

\* 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:III and 2008:IV

			Number of responding companies	Total output	Domestic sales	Domestic orders <sup>1</sup>	Actual exports	Export orders <sup>1</sup>	Finished goods	Number of employees
Mining, quarrying, construction materials, and wood	2008	IV	22	-52	-59	-65	-36	-55	*9	-41
	2008	III	24	*8	*-4	-43	*-20	*-29	*17	*-13
Food and beverages	2008	IV	37	*-19	*-14	*-20	-22	-23	*-16	*-14
	2008	III	38	*19	*11	-18	*4	*-5	*11	*3
Textiles, clothing, and leather	2008	IV	18	-41	-47	-53	-38	-38	*6	-50
	2008	III	20	*-21	-42	-32	*-33	-38	*0	-40
Chemicals, rubber, and plastic	2008	IV	42	-55	-69	-62	-46	-42	*-2	-40
	2008	III	53	*11	*-6	-28	20	*0	*13	*6
Metals and machinery	2008	IV	35	-57	-63	-72	-70	-70	*-45	-51
	2008	III	39	-28	*-13	-26	*-24	*-21	*13	*-5
Electronics, electricity, and transport equipment	2008	IV	54	-28	-26	-44	*-20	-30	*4	-37
	2008	III	67	*12	*6	*-5	*5	*6	19	*4
Paper, printing, and other	2008	IV	22	*0	*-14	-35	*-25	*0	*21	*-9
	2008	III	23	*9	*14	-23	*-7	*-14	*-14	-13
Total manufacturing industries excluding diamonds	2008	IV	230	-37	-42	-50	-37	-39	*-1	-35
	2008	III	264	*4	*-2	-22	*-2	*-8	11	*-3
Diamonds	2008	IV	6	-100	-80	-75	-80	-100	*50	-83
	2008	III	8	-100	-86	-57	-75	-88	*13	-50
Total manufacturing industries	2008	IV	236	-38	-43	-51	-39	-41	*0	-36
	2008	III	272	*1	*-5	-23	*-4	-11	11	*-5

<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:IV

	Manufacturing companies				Construction companies				
	Total	Small	Middle	Large	Total	Small	Middle	Large	
Output	-38	-55	-48	-29	Total activity	-37	-75	*-29	*-33
Total sales	-44	-62	-51	-36	Area of starts	-39	-100	*-25	-33
Domestic sales	-43	-57	-53	-34	Area of completions	-21	-75	*-15	*-8
Export	-39	*-27	-49	-36	Output prices in \$	*-16	*-25	*-21	*-8
Number of companies	235	21	90	124	Area of completions	31	4	14	13

<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			
	III	IV	I	II	III	IV		III	IV	I	II	III	IV
<b>Demand constraints</b>							<b>Demand constraints</b>						
Volume of export orders	<b>0.9</b>	<b>1.0</b>	<b>1.2</b>	<b>1.1</b>	<b>1.3</b>	<b>1.6</b>	Booking by foreign tourists	1.0	0.7	0.5	0.5	0.8	0.6
Volume of domestic orders	<b>0.8</b>	0.9	1.1	1.0	1.3	<b>1.4</b>	Booking by Israelis	0.4	0.6	0.4	0.3	0.5	0.5
<b>Supply constraints</b>							<b>Supply constraints</b>						
Machinery and equipment shortage	0.4	0.5	0.4	0.4	0.4	0.2	Economic and political situation in Israel	1.1	1.0	0.7	0.8	1.2	1.8
Financing difficulties	0.5	0.5	0.6	0.7	0.8	<b>0.9</b>	Intensification of competition	<b>2.0</b>	<b>1.9</b>	<b>1.5</b>	<b>1.4</b>	<b>1.7</b>	<b>1.7</b>
Labour shortage	<b>0.9</b>	<b>1.0</b>	<b>0.9</b>	<b>0.8</b>	<b>0.8</b>	<b>0.4</b>	<b>Supply constraints</b>						
							<b>Supply constraints</b>						
							Financing difficulties						
							0.7 0.8 0.5 0.7 0.9 1.5						
							Labour shortage						
							1.4 1.8 1.5 1.0 1.5 1.0						
Construction							Hotels						
	2007		2008					2007		2008			
	III	IV	I	II	III	IV		III	IV	I	II	III	IV
<b>Demand constraints</b>							<b>Demand constraints</b>						
Volume of demand	<b>1.6</b>	<b>1.6</b>	<b>1.8</b>	<b>1.8</b>	<b>1.8</b>	<b>2.6</b>	Booking by foreign tourists	<b>2.0</b>	<b>1.4</b>	<b>1.3</b>	<b>1.5</b>	<b>1.1</b>	<b>1.9</b>
<b>Supply constraints</b>							<b>Supply constraints</b>						
Input prices	1.1	1.4	1.4	1.8	1.7	1.0	Booking by Israelis	1.2	0.9	1.1	1.3	1.0	1.7
Financing difficulties	1.1	1.0	1.6	1.2	1.7	2.0	Economic and political situation in Israel	1.5	1.1	1.0	1.3	1.0	1.9
Labour shortage	<b>2.4</b>	<b>2.3</b>	<b>2.3</b>	<b>2.2</b>	<b>2.2</b>	<b>1.8</b>	<b>Supply constraints</b>						
Machinery and equipment shortage	0.4	0.2	0.4	0.5	0.5	0.5	<b>Supply constraints</b>						
							Financing difficulties						
							1.0 1.3 1.3 1.4 1.0 1.2						
							Labour shortage						
							1.5 1.5 1.4 1.7 1.4 1.0						
Trade							Service Industries						
	2007		2008					2007		2008			
	III	IV	I	II	III	IV		III	IV	I	II	III	IV
<b>Demand constraints</b>							<b>Demand constraints</b>						
Volume of orders	0.8	<b>0.6</b>	0.6	0.9	0.5	0.2	Economic and political situation in Israel	0.7	0.7	0.7	0.9	0.9	1.3
Economic and political situation in Israel	<b>0.7</b>	0.7	<b>0.9</b>	<b>1.1</b>	1.3	2.0	Global Economic situation	0.5	0.8	0.8	1.3	1.6	<b>2.1</b>
Economic situation in the world	0.4	0.6	0.9	<b>1.2</b>	<b>1.5</b>	<b>2.4</b>	Intensification of competition	<b>1.6</b>	<b>1.6</b>	<b>1.6</b>	<b>1.6</b>	<b>1.5</b>	1.6
<b>Supply constraints</b>							<b>Supply constraints</b>						
Financing difficulties	<b>0.7</b>	<b>0.9</b>	0.9	0.7	0.9	<b>1.4</b>	<b>Supply constraints</b>						
Labour shortage	0.7	<b>1.0</b>	<b>1.2</b>	<b>1.1</b>	<b>0.8</b>	0.5	<b>Supply constraints</b>						
							Financing difficulties						
							0.9 0.7 0.6 0.8 0.8 1.0						
							Labour shortage						
							1.2 1.2 1.3 1.1 1.0 0.7						

## APPENDIX

### Notes to the Survey

#### *Net balance*

This quarterly survey relates to developments in the fourth quarter of 2008 and includes assessments and expectations regarding the first quarter of 2009. 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.

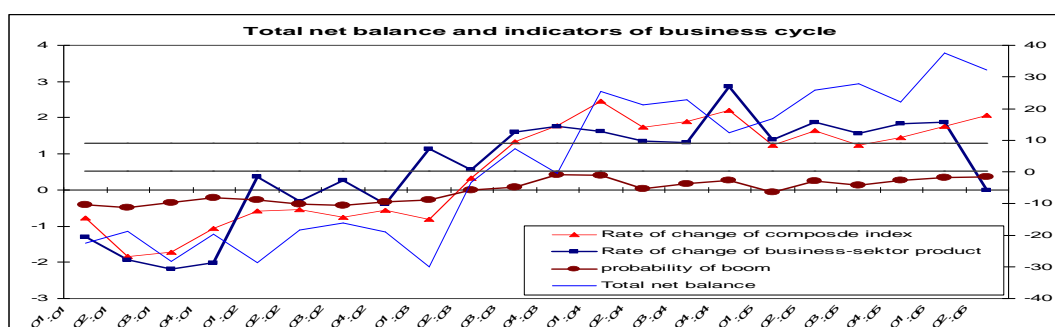
Although the results are not weighted by company size, in the analysis of the results in manufacturing industries and construction the main results are also shown with the companies grouped by size.

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.

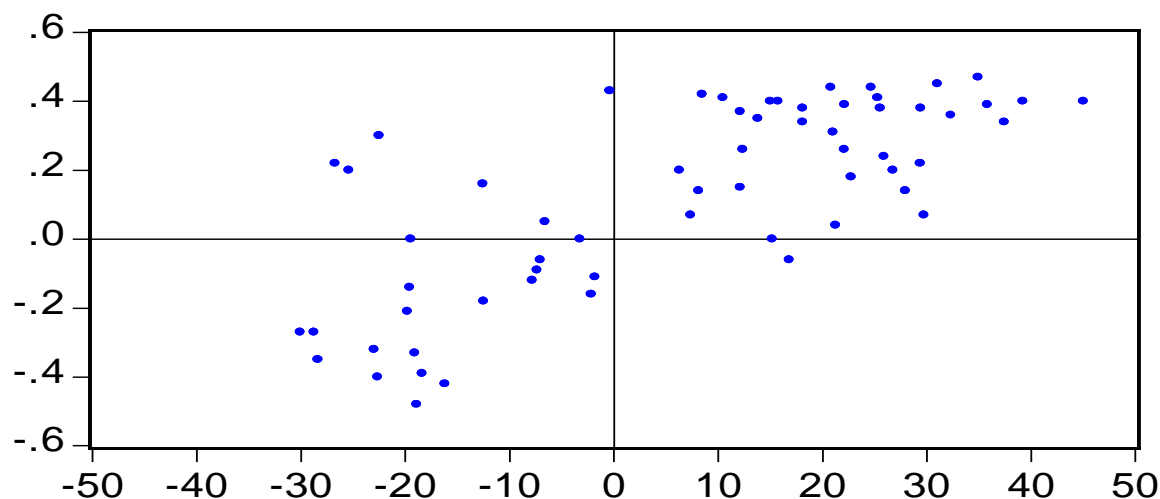
The data on net balances are based on totaling the answers of all companies that respond to the survey at large and not only those that participated in recent surveys. The data in all tables are given in terms of the percent of companies that responded.

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- sector 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)

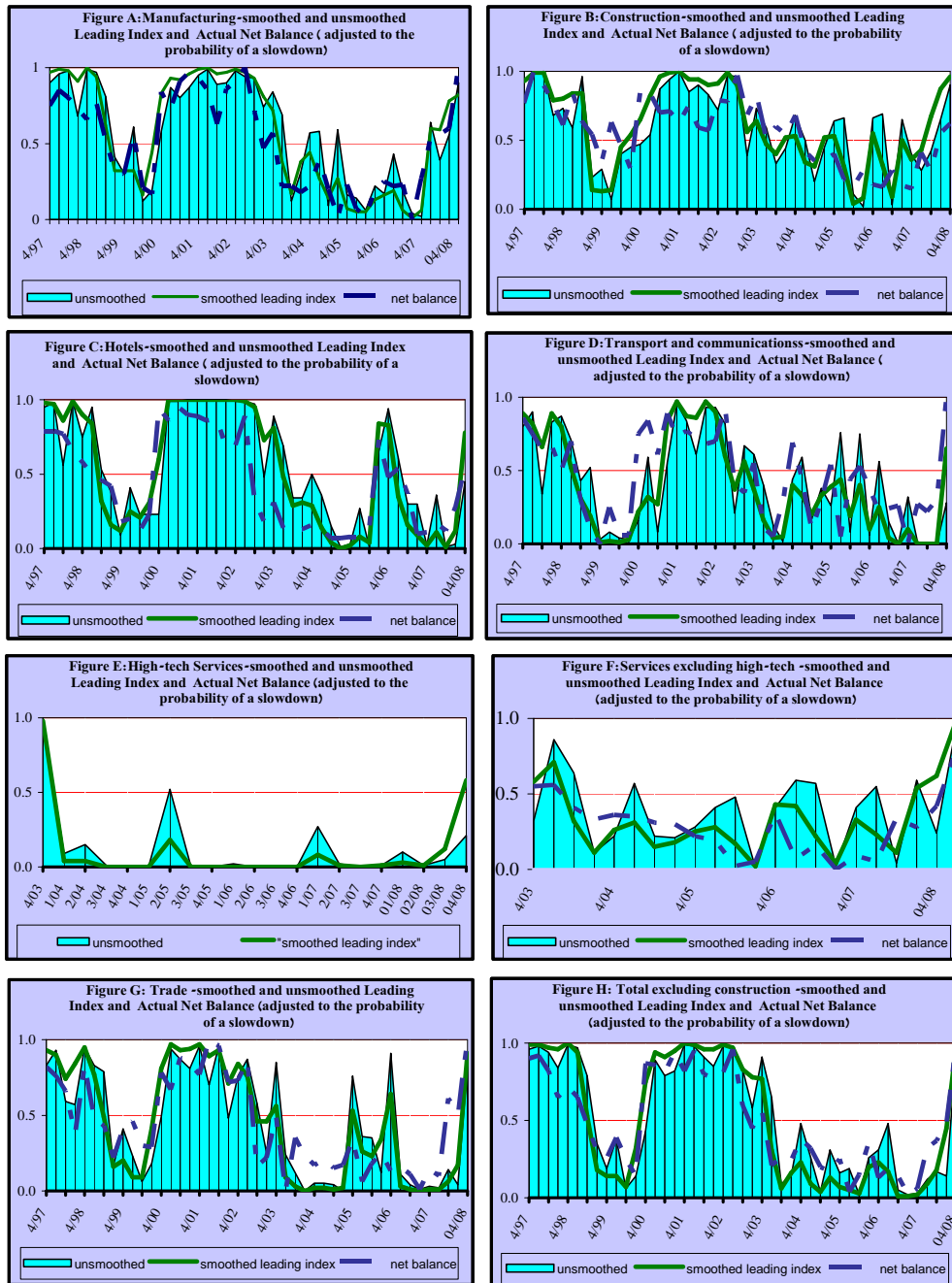
Number of companies <sup>b</sup>	Continued slowdown		slowdown-acceleration		Acceleration-slowdown		Continued acceleration		Industry
	average	standard deviation	average	standard deviation	average	standard deviation	average	standard deviation	
257	0.45	0.07	0.11	0.04	0.14	0.04	0.30	0.06	Manufacturing
33	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



