Recent Economic Developments 127

January - April 2010

Bank of Israel
Research
Department

Jerusalem, June 2010

Catalogue # 3077510127/9

http://www.bankisrael.gov.il

Printed in Israel by Ayalon Press, Jerusalem

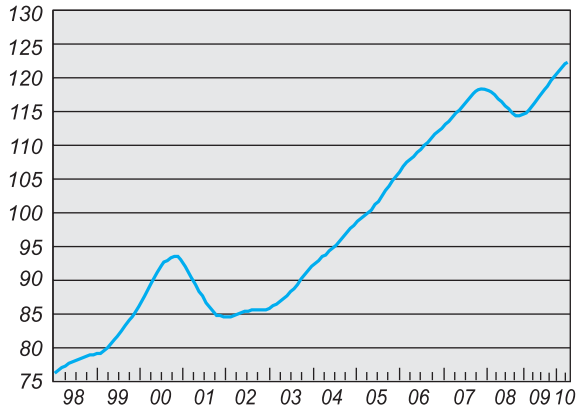
Part 1: Review of Recent Economic Developments, January to April 2010[1]

Main Developments

In the period reviewed, January to April 2010, Israel's economic recovery continued in step with the recovery of the global economy. However, there were signs of some slowdown in the rate of growth compared with the growth trend at the end of 2009. Indications of the recovery could be seen in the composite state-of-the-economy index, which rose by 6.4 percent (annual rate, Figure 1.1). GDP increased at an annual rate of 3.3 percent in the first quarter of 2010, and gross domestic business sector product at a rate of 4.8 percent, with a concurrent surge in imports. This development, which derived mainly from the continued increase in domestic demand, brought the uses to their pre-crisis level. Gross domestic investment increased as a result of the halt in the downward trend in stocks, and private consumption, excluding durables, also grew. This increase in domestic demand was due to increased employment security, the increase in the value of the public's assets portfolio, the low level of the interest rate, and positive expectations regarding the continued recovery of economic activity. Nonetheless, exports declined because of the slowdown in the rate of recovery in some of Israel's export targets.

Figure 1.1

The level of economic activity,* 1998-2010**
(index: 2005 average=100)



* The Bank of Israel composite index, including the change in economic activity trend growth.
** To April 2010.

The expansion of economic activity, that encompassed most of the principal industries, halted the downward trend in stocks and led to a slight improvement in employment, reflected in the slow increase in the number of employees which exceeded its pre-crisis level. Nevertheless, investment in the principal industries continued to decline, the real wage remained low despite the fact that its erosion halted in the period reviewed, and the unemployment rate stayed higher than its level before the crisis. The economic recovery was also reflected in an increase in tax revenues, although the rise was slower than in the second half of 2009. Tax revenues exceed the budget estimates, thus reducing the domestic deficit below the seasonal path consistent with the deficit ceiling in the budget. Thus the deficit continues to be low compared with that in other countries, and no significant increase in the debt/GDP ratio is expected.

The rate of inflation slowed somewhat in the period reviewed. Even so, the rate of inflation over the previous twelve months was at the upper limit of the inflation target range, inflation expectations towards the end of 2009 increased to close to the upper limit of the range, and asset prices (shares, bonds and real estate) continued to increase.

In the light of this background and the low level of the interest rate, and despite expectations that the low global interest rate environment would persist, the Bank of Israel continued to increase the interest rate gradually, from 1 percent in January to 1.5 percent in April. The shekel continued to appreciate in the period reviewed, and the Bank purchased foreign currency.

Despite the positive indications of the economic situation in the period reviewed, future recovery depends on international developments. The strength of the global recovery depends on the ability of many economies to continue growing without the fiscal and monetary intervention that were invoked to deal with the crisis. The rapid increase in the debts of some countries casts a cloud over the continuation of the global growth trend, in light of concern that the debt crisis will spread to other countries. This concern mounted towards the end of the period reviewed, following the downgrading of Spain's and Portugal's credit rating and despite the aid to Greece, and it adds to the uncertainty regarding the continuation of the global, and Israel's, recovery.

[1] Based on data available by 31 May 2010.

Aggregate real activity

Preliminary National Accounts data[1] for the first quarter of 2010 (Table 1.3) indicate continued growth: **GDP increased** by 3.3 percent, and **gross domestic business sector product** by 4.8 percent. The continued increase in GDP, with accelerated increase in imports, expresses the further recovery in demand, headed by domestic demand, reflecting the return of the uses to their pre-crisis level. Whereas GDP and private consumption declined slightly as a result of the crisis, and imports and exports approached their pre-crisis levels in the period reviewed, fixed investment remained low.

Private consumption continued to grow in the period reviewed, but more slowly than in previous quarters. The slowdown derived from an 18 percent decline in the consumption of durables, whereas consumption of non-durables increased rapidly (by 4.7 percent) compared with the level in the second half of 2009. The continued increase in the consumption of non-durables is consistent with greater employment security, the increase in the value of the public's portfolio, the interest rate, which despite a small increase in the period reviewed is still low and encourages real economic activity, and consumers' positive expectations of continued recovery of economic activity, reflected also in the consumer confidence index. The slowdown in the increase in the consumption of durables, led by a sharp drop (of 31 percent) in car purchases and reflected also by a steep decline in imports of durables, may have been partially due to purchases of vehicles having been brought forward in previous quarters, before the increase in the value for tax purposes of the use of new leased vehicles became effective at the beginning of 2010.

Gross domestic investment rose, as a result of the halt in the reduction of stocks at the end of 2009, while fixed investment remained basically unchanged. Despite the end of the decline in stocks in the period reviewed—which indicates a positive change, as it was accompanied by an increase in imports of raw materials and capital goods—and despite a small increase in non-residential construction, total investment in the principle industries did not start to recover, and was still some 16 percent lower than its level prior to the crisis. This, in spite of expectations of further growth, and an easing of the credit shortage, as can be seen from the survey of expectations in the manufacturing industry and the persistent decline in the business sector's risk premium (Figure 1.13). That said, investment in residential construction continued to increase, prolonging the trend evident in the last few years, due to the ongoing rise in the demand for homes.

Goods and services exports (excluding diamonds) fell in the period reviewed, the result of a steep drop in services exports while goods exports hardly changed. **Goods and services imports** (excluding defense imports and imports of ships, planes and diamonds) surged by about 22 percent, led by a jump in goods imports. Although services imports and exports did not decline significantly in the crisis, in the period reviewed they did not return to their pre-crisis levels. In contrast, goods imports and exports, which fell considerably in the crisis but recovered quickly, continued to increase as part of the general recovery in the period reviewed. Nonetheless, the increase in goods exports moderated, as a result of some decline in demand from Israel's export markets and the continued real appreciation of the shekel in the period reviewed.

Public consumption, which has risen significantly since the beginning of 2009, continued to increase at a rapid rate of 8.2 percent in the period reviewed. Public consumption excluding defense imports, however, declined by 4.4 percent.

By-industry real activity[2]

The manufacturing industries, those most affected by the crisis, continued to recover in the period reviewed but their activity level remained lower than their pre-crisis level—as reflected in total output and the number of employee posts and hours worked in manufacturing (Figure 1.2), although the number of persons employed decreased slightly. Output increased at all levels of technology, but with much variance from industry to industry: the output of chemicals increased by 65 percent; metal and basic metal products industries by 26 percent and 44 percent, respectively, while electronic components declined by 36 percent. The decreases in output trace partly to sluggish global demand, since the relevant industries' exports also decreased.[3] Thus, the dollar value of chemicals exports grew by 21 percent and of basic metal products by 23 percent, whereas the dollar value of electronic-component and computer exports declined by 23 percent. The decreases in electronic components—in both output and exports—originated partly in the opening of Intel's new plant at the beginning of 2009, with activity at this facility beginning to slow down late in the year.

[1] All shown herein as annual rates, seasonally adjusted.

[2] The by-industry real-activity data are annual and seasonally adjusted (Table 1.4).

[3] The data on exports of goods are quarterly, and seasonally adjusted.

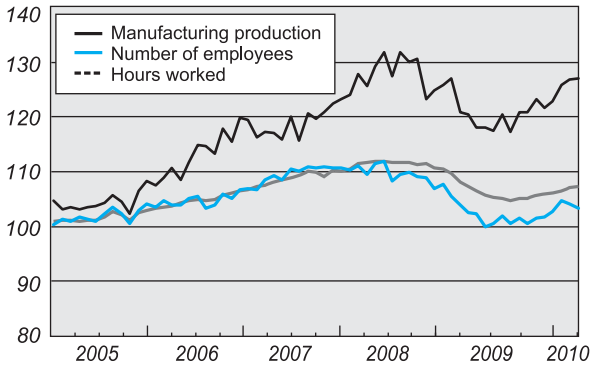
The imports of goods data point to an increase in imports of raw materials and capital goods, which may indicate expectations of further recovery of manufacturing output in the next quarter. The Companies Survey and the survey of expectations in the manufacturing industry also reflect optimism. These surveys, however, show that most of the increase in manufacturing output was directed to the domestic markets, whereas expectations of future expansion derive from predictions of further increase in global demand. For this reason, and since 40 percent of manufacturing output is for export, the continued recovery of manufacturing output depends heavily on developments abroad.

The activity of trade and services industries expanded rapidly in the period reviewed and rebounded to pre-crisis levels, as the turnover indices show. Retail trade expanded at an accelerated pace (Figure 1.2), signaling expectations of an increase in private consumption, whereas wholesale trade continued to grow steadily (by 11 percent). The service industries also continued to expand, led by business services (activity up 25 percent), which account for a large portion of trade and services revenue. Activity in hotel and restaurant services increased as well (by 15 percent), giving evidence of the continued consolidation of the public's sense of economic security.

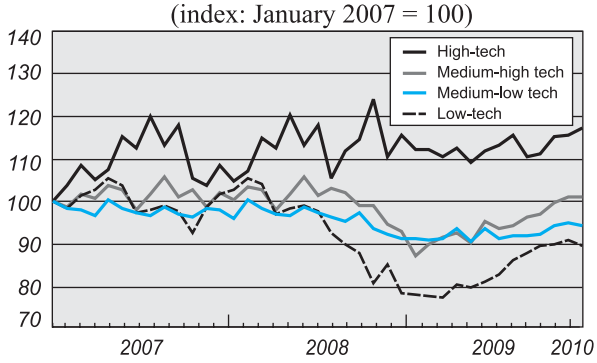
Tourism activity continued to increase, with ongoing upturns in arrivals and bed nights of foreign and domestic tourists (15 percent and 10 percent, respectively—Figure 1.3). The bed nights data show that while domestic tourism was not badly harmed by the crisis, incoming tourism contracted severely and has yet to regain its pre-crisis level. The steep shekel appreciation following the crisis may account for some of the explanation. UNWTO data show that world tourism also continued to trend upward during the period reviewed, although still falling short of the pre-crisis level. The recovery of tourism provides further evidence of optimism among domestic and foreign consumers.

Figure 1.2

Manufacturing production, 2005-2010*
(index, 2004 average=100)



Manufacturing production by technological intensity of industry, 2007-10
(index: January 2007 = 100)



Large-scale retail trade, 2005-2010**
(index: 2002 average=100)

* To March 2010. Seasonally adjusted.
** To April 2010. Seasonally adjusted.

Figure 1.3

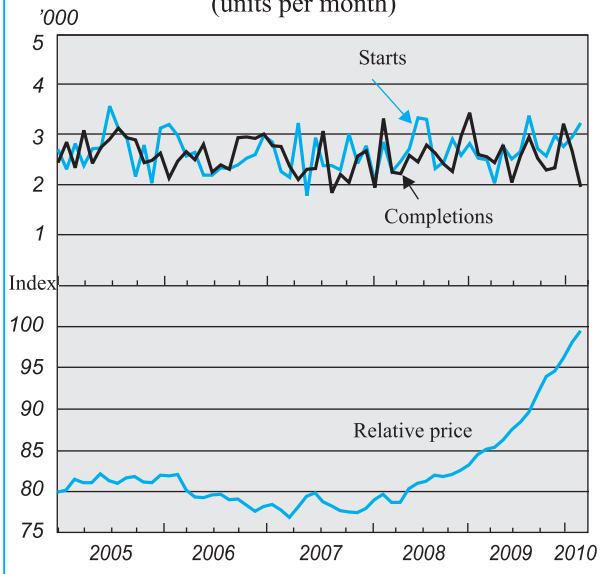
The hotel industry: monthly bed nights of tourists and Israelis, 2005-2010*

* To April 2010. Seasonally adjusted.

Construction activity, expressed in terms of total industry investment, expanded in the period reviewed. Most of the growth traced to a rebound in nonresidential construction investment, which had contracted severely during the crisis, whereas residential construction investment continued to increase moderately in keeping with its trend since 2004. The growth of activity during the period reviewed was also reflected by a mild upturn in the number of building permits issued at the end of 2009 and by construction companies' responses in the Companies Survey. The Companies Survey also shows that the industry continues to suffer from a land-supply constraint. No significant change in this field will be evident for the time being, despite the heightened efforts of the Israel Lands Administration (ILA) and the Ministry of Construction to release land for construction more quickly. The steep increase in the number of building transactions approved by the ILA should affect supply of land two years hence. Demand for dwellings continued to increase, evidently influenced by low mortgage-loan interest even though the monetary rate was raised during the period reviewed. The inability of supply to keep up with the increase in demand is reflected in the continued upward movement of housing prices, some of which was seasonal, (by 3.6 percent in January–February, Figure 1.4), admittedly less than in the two previous quarters.

Figure 1.4

Housing starts and completions,* and relative price,** 2005-2010 (units per month)



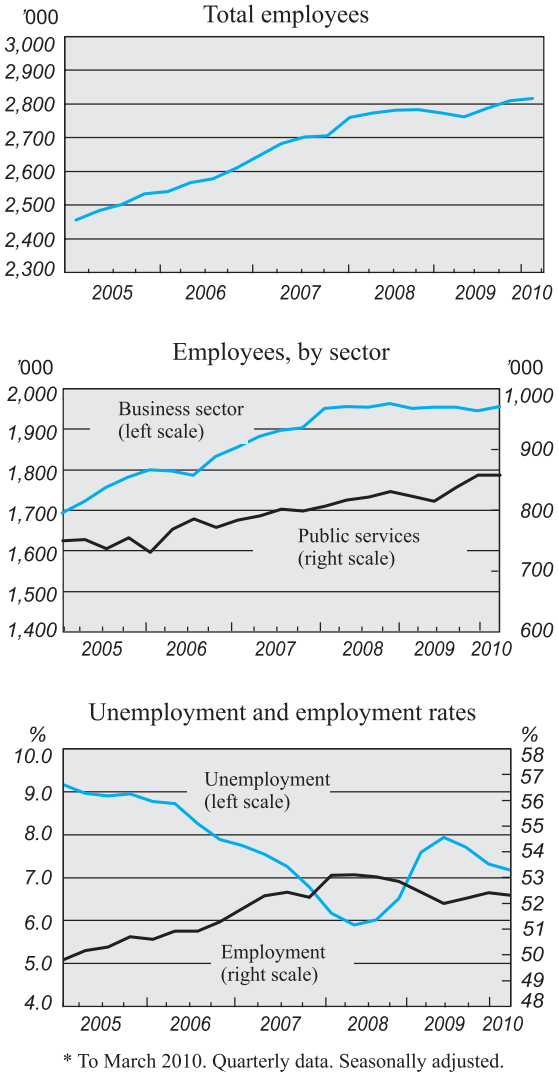
* Original data, to February 2010.
** Prices of owner-occupied dwellings relative to CPI (index, January 1998=100). To February 2010.

The labor market[4]

The labor market continued to recover during the period reviewed but at a somewhat slower pace. The continued moderate increase in demand for labor induced a measured growth of employment and an increase in the nominal wage (Figure 1.5). Persons employed increased by 0.2 percent, surpassing the pre-crisis level. Most of the upturn, however, was due to part-time hiring, explaining the

Figure 1.5

The labor market, 2005-2010*



* To March 2010. Quarterly data. Seasonally adjusted.

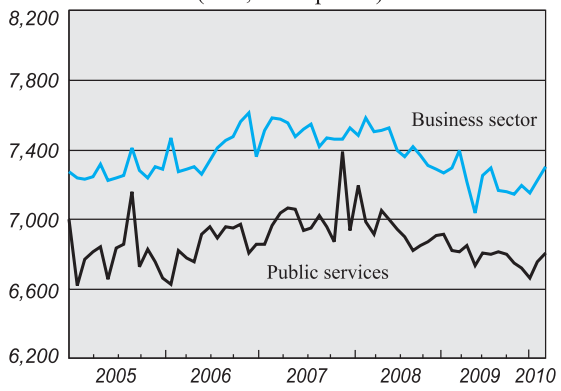
[4] The National Insurance data (number of employee posts, real wage, and nominal wage) relate to January–February 2010, whereas the Labor Force Survey data (number of persons employed) relate to the first quarter of 2010. All data are quarterly, and seasonally adjusted (Table 1.5).

concurrent acceleration in the number of employee posts (up 0.9 percent). It is also noteworthy that this slowing of the increase in employment halted the upward trend in the employment rate (the share of the working-age population) that began in the second half of 2009. Further evidence of the slowing of the employment recovery is the continued sluggish downward trend (a reduction of 0.1 percentage points) in the unemployment rate, (the share of the labor force), 7.2 percent in the period reviewed as against 5.9 percent on the eve of the crisis, and a milder increase in the employment balance.[5] The increase in labor demand resulted in a 1.1 percent increase in the nominal wage, and, for the first time, an upward movement of the real wage (Figure 1.6), by 0.9 percent, although it remained 6 percent under its pre-crisis level.

Analysis at the industry level, based on Labor Force Survey data, shows that employment increased most conspicuously in banking and financial institutions; transport, storage, and communication services; and healthcare, welfare, and education services—industries in which employment had not decreased significantly during the crisis. In manufacturing, however—in which activity has not yet returned to its pre-crisis levels—employment continued to fall while employee posts continued to rise moderately, continuing a trend that began in the second half of 2009. In manufacturing industries that were hardly affected by the crisis (mainly chemicals, and food, beverages, and tobacco), employment remained relatively strong, whereas in most other industries it declined. Quarter-on-quarter comparison of the rates of change in activity with rates of change in employment shows no clear relation between the variables—evidently due to the slow response of the labor market to the recovery of business activity. The Companies Survey gives further evidence of the labor market's slow response, showing that in most industries the net balance[6] of activity was 2–2.5 times higher than the net employment balance (with the exception of business services, in which the two balances matched).

Figure 1.6

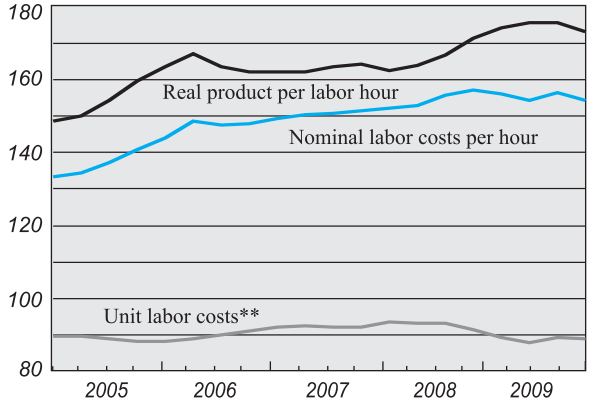
Real wage per employee post, 2005-2010*
(NIS, 2004 prices)



* To February 2010. Seasonally adjusted.

Figure 1.7

Index of nominal unit labor costs (gross) in the business sector, 2005-2009*
(1997 average=100)



* To December 2009. Quartely data. Seasonally adjusted.
** Total labor costs *divided* by GDP.

The government

Tax revenues continued to increase in the first quarter of 2010, albeit less vigorously than in the second half of 2009. Net of legislative changes and nonrecurring revenues, total tax revenues were 11 percent higher than in the first quarter of 2009, with similar increases in both direct and indirect tax revenues. Tax revenues still surpass the outlook in the state budget. Since domestic expenditure exclusive of net issue of credit corresponded to the seasonal trajectory of the budget in the first four months of 2010, budget performance during the period reviewed suggests that the domestic deficit will probably be smaller than the maximum allowed in the budget (5.5 percent of GDP). While the domestic deficit was under the year-earlier level in the period reviewed (NIS 3.2 billion as against NIS 6.6 billion), it was still higher than in 2005–08, when surpluses were recorded (Table 1.6 and Figure 1.8). The domestic deficit remains low by international standards and the debt/GDP ratio is not expected to rise significantly.

[5] New hirings minus layoffs.

[6] Defined as the difference between the percentage of companies reporting an increase and the percentage of those reporting a decrease.

This is unlike the situation in most developed countries, where considerable fiscal adjustment is needed (Table 1.1).

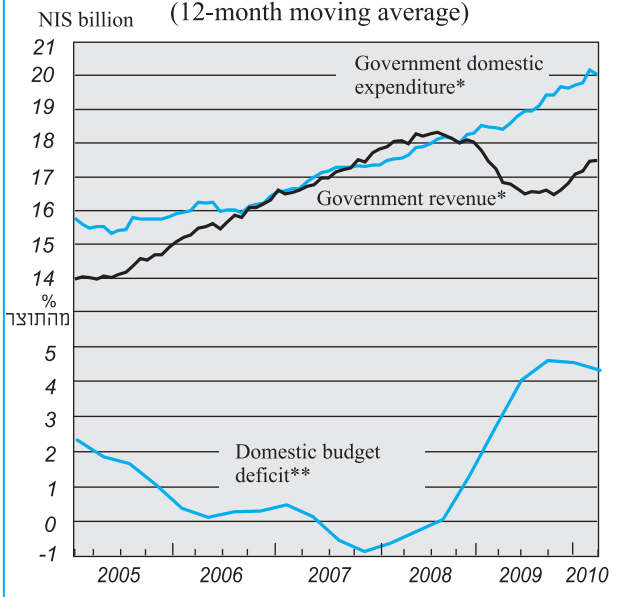
Table 1.1 Governments' Financial Balances

	Total OECD	Eurozone	Japan	US	Israel
2005	-2.7	-2.6	-6.7	-3.3	-4.7
2006	-1.2	-1.4	-1.6	-2.2	-2
2007	-1.2	-0.6	-2.4	-2.8	-1.5
2008	-3.3	-2	-2.1	-6.5	-3.1
2009	-7.9	-6.3	-7.2	-11	-5.8
2010 forecast	-7.8	-6.6	-7.6	-10.7	-5
2011 forecast	-6.7	-5.7	-8.3	-8.9	-4.7

SOURCE: OECD database (the figures for Israel differ from those in the Central Bureau of Statistics National Accounts).

Figure 1.8

Government revenue and expenditure and The deficit 2005-2010
(12-month moving average)



* To April 2010.

** Including the Jewish Agency. To March 2010.

The current account[7]

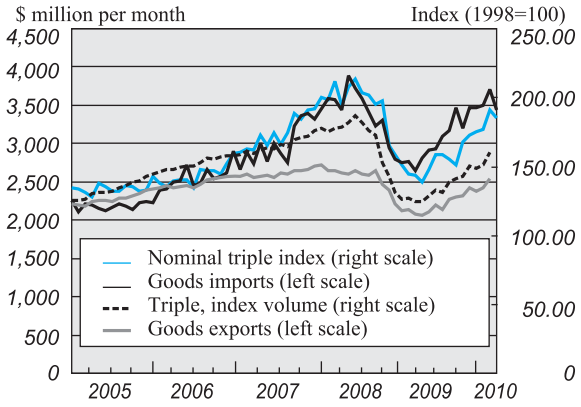
The trade deficit widened to $2.6 billion as the growth rate of exports of goods slowed slightly and that of imports of goods accelerated (Figure 1.9), against the background of steeper appreciation of the real effective exchange rate than in the previous quarter (Figure 1.13).

The faster rate of increase in the dollar value of imports reflects, in the main, rapid upturns of imports of raw materials, fuel, and capital goods,[8] and was evident in most of their components. Imports of durable consumer goods, in contrast, decreased by 7 percent, partly due to purchases of vehicles having been brought forward in previous quarters, to preempt the increase in the value for tax purposes of the use of new leased vehicles.

The dollar value of goods exports increased less vigorously in the reviewed quarter than in the previous period partly due to relatively rapid changes in the composition of Israel's exports to its various target markets—changes that also affected the composition of exports by industry. These

Figure 1.9

Foreign trade,[a] 2005 to 2010, Triple Trade Index[b]



[a] Excluding ships, aircraft, diamonds, and fuel. To April 2010. Seasonally adjusted.

[b] The data of the triple index are to March 2010. The triple index is the weighted index of trade data of Germany, Japan and the US.Triple trade index, 1998 = 100

[7] The foreign-trade data (Table 1.7), denominated in current dollars and expressed in quarterly seasonally adjusted terms, relate to imports and exports of goods excluding ships, aircraft, and diamonds in the first four months of 2010. They include only goods that cleared customs.

[8] Capital goods imports as recorded in the foreign trade data are different from those in the National Accounts data for the period reviewed.

Table 1.2 Exports to Europe and Europe's Comparative Advantage, by Industry

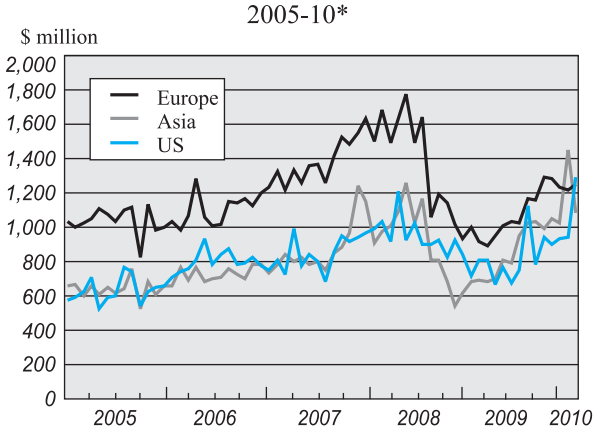
	Industry share in Israel's total exports (%) (1)	Industry share in Israel's exports to Europe (%) (2)	Industry export dependence on Europe (2/1)	Industry exposure to European competitors—comparative advantage of European exporters[a]
Chemicals (excl. pharmaceutical)	15	17	High (1.1)	Very high (1.4)
Pharmaceuticals	12	6	Very low (0.5)	High (2.0)
Machines and mechanical equipment	24	23	Neutral (0.9)	High (1.2)
Manufacturing	17	21	Very high (1.3)	Neutral (1.0)
Minerals	9	10	High (1.2)	Very low (0.3)
Medical and optical equipment	8	7	Neutral (0.8)	Very high (1.4)
Livestock, plants and food	7	11	Very high (1.5)	Neutral (0.9)
Planes, sailing boats and vehicles	5	1	Very low (0.3)	High (1.3)
Other	3	3	Neutral (0.9)	Low (0.7)
Total	100	100		

[a] Europe's comparative advantage in an industry is calculated as the ratio of the share of the industry in Europe's total exports to its share in global trade (excluding internal European trade).
SOURCE: Based on IFS, EUROSTAT, and Central Bureau of Statistics data.

changes derive from the different effects of the global crisis on the countries, and also their different recovery paths. The most conspicuous development is the stabilization of Europe's imports during the period reviewed following their increase at the start of recovery in the second half of 2009, in contrast to continued mild increases in the United States and Asia—a stabilization that is reflected in the slowing of the increase in Israeli exports to Europe (Figure 1.10).

Figure 1.10

Israel's goods exports, by main target markets, 2005-10*



* Seasonally adjusted. The US data do not include the Intel factory or diamond exports.
To March 2010.

Although only 6.6 percent of Israel's goods exports reach southern Europe (Greece, Portugal, Spain, Italy),[9] the area that lies at the core of the crisis, the slowdown of recovery throughout the eurozone due to the crisis in these countries may have broad implications for Israel's exports to the eurozone at large. These implications include both a direct effect—less European demand for Israeli exports—and the indirect effect on Israeli exporters' competitiveness of nominal shekel appreciation against the euro. These effects were manifested in the period reviewed by a drop in exports to Ireland and Greece.

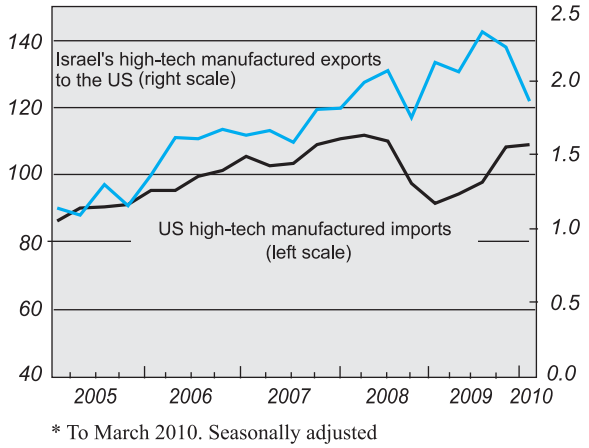
[9] In terms of percent of total other goods and services (including exports of software and additional high-tech services), the proportion is 5.2 percent.

Israeli exports are heavily exposed to the European market: 33 percent of total exports (excluding diamonds) are destined to Europe, a much higher proportion than worldwide exports to Europe (21 percent). The decrease in European demand could have a notable adverse effect on mixed high-tech and mixed low-tech and low-tech industries such as machinery and equipment,[10] since the European market is their main destination (Table 1.2). The chemical (including pharmaceutical) and medical and optical equipment industries could suffer also; these industries account for 60 percent of Israel's total exports. In these industries European countries have a distinct comparative advantage (Table 1.2). This could become even more pronounced in light of an weakness of the euro, which could harm the competitiveness of the world's other exporters including those in Israel. These changes already began to find expression in the period reviewed in a change in the share of Europe in Israel's total export volume in each of these industries. Thus, in machinery and equipment the market share to Europe fell from 31 percent to 28 percent, returning to its pre-crisis level. In medical and optical equipment, the market share fell from 28 percent in the previous period and 26 percent on the eve of the crisis to 20 percent. In chemicals, while market share did increase during the period reviewed, it had fallen in the previous three months; therefore, there was a decrease from 27 percent in the previous period and 26 percent on the eve of the crisis to 23 percent in the period reviewed.

Table 1.2 shows Israel's exposure to the events in Europe. The third column lists Israel's industries whose exports to Europe make up a higher percentage of their total exports than do exports from the rest of the world to Europe. The exposure of industrial exports and exports of livestock, plants, and food is relatively high, whereas pharmaceutical exports are not badly exposed. The last column analyzes the extent of each industry's exposure to European competitors whose relative standing has been improved by the depreciation of the euro: mainly exports of chemicals, medical and optical instruments, and pharmaceuticals.

Figure 1.11

Israel's high-tech manufactured exports to the US and US high-tech manufactured imports, 2005 to 2010*
($ billion per quarter)



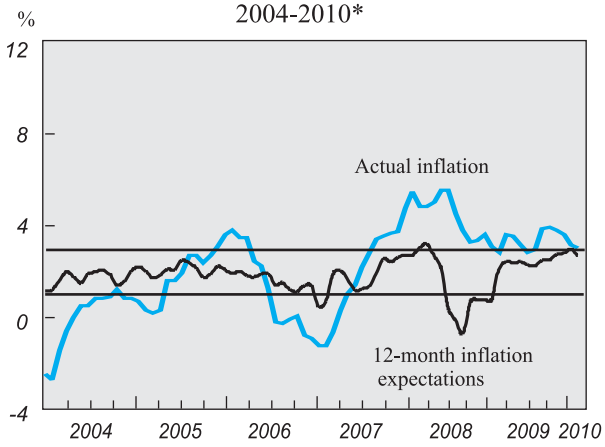
* To March 2010. Seasonally adjusted

Monetary policy

The pace of price increases in the domestic market continued to slowed during the period reviewed (Table 1.9 and Figure 1.12). The Consumer Price Index was flat from January to April, mainly due to seasonal factors—foremost in clothing and footwear prices—but also due to government actions: lowering the Value Added Tax rate, abolishing the water surcharge, and cutting electricity rates; it also reflected the slowing of increases in energy and housing prices. The seasonally adjusted CPI rose by 0.3 percent in cumulative terms. The annual inflation rate (over the previous twelve months) was in the upper part of the inflation target range and was affected mainly by increases in energy and housing prices and increases that traced to government intervention in 2009. Since inflation expectations to one year ahead remained relatively high, both according to the forecasters and according to the capital market, the expected inflation rate verged on the upper bound of the inflation target. Asset prices, including equities, dwellings, and CPI-indexed bonds (especially corporate bonds), rose during the period reviewed,

Figure 1.12

Inflation in previous 12 months, inflation expectations, and the inflation target, 2004-2010*



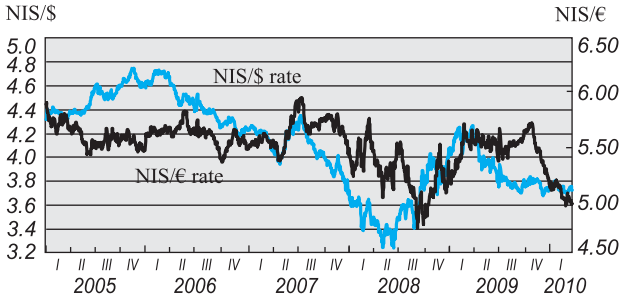
* 12-month inflation expectations as calculated by the Bank of Israel Research Department. To April 2010.

— Inflation target range.

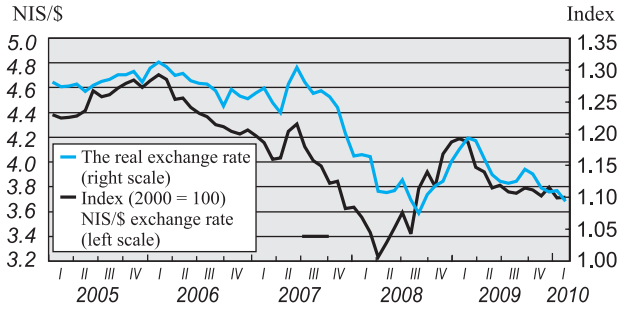
[10] Which constitute part of manufacturing exports.

Figure 1.13

The nominal NIS/$ and NIS/€ exchange rates, 2005-2010*



The nominal NIS/$ exchange rate and the real effective exchange rate,[a] 2005-2010

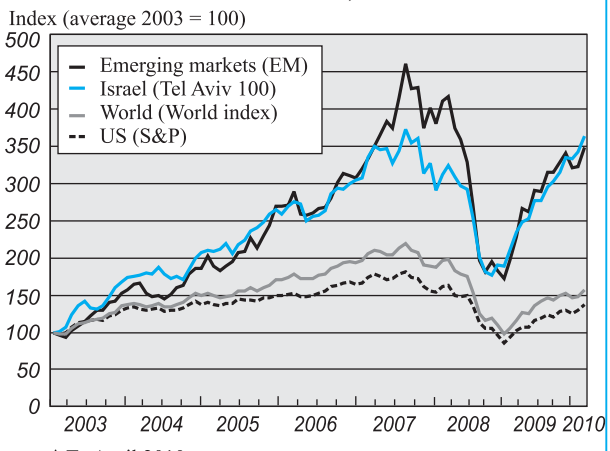


* To April 2010..

[a] The real effective exchange rate is the trade-weighted geometrical average exchange rate of the shekel against the 28 currencies of Israel's 38 main trading partners *minus* the difference between inflation in Israel and in those countries.

Figure 1.14

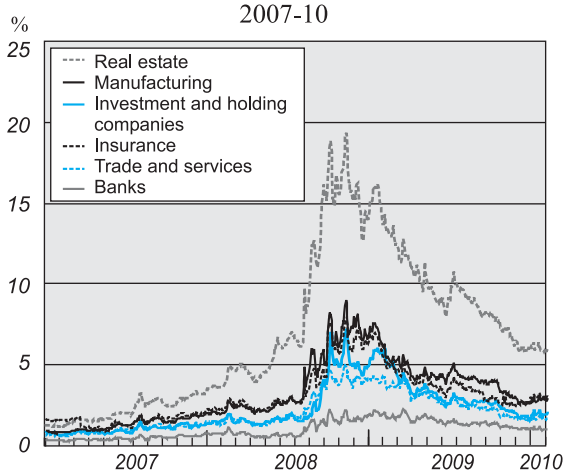
Leading share indices, Israel and around the world, 2003-10*



* To April 2010.

Figure 1.15

The gap between the weighted average yield of CPI-indexed corporate bonds and *Galil* government bonds, by industry, 2007-10



* To April 2010.

partly reflecting the economic recovery and expectations of its continuation, but also responding to the low interest rates on risk-free deposits resulting from the low monetary rate. Major countries' central banks are expected to maintain low monetary rates the rest of the year. Against the background of these developments, the low domestic rate, and the continued domestic and global recovery, the Bank of Israel raised its rate in a gradual process—by 0.25 percentage in January, to 1.25 percent; no change in February and March; and another 0.25 percentage point in April, to 1.5 percent.

The nominal effective exchange rate continued to appreciate during the period reviewed—against the background of the surplus in the current account of the balance of payments and the interest rate differential between Israel and other countries. The Bank of Israel bought $1,573 million in January, $200 million in February, $500 million in March, and $2,525 million in April.

The global economy

In the first quarter of 2010, the global economy posted stronger growth than had been expected in light of the severity of the damage caused by the crisis. Although the rebound was perceived at the global level, it did not embrace all countries to the same extent. In advanced economies, growth was slow and was based on massive monetary and fiscal intervention that caused government debts to balloon and clouded the continuation of the growth. In emerging markets, conversely, growth was powered mainly by rising domestic demand and therefore appears more stable than

that in the advanced economies. Against this background and despite the increase in global activity as reflected in recent indicators, the IMF decided to increase its 2010 global GDP growth outlook only marginally, to 4.25 percent, only slightly higher than in its January outlook.

While the cross-country disparities in the pace of recovery occurred mainly between the group of emerging markets and that of the advanced economies, there was high variance also within these groups. The US grew faster than the eurozone and Japan, partially due to more expansionary fiscal and monetary policies. Consequently, the private consumption and growth of stocks data are more positive in the US than in most European countries. The sustainability of these trends, however, is not clear. Furthermore, the high unemployment rates, the weakness of the real-estate market, the shortage of credit, and the still-fragile condition of many banks are overshadowing the continuation of growth in both the US and Europe. Consequently, budget deficits and public debt/GDP ratios are continuing to widen rather quickly, especially in some of the eurozone countries. The OECD's adjusted outlook, however, suggests that government deficits will stabilize at their high 2009 level in 2010 and decrease in 2011, especially in the US. This assessment is based on the expectation of greater economic activity and the implementation of fiscal consolidation programs (Table 1.1). In the eurozone, there are fears that countries already recovering will slide back in the wake of those in crisis. In Japan, some recovery of domestic demand and exports is evident, but the deflation problem and the high debt ratio are continuing to cloud the continuation of economic growth.

Most emerging markets, in contrast, are typified by relatively vigorous recoveries. The Asian countries are the growth leaders; in most of them, GDP has surpassed its pre-crisis levels and is verging on its potential level due to rapid recovery of exports, an inflow of foreign capital, surging domestic demand, and low debt ratios that allowed these countries to apply effective countercyclical policies during the crisis. China is also enjoying very rapid growth and solid macro data but attracts concern about high inflation and the formation of a real-estate bubble.

The review period closed with a spurt of fears about a spillover of the debt crisis into additional countries, given the downgrading of Spain's and Portugal's sovereign rating and despite the aid to Greece. The onerous debts of additional EU member states and their strong interdependence may undermine investors' confidence in the stability of the entire eurozone and place a question mark over the continuation of the global recovery generally and that of Israel's economy.

Table 1.3 National Accounts,2009-10
(percentage change in annual terms, at constant prices, seasonally adjusted)

		Change from previous quarter							
		2009				2010	2010:QI		
	2009[a,b]	I	II	III	IV	I	Change from previous quarter	Year on year change[a]	Last month for which data available
GDP	0.7	-2.7	1.2	3.6	4.8	3.3	3.3	3.2	Mar
Business-sector product	-0.2	-4.8	1.2	3.1	5.0	4.8	4.8	3.5	Mar
Private consumption	1.4	-2.8	10.3	6.1	5.0	1.6	1.6	5.7	Mar
Gross domestic investment	-8.9	-22.4	-30.3	-7.3	-38.4	174.4	174.4	2.2	Mar
Fixed investment	-6.0	-13.6	2.1	5.3	-8.5	-0.3	-0.3	-0.5	Mar
Goods and services exports excl. diamonds	-9.6	-26.7	-3.7	10.0	39.0	-11.4	-11.4	6.9	Mar
Goods exports[c]	-12.3	-15.0	-19.3	40.3	40.7	5.8	5.8	14.0	Mar
Services exports[c]	-11.7	-43.2	60.5	-33.9	66.5	-36.2	-36.2	3.1	Mar
Goods and services imports excl. diamonds	-12.3	-39.0	0.6	14.5	4.5	21.7	21.7	10.0	Mar
Goods imports[d]	-14.4	-37.1	10.5	33.7	2.8	49.3	49.3	22.7	Mar
Services imports[d]	-11.6	-32.1	3.1	-9.7	16.2	5.2	5.2	3.3	Mar
Public sector consumption	2.2	-2.3	10.0	2.7	4.6	8.2	8.2	6.3	Mar
Public sector consumption excl. defense imports	3.7	-3.9	15.7	6.0	3.5	-4.4	-4.4	4.9	Mar
Domestic use of resources	0.0	-5.6	1.4	4.6	-5.6	22.2	22.2	5.2	Mar

[a] Unadjusted data.

[b] Compared with previous year.

[c] New calculation - excluding subsidies.

[d] New calculation - excluding taxes.

SOURCE: Central Bureau of Statistics and Bank of Israel.

Table 1.4. Indicators of Business Activity,[a] 2009-10
(percentage change, in annual terms, seasonally adjusted)

		Change from previous quarter					January - April 2010		
		2009				2010			
	2009[a,b]	I	II	III	IV	I	Change from previous period	Year on year change[a]	Last month for which data available*
Composite state-of-the-economy index	-1.8	-3.3	3.3	7.2	7.5	6.6	6.4	6.2	Apr
Unit labor cost	-4.1	-4.6	-5.3	-4.1	-2.4				Dec
Large-scale retail trade	4.2	3.3	18.5	-10.0	9.5	3.9	3.4	2.7	Apr
Manufacturing production (excl. diamonds)	-6.0	-17.9	-3.6	3.4	10.1	13.2	13.2	5.6	Mar
Index of trade revenue	-1.9	-3.5	9.7	8.3	12.0	12.9	12.9	10.7	Mar
Index of trade and services revenue	-2.8	-4.7	7.4	4.8	12.3	15.7	15.7	10.0	Mar
Index of services exports	-14.9	-53.9	22.5	5.0	29.9	11.3	17.1	18.0	Apr
Tourist arrivals	-10.2	-74.8	92.6	59.2	51.6	8.0	13.7	46.2	Apr
Residential construction[a]		period average, year-on-year change							
Starts	0.4	2.0	-2.2	-2.4	4.7	18.2		15.6	Feb
Completions	4.2	8.5	3.3	2.1	2.8	-19.3		-23.5	Feb
Nonresidential construction[a]									
Area of starts	-17.7	0.9	-49.5	-34.2	24.4	-20.0		-20.0	Mar
Building permits	14.0	-0.1	-34.6	4.2	206.2	103.1		103.1	Mar
Survey of companies (net balance, percent)[c]									
Weighted balance of the business sector	-8.0	-36.0	-12.0	-1**	16.0	29.0			Mar
Output of manufacturing firms	-5.0	-30.0	-14.0	3**	24.0	34.0			Mar
Sales by trading firms	-8.0	-54.0	0**	2**	22.0	30.0			Mar

* When the last month is April, the period of comparison is four months; when the last month is March, the comparison is quarterly; when the last month is February, the period compared is two months.

** Not significant at 5% level.

[a] Unadjusted data.

[b] Year-on-year.

[c] The net balance is defined as the difference between the number of firms reporting a rise and those reporting a decline, as a proportion of all reporting firms.

SOURCE: Based on Central Bureau of Statistics and Ministry of Construction and Housing data.

Table 1.5. Indicators of Labor Market Developments, 2009-10
(percentage change, seasonally adjusted)

		2009				2010	January - April 2010		
	2010:QI	I	II	III	IV	I	Change from previous period	Year on year change[b]	Last month for which data available*
	('000)	Percent change from previous quarter							
Civilian labor force	3,033.5	0.8	-0.1	0.6	0.4	0.1	0.1	1.0	Mar
Israeli employees	2,815.9	-0.4	-0.4	0.9	0.9	0.2	0.2	1.3	Mar
of which: in general government	857.8	-1.0	-0.9	2.8	2.3		0.0	3.8	Mar
in business sector	1,956.2	-0.6	0.1	0.0	-0.5	0.5	0.5	0.3	Mar
Foreign workers and Palestinians (unadjusted)[c]	0.0	-4.6	2.2	-0.2	-2.7				Dec
Average hours worked weekly per Israeli employee	36.4	1.1	0.3	1.4	0.8	-1.1	-1.1	0.5	Mar
Weekly Labor input in business sector (incl. foreign workers and Palestinians)	96,446	-0.3	0.2	1.0	1.6	-0.5	-0.5	1.6	Mar
of which: Israelis	84,509	0.5	0.0	1.3	2.2	-1.0	-1.0	1.7	Mar
Weekly labor input in general government (Israelis)	18,260	1.4	-1.0	5.6	2.9	-2.3	-2.3	2.9	Mar
Unemployed	217.6	17.5	4.4	-2.2	-4.8	-1.8	-1.8	-2.3	Mar
Work seekers	191.8	10.0	4.3	-1.5	-2.2	-6.3	-23.1	0.0	Dec
Claims for unemployment benefit	80.0	22.3	14.2	2.1	-4.6	-10.3	-31.7	-3.2	Apr
Balance of employment[c]		-1.9	-0.6	-0.3	1.7	2.3			Apr
Vacancies[a]					-10.7	4.2	2.5		Apr
Real wage per employee post[d,e]	7,168.4	-0.1	-1.4	0.4	-0.8	0.9	7.8	-0.5	Feb
In general government	6,833.8	-0.4	-0.8	0.1	-1.3	1.0	8.1	-1.1	Feb
In business sector	7,333.3	0.0	-2.1	0.5	-0.6	1.4	7.7	-0.2	Feb
Nominal wage per employee post[e]	8,136.2	0.3	-0.3	1.4	0.2	1.2	8.1	3.1	Feb
In general government	7,756.4	0.0	0.5	1.3	-0.7	1.4	10.0	2.5	Feb
In business sector	8,323.3	0.3	-1.2	1.7	0.5	1.8	9.1	3.5	Feb
		Percent, seasonally adjusted							
Participation rate	56.3	56.7	56.5	56.6	56.5	56.3			Mar
Employment rate	52.3	52.4	52.0	52.2	52.4	52.3			Mar
Unemployment rate	7.2	7.6	7.9	7.7	7.3	7.2			Mar
Depth of unemployment[g]	36.1	30.1	33.4	34.8	34.4	36.1			Mar

* When the last month is April, the period of comparison is four months; when the last month is March, the comparison is quarterly; when the last month is February, the period compared is two months.

[a] Unadjusted data.

[b] Due to an error in the method of calculation, the data from January 2008 have been recalculated.

[c] Posts filled minus terminations of employment as a percentage of the total number of employees in businesses in the Employers Survey Sample.

[d] At 2004 prices.

[e] Including foreign workers and Palestinians.

[f] Percent of unemployed seeking work for more than six months (unadjusted).

SOURCE: Central Bureau of Statistics, Labor Force Survey, except for data on Israelis, non-Israelis, and labor input in the business sector, and total Israelis employed, which are the Central Bureau of Statistics (CBS) National Accounts estimates, and vacancies, which are derievd from the CBS Survey of Vacancies.

Table 1.6. Government Budget Performance, 2009-2010

		2009				2010	January - April 2010		
	2009[a]	I	II	III	IV	I	Change from previous period	Year on year change	Last month for which data available*
Domestic deficit as percent of GDP	-3.7	-1.3	-5.3	-1.3	-7.0	-0.6	-0.6	-1.3	Mar
Deviation from domestic budget path, excl. credit extended[b]				(NIS billion)[b]					
Revenue	3.0	-4.0	0.8	2.9	3.4	1.5	-3.0	5.3	Apr
Expenditure	-2.5	-4.7	2.1	-1.3	1.3	-1.4	0.6	6.9	Apr
Deficit	5.6	0.6	-1.3	4.1	2.1	2.9	-3.6	-1.6	Apr
Total deficit excluding credit	-39.3	-5.3	-13.5	-4.5	-16.1	-3.1	14.8	4.5	Apr
				Real percentage change, year on year					
Government tax revenue	-5.3	-13.6	-10.7	-1.6	6.9	9.1	7.5	8.0	Apr
of which: income tax, net	-12.2	-17.5	-15.6	-12.4	-0.8	2.0	11.6	-0.5	Apr
VAT, gross	-6.1	-13.2	-13.8	0.2	3.4	14.1	7.6	13.9	Apr
Government expenditure	2.5	-5.8	8.6	7.6	0.3	8.8	-11.1	3.4	Apr
National Insurance allowances	7.2	6.7	7.0	8.0	7.0	4.3	3.4	4.1	Apr
of which: Unemployment benefit	59.2	47.9	71.2	69.4	48.3	2.3	-12.1	-5.6	Apr
Income support[d]	0.4	-3.0	0.9	0.7	3.3	2.0	3.3	1.2	Apr
National insurance contributions received from the public	-1.3	-2.2	-4.2	-1.5	2.6	4.8	1.2	6.1	Apr

* When the last month is December, the comparisons are of four-month periods; when the last month is September, the comparisons are quarterly; and when the last month is November, the three months September–November are compared with May–July.

[a] Compared with previous year.

[b] The path was determined on the basis of the deficit target.

[c] Year on year change. Does not refer to the seasonal path.

[d] Not including income support in old-age and survivors' pensions.

SOURCE: Based on Ministry of Finance and National Insurance Institute data and Bank of Israel

Table 1.7. Foreign Trade, Balance of Payments, and the Reserves, 2009-10

		2009				2010	January - April 2010		
	2009[a,b]	I	II	III	IV	I	Change from previous period	Year on year change[a]	Last month for which data available
	(rate of change, percent)[c]								
Trade in goods[d]									
Goods imports	-22.3	-18.5	-5.3	9.9	3.9	10.7	12.7	21.8	Apr
of which: Consumer goods	-8.5	-10.2	-1.9	9.2	3.5	4.7	6.1	16.6	Apr
Capital goods	-27.3	-19.7	-9.6	12.0	-2.9	9.2	12.8	10.5	Apr
Intermediates	-25.0	-21.0	-4.8	9.2	6.8	13.8	15.3	28.7	Apr
Goods exports	-13.1	-12.4	0.7	9.7	10.2	5.3	6.1	28.7	Apr
of which: Manufacturing	-13.3	-12.9	1.0	10.5	9.7	5.2	5.9	29.2	Apr
of which: High-tech	5.0	-0.9	8.7	7.3	3.0	-0.1	-0.6	20.5	Apr
Balance of payments				$ million					
Goods and services exports	67,453	15,734	16,191	16,271	19,258				Dec
Goods and services imports	63,195	14,039	14,810	16,846	17,501				Dec
Balance of trade in goods and services account	4,258	1,695	1,381	-575	1,756				Dec
Current account	7,191 0	2,351	1,490	14	3,336				Dec
Financial account (excl. foreign exchange reserves)[a]	1,467	-231	2,224	6,255	-2,381			-231	Dec
of which: Nonresidents' direct investment[a]	943	1,185	703	1,414	469			1,185	Dec
Nonresidents' portfolio investment[a]	620	664	186	1,063	570			664	Dec
Residents' direct and portfolio investment abroad[a]	2,153	960	1,378	3,244	3,030			960	Dec
Bank of Israel reserves, end-period[a]	60,612	44,332	50,275	59,964	60,612	62,476		0	Apr
Net foreign debt (percent of GDP)[a]	-27.5	-25.6	-26.0	-26.3	-27.6			-25.6	Dec

* When the last month is April, the period of comparison is four months; when the last month is March, the comparison is quarterly; when the last month is February, the period compared is two months.

[a] Unadjusted data.

[b] Compared with previous year.

[c] The change relates to the dollar values of imports and exports.

[d] Not including ships, aircraft, diamonds, and fuel.

SOURCE: Central Bureau of Statistics.

Table 1.8. Indicators of Economic Development in Advanced and Developing Countries[a] (annual rate of change, percent)[b]

	2008	2009	Projection 2010	Projection 2011
World GDP	3.0	-0.6	4.2	4.3
Advanced countries	0.5	-3.2	2.3	2.4
Developing countries	6.1	2.4	6.3	6.5
World trade	2.8	-12.3	5.8	6.3
Advanced countries				
Imports	0.6	-12.0	5.4	4.6
Exports	1.9	-11.7	6.6	5.0
Developing countries				
Imports	8.5	-8.4	9.7	8.2
Exports	4.0	-8.2	8.3	8.4
Commodity prices (US$)				
Oil[c]	36.4	-36.3	29.5	3.8
Nonfuel	7.5	-18.7	13.9	-0.5
Inflation (CPI) in advanced countries	3.4	0.1	1.5	1.4
Short-term interest[d] (%)				
Dollar deposits	3.0	1.1	0.5	1.7
Euro deposits	4.6	1.2	0.9	1.6
Unemployment rate in advanced countries	5.8	8.0	8.4	8.0

[a] According to World Economic Outlook, Israel is classified as an advanced country. The advanced countries include the industrialized countries and some emerging markets.

[b] Except for unemployment and interest rates (percent).

[c] The average price of a barrel of Brent crude oil in 2009 was $61.78, excluding freight costs. Estimated price for 2010 is $80, and for 2011, $83.

[d] Six-month Libor rate for US dollar deposits, and three-month Libor rate on euro deposits.

SOURCE: World Economic Outlook (IMF), April 2010.

Table 1.9. Selected Price Indices, the Effective Exchange Rate, Nondirected Bank Credit, Interest Rates, Yields, and the Share Price Index, 2009–10
(rates of change, percent)

		2009				2010	January–April 2010		
		(change from previous quarter)							
	2009[a]	I	II	III	IV	I	Change from previous period[a]	Year on year change[b]	Last month for which data available*
	(annual terms, percent[c])								
CPI[b]	3.9	-0.1	2.3	1.3	0.5	-0.9	0	3	Apr
Consumer price index, seasonally adjusted[b]	4	0.8	1.3	0.8	1.1	0.1	0.3	3	Apr
Price index of owner-occupied homes[b,c]	21	3	5.1	6.3	5.2	3.6	2.4	21.9	Feb
Real effective exchange rate[d,e]	1.8	-2.1	4.8	1.5	3.3	-3.5	-2.2	-4.8	Apr
Nominal effective exchange rate[d]	4.3	-0.4	7.5	4.7	5.5	-2.4	-3.4	-3.8	Apr
Nondirected bank credit[d]	4.3	0.2	-2.3	1.2	4.3	2.2	2.4	1.4	Apr
Effective interest rate in daily deposit auction[d]	0.8	1.2	0.5	0.6	0.8	1.3	1.3	1	Apr
Yield on 5-year bonds[d]	1.5	1.8	1.6	1.5	1.1	1.3	1.3	1.7	Apr
Risk premium[d,f]	1.6	1.3	0.8	0.7	0.9	1.1	1.1	0.6	Apr
General share-price index[b]	78.7	20.3	18.3	10.3	13.9	10.4	4.5	30.1	Apr
	Period average, year-on-year change								
CPI	3.3	3.4	3.2	3.2	3.6	3.5	-0.4	3.4	Apr

[a] Year-on-year.

[b] Last month in period compared with last month of previous period.

[c] Not part of the CPI.

[d] Quarterly average compared with average of previous quarter.

[e] The real effective exchange rate is the weighted geometric average of the exchange rate of the shekel against 28 currencies, representing 38 of Israel's main trading partners (weighted by the extent of Israel's trade with those countries), adjusted for the difference between the inflation rate in Israel and in those countries.

[f] As measured by the 5-year credit-defalt-swap (CDS).

SOURCE: Central Bureau of Statistics and Bank of Israel.

Part 2: Broader Review of Selected Issues

The Ratio of Women's Wages to Men's Wages in Israel and the OECD

- In Israel the ratio of women's average wage to men's is 64 percent—higher than the average in the OECD.
- The ratio in Israel is higher than that obtained from a comparative analysis with the OECD countries that includes explanatory variables such as the minimum wage, the employment rate of women, age at marriage and fertility.
- In Israel, women's integration in the labor market relative to men's and the minimum wage compared with the average wage are relatively high. These aspects are characteristic of countries in which the women's/men's wage ratio is relatively high.
- Women in Israel marry relatively young, a feature generally associated with countries in which women's wage/men's wage ratio is low.

This article examines the differential between men's and women's wages in Israel in comparison with the differential in OECD countries. For that purpose it is preferable to use an official database rather than trying to create the data from studies carried out relating to each country separately. The OECD publication Economic Outlook gives the median ratio of women's wages to men's;[1] it shows that the average ratio in the OECD countries in the years 1997–2007 was 84 percent. In Israel, based on the Central Bureau of Statistics Income Surveys, the ratio was 81 percent. There are two critical problems, however, in using the OECD publication mentioned: (1) it does not include data on Israel, and (2) it lacks data on five OECD member countries. We therefore chose to use another data source,[2] one source that incorporates data on most countries in the world, despite the fact that it relates to the average wage and not the median wage, which is more indicative for our comparison.

Based on the above source for the years 2004–06, women's average gross wage in Israel was 64 percent of men's; in 128 countries around the world the ratio was 50 percent, on average; and in 31 OECD countries (including Israel) the ratio was 59 percent, on average. The figures relate to the gross wage, and are not adjusted for any explanatory variables. It is worth noting that there is great variation between the OECD countries—the standard deviation of the wage differential between men and women is 10 percent (Figure 2.1).

Despite the problem of econometric analyses based on few observations, this article will examine which variables are correlated with the differentials between men's and women's wages in OECD countries and in Israel.[3] Figure 2 shows the coefficients of the Pearson correlation between various variables and men/women wage differential, and Israel's position among the countries, by percentile. The figure shows only those variables found to be significant at the 95 percent level.

No statistical (binary) relation was found between the inter-gender wage differential and population size, GDP, GDP per capita,[4] share of trade in GDP, average rate of growth in the previous few years, the level of the minimum wage, the rate of employment among men, the share of women in part-time employment in the total number of employed women, the average number of years of education among men, the fertility rate, and the age at which women are eligible to vote.

Analysis based on multivariate regression

Most of the independent variables are correlated with each other, and the purpose of the multivariate correlation is to estimate the marginal correlation of each variable separately. As a result of the interdependence of the explanatory variables certain variables were found to be significant in the multivariate regression, whereas based on the bivariate regression no relation was found between them and the wage differential. One notable example of this was the minimum wage, which was found to be significant, robust and negative in nearly all the multivariate models estimated.

[1] Defined as the ratio of the median wage of women to the median wage of men, in full-time employment only.

[2] International data from World Economic Forum Global Gender Gap Report, 2007, taken from the Human Development Report, HDI (Human Development Index), which are themselves taken from the International Labor Organization 2007b, the LABORSTA Database. Most of the data come from periodic surveys, but some are from national insurance institutes.

[3] A common way of dealing with the problem of a small sample is perform the study using a panel over several years. That is not appropriate for our purpose, however, because the difference in the dependent variable over several years is negligible compared with the difference between countries.

[4] It is important to bear in mind that this refers only to the OECD. In a study encompassing most countries in the world, GDP per capita was found to be positively correlated with women's/men's wage ratio.

Figure 2.1

The Ratio of the Average Women's Wage to the Average Men's Wage in Israel and the OECD Countries

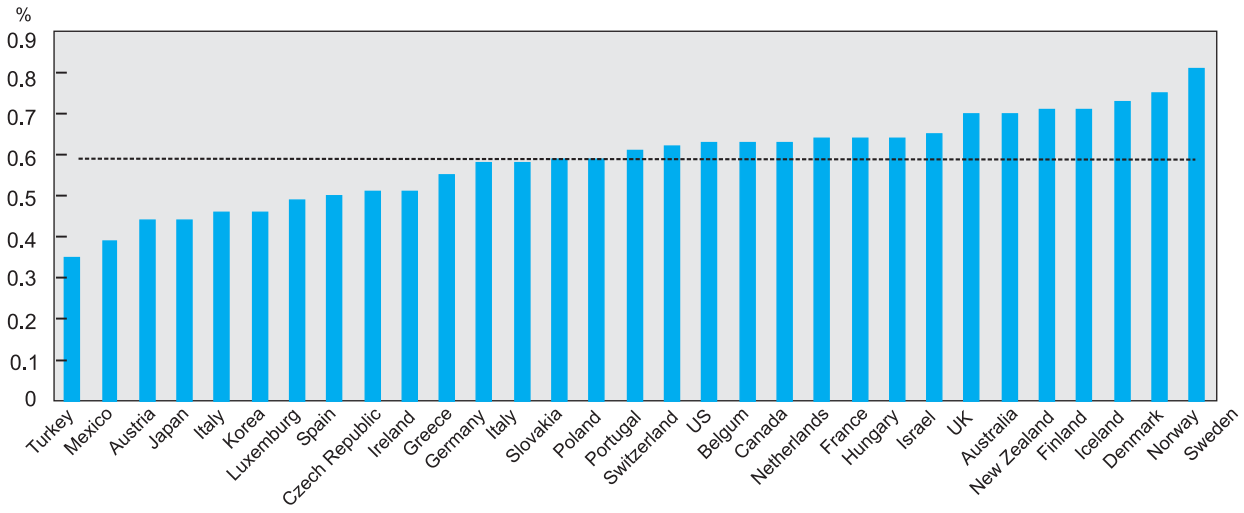
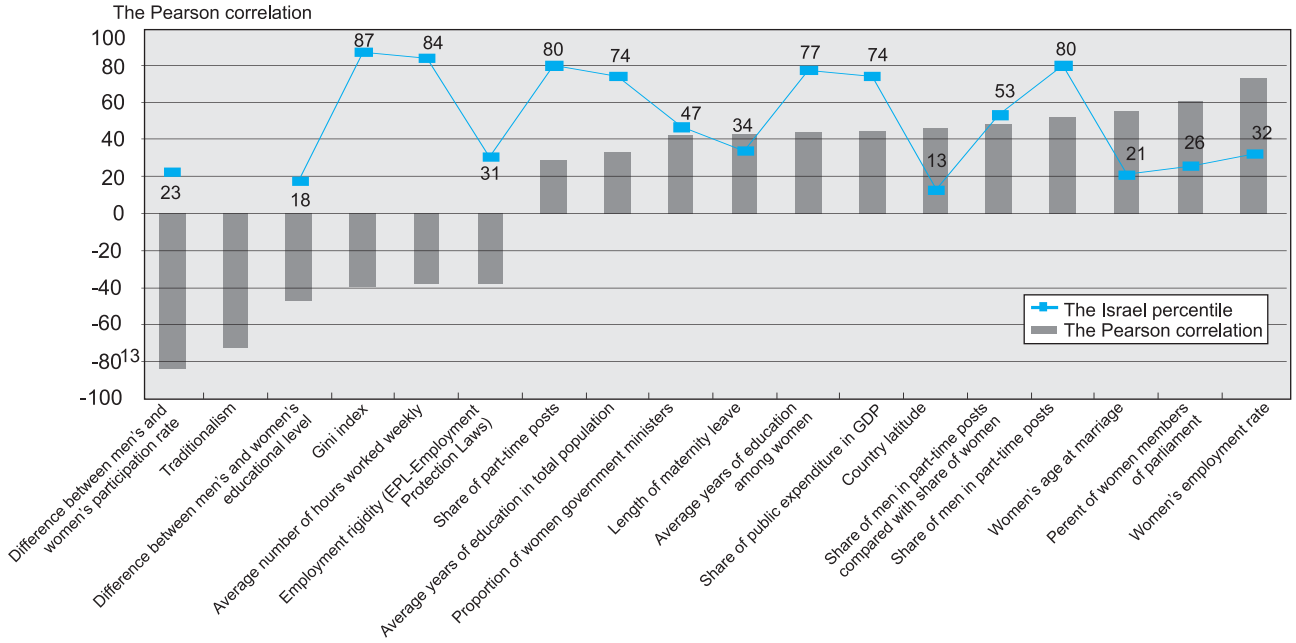


Figure 2.2

The Correlation between Certain Variables and the Women's/Men's Wage Ratio in the OECD



[a] Traditionalism is a dummy variable given the value one for countries with a Catholic majority, and for Israel, Japan and Korea. For Germany, with a more or less even split between Catholics and Protestants, the value assigned was 0.5. Countries' latitudes were found to be good explanatory variable even when only Europe was studied.

Figure 2 shows that the coefficient of correlation of inequality, the Gini index (after government intervention) is strongly negatively correlated with the ratio of women's to men's wages.[5] This explanatory variable is not exogenous, as it is affected by the age differential between men and women.[6] Although to some extent it reflects each country's social outlook, we did not use it as an explanatory variable because of its weakness as an endogenous variable.[7]

As a result of the small number of observations relative to the number of explanatory variables, together with the relatively high correlation between the explanatory variables themselves, it is appropriate to combine several of them into one vector which would serve as the explanatory variable of the wage differential between men and women in an international comparison. Using known econometric tools,[8] we constructed two separate vectors: one is "cultural," including average fertility, average age of women at first marriage, degree of traditionalism in each country, the number of female members of parliament, and the country's latitude. The second variable is made up of various aspects of the labor market, including the average number of years of education among women, the difference between the number of women's and men's years of education, the rate of employment among women, the difference between women's and men's employment rates, and the average number of hours worked per employee. The signs of some of the elements of the vectors were changed from plus to minus to create a positive correlation with the women's/men's wage ratio.[9] Each vector is an index consisting of a linear combination of its elements, and combination which assigns different weights to different elements. Two policy variables were added to the two vectors, of which only the minimum wage was found to be positively and robustly correlated with the response variable. The results of the model are given in the table.

The labor market vector is not exogenous to the wage differential between men and women, and we therefore opted to sue the following model:

$$WM_i = \beta_1(X_{1,i}) + \beta_2(X_{2,i}|X_{1,i}) + \beta_3(P_i) + \upsilon_i$$

Table 2.1 Ratio of women's wages to men's

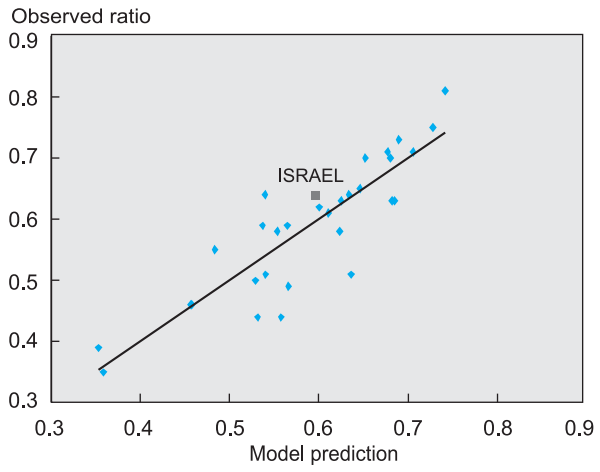
	31	Number of observations
	0.74	Explanatory power (AdjR^2)
t value	Coefficient	
8.34	0.058	Cultural vector
3.4	0.037	Labor market output vector
2.4	0.003	Minumum wage
13.62	0.503	Constant

where WM_i is the dependent/response variable, the ratio of the average wage of women to that of men in country i; $X_{1,i}$ is the cultural variables vector and $X_{2,i}$ is the labor market variables vector. b_1 estimates the correlation with the cultural variables, including their effect via the labor market variables after neutralizing their effect via the cultural variables, and b_3 is the correlation with the policy variables.

According to the model, the wage ratio between women and men should be **59.4** percent, compared with the actual ratio of **64** percent, and the OECD average of **59** percent. This

Figure 2.3

Ratio of Women's Wage to Men's Wage, Israel and the OECD



means that according to the explanatory variables taken into consideration in the model, the ratio of women's wages to men's wages in Israel is slightly higher than the average in the OECD countries.

[5] Similar results are obtained when other indices of inequality are used.

[6] No reliable database was found for all countries that compares the inter-gender wage differentials separately.

[7] Using the Gini index with a lag does not solve the endogeneity problem, as it is highly correlated with the index without a lag, meaning that there is no significant difference between the variable with a lag and the variable without a lag.

[8] We used the Principal Component procedure in Eviews, which is based on the Johnson and Wichern (1992) technique.

[9] For example, the fertility variable which is negatively correlated with the inter-gender wage ratio was given a minus sign.

According to the model, the "cultural" variable in Israel (which is 2nd from the bottom of the 31 countries ranked according to this variable) should increase the wage differential between women and men by **11.7** percentage points compared with the OECD average; in contrast, women's participation in the labor market in Israel, which is slightly higher than that in the OECD (Israel is in the 58th percentile with regard to this index), and in particular the high participation rate (in which Israel is top) taking into account the cultural variable, would increase the ratio by **7.8** percentage points relative to the OECD average. The minimum wage,[10] which is higher than in the other countries (in the 94th percentile), would increase the ratio by **4.4** percentage points relative to the average.

The Level of Income and the Incentive to Work Among People in the Income-Support System

- The income-support benefit in Israel is not generous by international comparison.
- The relatively low level of the benefit, a high degree of progressiveness of the direct taxation system in Israel, low rates of reduction of income-support benefit and of other financial benefits against income from work, and earned income tax credit (EITC, or negative income tax) (in certain localities only), create a strong incentive, by international comparison, for recipients of the benefits to work.
- Labor law enforcement should be reinforced, the EITC program should be made country-wide, and the credits increased in order to reduce poverty among workers and to boost employment.

The main objective of income-support systems in Israel and worldwide is to ensure a minimal income (social "safety net") for the population that does not earn enough or does not work because of incapacity or short supply of workplaces. At the same time, the characteristics of the income-support system (including the reduction of the benefit against income from work and job search requirements) serves to encourage recipients of transfer payments who are capable of working to join the labor force (or to increase their working hours) and achieve economic independence. In 2008 about 111,100 households in Israel received income-support benefits, about 30 percent of which were new immigrant households and about 26 percent single-parent families. About 29 percent (32,000) of the families that received income-support benefits also earned income from work. The income from work of about 86 percent of these families was less than NIS 3,000 a month.[11]

In Israel, an income-support benefit (partial or full) is paid according to the Income Support Law, 5741–1980, to those who cannot ensure a livelihood for themselves. Changes have taken place over the years in the Israeli income-support system in response to modifications in the perception of the correlation between the benefits and participation in the labor market. Until 2003, the percentage of benefit recipients in the working-age population grew rapidly.[12] This rapid growing trend, however, reversed in 2003, when as part of the budget, the Income Support Law was amended; in order to reduce the dependence on benefits and to encourage people to look for work the benefit was reduced and conditions for receiving the benefit became stricter. The main groups affected by this were single parents and couples with two children.[13]

Eligibility for the benefit and its scale are conditional on a means test (income from work, savings, and other financial assets must be lower than the threshold determined[14]) and an employment test[15] (job search requirements from those who are capable of working)—i.e., registration at the Public Employment Service (or at the employment center of the "Lights to Employment" program, which ended at the beginning of May 2010). To the extent that the person meets the means test and the employment test, and depending on the family structure, a *full benefit* is paid to those who cannot

[10] Some countries do not have an official minimum wage. As they nevertheless have an unofficial one, determined by labor's bargaining ability, we attributed a minimum wage to them at the lowest level of all the countries. If we had attributed to them a minimum wage of 0, the effect of the level of the minimum wage would have been weakened by 40 percent.

[11] The National Insurance Institute—Research and Planning Administration (2009), Annual Survey 2008.

[12] For further information on the reasons for the sharp rise in the number of benefit recipients, see: Brender, A., Peled, O., & Kasir (Kaliner). N. (2002). Government Policy and the Participation Rate in the Work Force of the Population in the Main Working Ages: Israel and the OECD Countries During the 1990s. Bank of Israel Survey 74, Bank of Israel, Research Department; Zussman, N., & Frish, R. (2005). The Effect of Transfer Payments on the Labor Supply of Single Mothers. Discussion Papers Series 2005.08. Bank of Israel, Research Department; Flug, K., Kasir (Kliner), N., & Meidan, I. (2005). The Single-Parent Families Law: Work Supply and Poverty. Discussion Papers Series, 2005.05. Bank of Israel, Research Department.

[13] For further information, see The National Insurance Institute—Research and PlanningAdministration (2004), *Annual Survey 2003 and 2002*.

[14] A single apartment in which the applicant lives is not included in the assets count. Vehicle ownership does not disqualify receipt of the benefit, subject to restrictions on the value and the use of the vehicle.

[15] Exempt from the employment test are those who have reached pension age, mothers of children up to age two, a single-parent father who has a child in his sole care who has not yet reached age two, and other groups. For further information see the website of the National Insurance Institute (www.btl.gov.il).

guarantee income from work for themselves: people who are ill, disabled, victims of work accidents, and unemployed—and are not entitled to benefits according to other programs. A *partial benefit* (income maintenance) is paid to those whose income from work and from other sources is below the minimal income level determined as necessary for their livelihood; in this case the income from work and from other sources is partially set off against the full benefit.

Recipients of income-support benefits are entitled to additional benefits, subject to various conditions: (1) **Housing allowance**;[16] (2) Supplementary **child allowance** for families with three or more children, and an education grant for single-parents and families with four or more children for those aged 6-14; (3) **Earned income tax credits** (EITC, or negative income tax) for people earning NIS 1,810 to NIS 5,366 a month from work. (This payment is also given to those who are not entitled to an income-support benefit but who live in the area of the "Lights to Employment" experimental program.) In addition to these, recipients of income-support benefits and others with low income are entitled to various discounts, whose value, relative to their incomes, is significant: **a discount on municipal taxes** (at a rate of between 40-90 percent, according to a means test), **a discount on children's day-care expenses** (according to a means test), an automatic **discount on the cost of a telephone line**, etc.

The amount of the income-support benefit and the structure of the benefit (for example, the rate of reduction against income from work), and also the conditions of entitlement to the additional benefits, affect the incentive to work.

International comparison of income-support benefits and transfer payments

The amount of the income-support benefit

We conducted an international comparison of households consisting of two parents and two children (aged 4 and 6)[17] with one breadwinner (in Israel, the father), that has no income from capital and does not own a dwelling. The reason for focusing on households with one breadwinner is the expanding phenomenon in recent years of poor working people: in 2008, more than 60 percent of the poor in Israel lived in households with at least one breadwinner.[18] The international comparison probably does not fully present the severity of the situation of poor Israeli families with one breadwinner, because a substantial proportion of poor families in Israel have more than two children.[19]

Figure 1 shows that in both Israel and many OECD countries, the income of a household of two parents and two children who live solely from transfer payments is, in the main, far below the poverty line and does not exceed 40 percent of the median income (corrected for a standard person and for family size). In Israel, even with the additional housing assistance, household income remains below the poverty line, and very low relative to other countries. Against this, the minimum wage in Israel is not low by international standards: by law, the minimum wage in Israel is equal to 47.5 percent of the average wage (in April each year), which is high relative to other countries, and it is also high relative to the median wage of a full-time employee. In any event, in Israel, and in many of the countries being compared, the addition of a further breadwinner, even earning the minimum wage, will raise the household's income above the poverty line.[20]

The composition of incomes of households living on transfer payments differs among countries. While in Israel and Germany, for example, the income-support benefit provides the largest proportion of the income, in other countries housing assistance (for example in Sweden and England), and payments to families (for example in the United States) contribute a larger proportion of the income of very-low-income households. This finding shows that transfer payments to low-income households are given in some countries as "designated payments", which are determined according to an assessment of the household's expenditure (for child raising, housing etc.)—as against the allowance given for example in Israel.

[16] Participation in expenditure on rent in the open market (amounts ranging from NIS 400 to NIS 774 a month for a family with two children and parents younger than 55, who live in "National Priority Area C"), assistance in purchasing an apartment and priority for obtaining public housing. The assistance is given subject to non-ownership of an apartment and other criteria. For further information, see the Ministry of Construction and Housing's website (www.moch.gov.il).

[17] This household composition was chosen due to availability of data and its relevance, considering other possible compositions. In Israel and other countries, the number of children and their ages affects the amount of transfer payments.

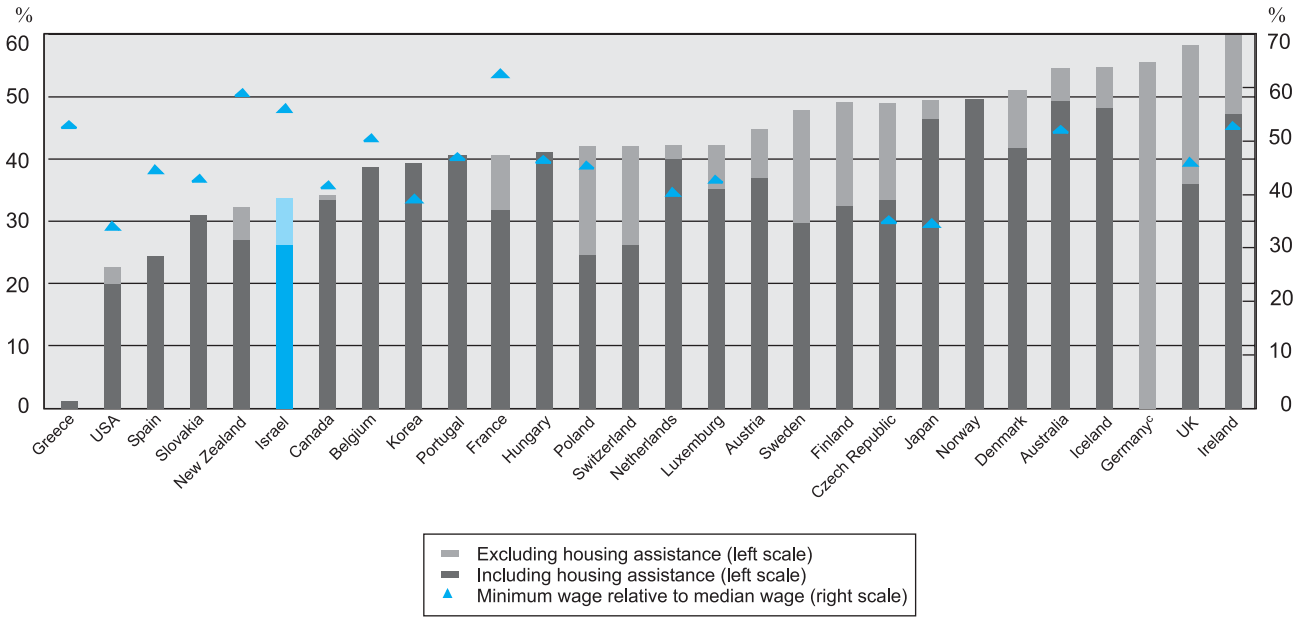
[18] Bank of Israel (2010), Annual Report 2009, Chapter 8.

[19] The income-support benefit does not increase if the family has more than two children. (Families with three or more children are, however, entitled to child allowance supplements, but these are not proportional to the increased expenditure involved in raising additional children.) Furthermore, average family size in Israel is higher than the OECD average. It can therefore be assumed that the income of households with one breadwinner in Israel is even less than that presented in the analysis—both absolutely and in relation to the OECD.

[20] Immervoll, H. (2010), "Minimum Income Benefits in OECD Countries: Policy Design, Effectiveness and Challenges", OECD Social, Employment and Migration Working Papers No. 100 and the Bank of Israel Annual Report 2009.

Figure 2.4

Net Income of a Household with Two Parents and Two Children from Transfer Payments[a] as Percentages of Median Income[b], and (Gross) Minimum Wage as Percentages of (Gross) Median Wage for a Full-Time Employee



[a]Transfer payments include: income-support benefits, payments to the family (child allowances), housing benefits (for rent payments in the open market), and tax credits. The data in the figure represent the maximum possible level of transfer payments.
[b]The median income is corrected for household size, by the methodology used by the OECD.
[c] The figure for Germany is the total transfer payments, including housing assistance.
Source: Based on OECD, The National Insurance Institute, The Central Bureau of Statistics. Israeli data: 2008; data for other countries: 2007

The incentive to work embodied in the transfer payments and the tax systems

The marginal effective tax rate (METR) measures how much of a given change in gross earnings is taxed away through income tax, social security contributions and reduction of benefits. This is an accepted measure that examines the extent to which the tax and the transfer-payments systems provide an incentive to work.[21] Figure 2 presents the value of the METR in the transition of a household with two parents and two children (aged 4 and 6) that has no income from capital and does not own a dwelling, from reliance solely on transfer payments (in which there is no income from work), to the situation in which the household has a single breadwinner earning the minimum wage from work (about NIS 3,700 in the year compared—2008). The figure shows that the METR in Israel is relatively lower than in OECD countries, which implies a relatively high incentive to work. This finding is the result of several factors: (a) Israel's relatively low position by international comparison of the income provided by transfer payments; (b) the moderate rate of reducing the income-support benefits and other transfer payments against income from work; (c) EITC (in regions where the program is in force); and (d) low rates of direct taxation on low-income earners, particularly because of a high (income) tax threshold, and low rates of national insurance and health tax payments.

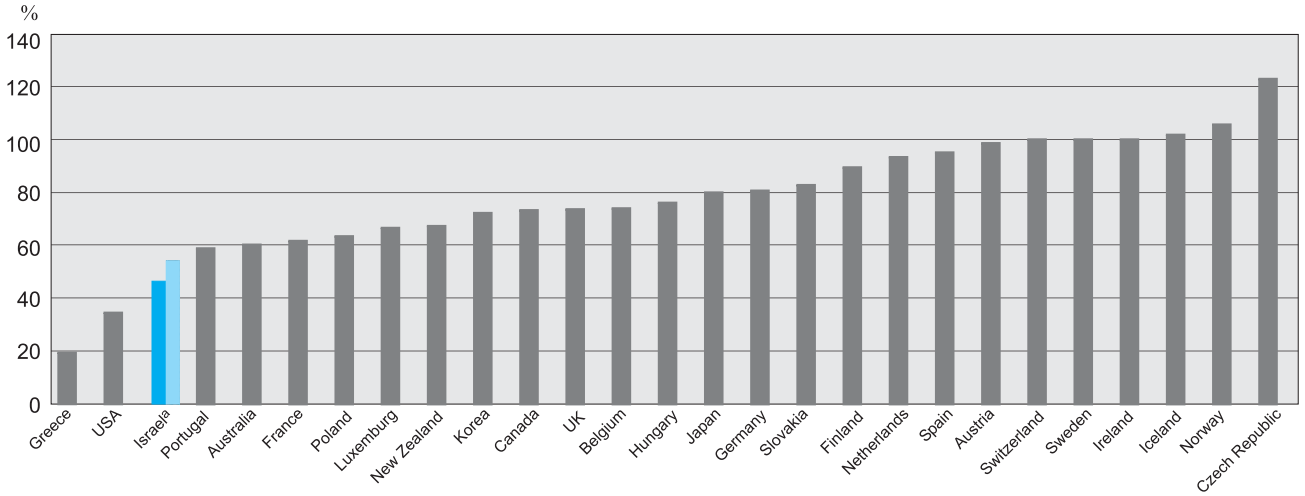
Conclusion

The income-support benefit in Israel is not generous by international comparison: the income of a couple with two children who live solely on the benefit and from additional transfer payments (such as child allowances and housing

21 $METR = 1 - \frac{\Delta Y_{NET}}{\Delta Y_{GROSS}}$ The income components taken into account: Wages, income-support benefits, unemployment payments (if relevant), income tax payments, health tax and national insurance payments, housing assistance and transfer payments to families (child allowances). A comprehensive explanation of the calculation of the index and its uses can be found in: OECD (2005), Employment Outlook, Chapter 3: Increasing Financial Incentives to Work: The Role of In-Work Benefits.

Figure 2.5

The Marginal Effective Tax Rate (METR) in the Transition from the Receipt of Income Support Benefits Only to Employment at Minimum Wage, 2008



[a] Figure for Israel: full bar represents METR when EITC is operational, and the striped bar when it is not
Source: OECD Tax and Benefits (http://oecd.org/els/social/workincentives),
The National Insurance Institute, Israel Tax Authority, Ministry of Construction and Housing, and Bank of Israel data processing.

benefits) stands at about only 34 percent of the median income corrected for family size. Because of the highly progressive direct tax system in Israel, the relatively low offset rates of the benefit against income from work, and earned income tax credits (in those regions in which the program exists)—the entry of an income-support recipient into the circle of employment, even at the minimum wage, would lead to a substantial improvement in the household's disposable income. In general, the countries compared have a high correlation between the scale of transfer payments and the METR (in other words, a non generous system of benefits implies high incentives to work). At the same time, even though in Israel the minimum wage is high relative to the median wage, the likelihood of finding full-time stable work at this wage level is not high and labor law enforcement for those who work is not high enough.[22] These findings highlight the need to support the efforts of low-income earners to work and to protect their rights. As part of this approach, an alternative framework to "Lights to Employment" should be operated, in order to assist capable income support recipients to integrate in long term employment. In addition, particular efforts should be devoted to labor laws enforcement, the EITC program should be broadened and the credits increased, and more work support services should be offered (as improved transportation and high quality care of children).[23]

Budgeting for Higher Education in Israel

Examination of the organizational structure and the funding scheme of Israel's higher education institutions has long been on the public agenda. In 2007, the Shohat Committee released its recommendations about the structure and budget of higher education. Our concern in this article is with the budgeting model that the Planning and Budgeting Committee (PGC) of the Council for Higher Education currently uses; below we analyze its advantages and disadvantages in comparison with different budgeting schemes that are conventional used abroad. In the Conclusion, we present recommendations from the economic literature on changes in the budgeting principles.

a. Israel's higher education system

Israel's higher education system comprises sixty-three institutions (eight universities, twenty-nine colleges, and twenty-six teachers colleges), attended by 260,000 students—52 percent at universities, 37 percent at colleges, and 11 percent at teachers colleges. The PGC participates in

[22] About 14 percent of full time employees earned less than the minimum wage in 2008–09 (Central Bureau of Statistics and Bank of Israel calculations).

[23] On this issue see also: OECD (2010), OECD Reviews of Labour Market and Social Policies: Israel.

Table 2.2 The Number of Research Institutions, by Country and Rating Group, 2009

Rating	Country	Rating group 1-20	21-100	101-200	201-300	301-400	401-500
1	U.S.	17	38	35	22	26	14
2	UK	2	9	12	10	3	4
3	Japan	1	4	4	2	8	12
4	Germany	-	5	9	10	12	4
5	Canada	-	4	2	12	-	4
6	France	-	3	4	7	5	4
7	Australia	-	3	3	3	4	4
8	Switzerland	-	3	3	1	-	1
9	Sweden	-	3	1	3	2	2
10	Netherlands	-	2	7	-	2	1
11	Denmark	-	2	1	-	1	-
12	Israel	-	1	3	-	2	1
13	Norway	-	1	-	2	-	1
14	Finland	-	1	-	-	2	2
15	Russia	-	1	-	-	1	-

Source: Shanghai Jiao Tong, Academic Ranking of World Universities (2009).

the budgets of twenty-nine institutions (the universities and twenty-one public colleges) and the Ministry of Education budgets the teachers colleges. The PGC's regular budget for the 2009/2010 academic year is NIS 6.8 billion.

Israel's higher education system has undergone many changes in the past two decades: (a) enrollment has trebled[24]— twice the rate of population increase—with the establishment of academic colleges, most of which are funded by the state; (b) the spread of colleges countrywide did much to enhance access to higher education, including in the outlying areas ; (c) the higher education budgets have been eroding in real terms in the past decade—tuition fees for first (bachelor's) degree studies have been reduced gradually by 26 percent as a result of the implementation of the Winograd Committee recommendations (2001), the state's contribution to the budgets of the higher education institutions has been lowered—in recent years the institutions' revenues from donations have also contracted due to the global economic crisis.

National expenditure for higher education in Israel is declining steadily, whereas in the OECD countries it has been stable, and in some countries is even growing. The decrease in Israel reflects budget cuts and the reduction of tuition fees, coupled with changes in the composition of students—a steep increase in the number of students pursuing bachelor's degrees at colleges, which have lower cost per student than universities and put academic staff to greater use in teaching. (Faculty members at colleges teach twelve hours per week, more than twice as many as their colleagues at universities.)

The decrease in public expenditure for higher education is reflected in research budgets. Ben-David (2008) shows that the investment in researchers and laboratories increased steeply between 1950 and 1973, by which time Israel even surpassed the United States in some indicators. From 1973 onward, however, the investment in research inputs has been falling: the number of faculty members per thousand of population has been declining and their age has been rising. Furthermore, the ratio of faculty members to students has been falling steadily since the beginning of the 1990s. The annual reports of the Council for Higher Education tell much the same story.

In 2009, Israel ranked twelfth in the quality of research at its universities (Table 1) and four of its seven research

[24] For expanded discussion of the development of the higher education system, see report of the Commission for Examination of Higher Education (Shohat Report) and Navon (2004).

competitive funds[27] in the past two years—34.6 percent; (2) each university's share in the total sum obtained from research grants of non-competitive external origin in the past two years—19.7 percent; (3) an index representing each university's share in scientific publications, weighted by publication quality—14.8 percent; (4) the number of students who complete doctoral studies during the standard period of time—29.6 percent; and (5) the number of recipients of master's degrees in research tracks during the standard period of time—1.3 percent. In 2008/2009, this component was NIS 1.86 billion. The size of the total research component is determined by the PGC at its discretion.

Colleges are budgeted on the basis of a different model that is calculated similarly to the budgeting of teaching at universities. A constant efficiency coefficient (0.8) is used for most of the colleges, irrespective of their actual efficiency coefficients.

Due to the many changes in the number of students and the composition of the student body, coupled with the real decrease in public funding, the existing budgeting model, which has been applied since the early 1990s, the existing model of budget allocation, used since the beginning of the 1990s, has many drawbacks that are reflected in the quality of the institutions' research and teaching.

The model does not adequately reward competition for **quality of research.** As research is an end product specific to the sphere of higher education, allocating the research budget on a university basis (block grants) does not motivate researchers to maximize their research quality. The current method of allocation cancels the direct link between the budget received by the university and research and its quality.

The model does not reward improvements in the **quality of teaching** either. Allocating money on the basis of the number of full-time-equivalent students irrespective of teaching quality encourages the institutions to increase the number of students who complete their studies within the specified time, occasionally at the expense of the level of the studies.

The **tariffs** that the government pays universities for teaching were set on the basis of average costs at two universities in 1990 and reflect the situation prevailing in those universities that year; it is not clear if they should still be maintained. They have not been re-evaluated since the base year; they have only been adjusted for price changes.

[27] External research funds—private or public—that allocate money for research pursuant to decisions of panels of referees that review research quality.

universities were rated among the world's 200 best research institutions.[25]

The ostensibly high rating of the quality of research in Israel traces to past investments. The cutbacks in the higher education budget and the lowering of tuition fees, in contrast to the global trend of upward movement in these indicators, will probably manifest themselves eventually in the erosion of Israel's rating.

b. The Israeli higher education budgeting scheme

Activity at the budgeted institutions of higher education takes place within three budget frameworks: a regular budget for current teaching and research activity, an infrastructure development budget, and a special budget, most of which from outside sources (including the universities' research budgets). State participation in higher education funding is the principal source of the budgeted institutions' revenues. The allocation for universities is determined on the basis of a budgeting model that the PGC established in the early 1990s (described below); the allocation for the colleges uses a separate model (formula), based on outputs only.

The budgeting model used for universities is meant to pay for main teaching and research outputs at universities through the regular budget. The model is divided into two main components, teaching and research.

The **teaching component** of the budgeting model for universities is designed to reflect actual teaching outputs—the number of students who earn bachelor's and master's degrees during the standard period of time. In the 2008/2009 academic year, this component was NIS 1.8 billion. It is measured for each university separately, as a multiple of the number of degree recipients (bachelor's and master's separately), a tariff, and efficiency coefficients.[26]

The **research component** of the university budgeting model is set in the form of an absolute sum that is divided proportionately among the universities commensurate with their research outputs, which are measured in five items: (1) each university's share of the total sum obtained from

[25] The index is biased somewhat because it imparts a certain advantage to institutions that operate in large and Anglophone countries.

[26] The efficiency coefficient is the proportion of students who complete their studies in the standard period of time (full-time equivalent students, FTE) in each discipline of study and degree; by and large, the standard period is three years at the first-degree level and two years for master's studies.

four tariffs are used as against twenty-four in the Israeli model.

Research budgets in Britain derive from two sources: the HEFCE transfers block grants to higher education institutions to pay for research infrastructure and dedicated projects, and the Research Council (corresponding to the Israel Science Foundation) forwards supplemental budgets to the institutions in accordance with quality assessments. In 2003 and 2006, the British higher education system underwent comprehensive reforms to improve research quality and make higher education more accessible. In the reforms, the role of competitive funds, which are allocated by the Research Council, was increased as a share of the research budget. Thus, two-thirds of research budgets originate in these funds today as against 12 percent in Israel. The share of research budgets that the HEFCE (in Israel—the PGC) transfers on the basis of peer-review quality assessment was also increased. For this purpose, research councils for specific disciplines have been established. In Israel, in contrast, the university receives the budget as a block grant and apportions it as it sees fit.

As part of the effort to expand resources without compromising on access, tuition fees in the UK have been raised considerably but are determined in a differential manner, commensurate with the student's income. Concurrently, the student assistance budget (loans and scholarships for students of modest means) has been increased appreciably, much as the Shohat Committee recommended in its examination of Israel's higher education system.

The California model

California's public tertiary education system is considered the most successful in all American states and is also the largest, with 2.4 million students enrolled. The higher education model in California is based on several overarching principles: (a) a functional differentiation among three tiers of public tertiary institutions that complement each other and allow specialization in teaching or research. The University of California (the uppermost tier) serves as the state's research institution and has ten campuses, the state colleges (the in-between tier), and the California community colleges (the lowest tier) specialize in vocational training and imparting basic skills for the labor market. (b) Institutions at all levels compete for research and teaching budgets. Mobility of students is allowed: the best students may transfer, in the middle of their studies, to a school on a higher tier and institutions may transfer less-accomplished students so that they may be admitted to another institution on the same tier or on a lower one. The institution is required to find the student an alternative place of study. (c) Funding from competitive research foundations is a major component in the budgeting

The model does not relate to the need to ensure appropriate teaching and research in specific disciplines of **national importance** (such as Judaism, Jewish history, Hebrew literature and Hebrew language, and other Jewish languages); when the universities encounter financial difficulties, they tend to shut down these disciplines, which rarely justify themselves in purely economic terms.

Colleges are budgeted on the basis of a separate model that takes no account of the actual efficiency coefficients. The setting of constant and uniform efficiency coefficients encourages these institutions to lower their requirements so that students may finish their degrees within the standard period of time. Something similar may also occur at the universities, as stated.

c. Higher education budgeting models abroad

Other countries employ various models for the funding of higher education. The most prominent models are the American and the British. The Israeli model in use today was determined on the basis of the approach that was once dominant in the UK. The differences between the models are numerous, as we specify below, and trace to their guiding principles. The British model is based on the principle of academic freedom; academic institutions receive public budgets in the form of block grants that they apportion as they see fit. The American model, in contrast, allows higher education institutions to specialize in teaching or in research by establishing a multilevel hierarchic structure: an upper tier that specializes in research, a second tier for academic teaching, and a lower tier for vocational training. The California higher education budgeting scheme also differs from the British model in terms of monetary incentives: academic units and researchers' wages derive a significant component of their budgeting from competitive funds in order to encourage research quality. The main drawback of the American model as against the other methods is its relatively high costs.

The British model

The public higher education system in the UK is composed of 116 universities and fifty-three colleges that cater to 2.1 million students. The British budgeting scheme is the archetype of its Israeli counterpart. In Britain, much as in Israel, government budgets for higher education are apportioned by the Higher Education Funding Council (the HEFCE, corresponding to Israel's PGC) on the basis of a model that takes account of each institution's teaching and research outputs, adjusted to their quality, and the institution uses its allocation as it sees fit. In respect of teachings, only

of research; a rather large proportion of researchers' wages is obtained from these sources.

The combination of this multi-tier structure and the budgeting scheme allows the institutions to specialize (in teaching or in research) while enhancing accessibility and quality. Thus, the American higher education system posts strong achievements by any measure. However, the high achievements, in both research and teaching, come at relatively high costs that threaten the stability of the system at times of budget cuts.

d. Conclusion

The rapid expansion of higher education in Israel, occasioned by the opening of colleges and the enhancement of accessibility, is a welcome development. Given the coupling of this development with the real erosion of sources, however, policymakers must increase the higher education public budget and introduce significant changes in how the budgets are allocated in order to improve teaching and research outputs and, in turn, to maintain Israel's relative advantage. The economic literature has been examining ways to incentivize higher education effectively for more than a decade (Barr, 2004; Bas and Van der Ploeg, 2001, 2005; Layzell, 2007). This literature suggests several principles for **efficient budgeting of higher education** that should be implemented in Israel too:

1. Budgeting of research: research should be budgeted from two complementary sources—one funding the research infrastructure overhead (commensurate with its outputs) and the other establishing a direct link between the allocation of money to academic units and the quantity and quality of their research, in order to encourage faculty members to improve research and teaching quality. This should be accomplished by significantly increasing the share of competitive funds and the Israel Science Foundation in the budgeting of research.

2. Budgeting of teaching: budgeting of teaching should be simple and should reflect the true costs of teaching and teaching quality. Teaching costs are divided between frontal teaching and laboratory studies. The main cost, even in subjects that entail experiments, traces to frontal teaching. Therefore, it is recommended to budget academic units on the basis of their frontal teaching costs and to give them a supplement for laboratory studies. It is also recommended link the budgeting of teaching to teaching quality by doing surveys on the placement of graduates in the labor market at a specific time after they finish their studies, and by making use of review boards.

3. Priorities: the budgeting model should reflect national priorities by reinforcing research disciplines in which Israel has a comparative advantage (e.g., the exact sciences) and those that are specific to the Jewish people (Hebrew literature and language, Jewish history, etc.).

4. Competition: competition among all institutions for PGC budgets should be stimulated by applying a standard model for universities and colleges and allowing the possibility of student mobility among institutions during their studies. Concurrently, candidates for studies should be given better information—about the quality of the institutions' teaching and research, graduates' average wage upon first placement, etc.

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Diary of Events: January to June 2010

January 2010	3	Cash for scrap metal.	The Ministry of Environmental Protection has begun to implement the first stage of the program for encouraging the conversion of cars into scrap metal. The state will pay anyone who hands over his old vehicle and cancels the vehicle license. NIS 100 million has been budgeted for the program.
	7	New assistance program for exporters.	The Ministry of Finance has inaugurated a new assistance program for exporters in which the state will share part of the risk of providing bank guarantees for export transactions, up to an overall amount of NIS one billion.
	11	The Ministry of Industry, Trade, and Labor will participate in the cost of building a model of business plans for small and medium-sized businesses.	The cost of preparing a business plan for a small or medium-sized business is high relative to the size of the bank loan that the business requires. The Ministry of Industry, Trade, and Labor has therefore decided to participate in the cost of building models of business plans for small and medium-sized businesses.
	17	The US administration's "responsibility tax".	The US administration has revealed a program of taxing 50 of the largest financial corporations in the United States that benefited from the government emergency programs during the financial crisis, with the aim of recouping the losses sustained in extricating the banking sector from the crisis.
	19	Change in the purchase-tax bracket.	The Tax Authority has updated the purchase-tax bracket, raising it by about 5.7 percent. The value of the tax bracket was raised in line with the rise in apartment prices in 2009 (according to owner-occupied housing services index). The implication of this is a reduction in tax rates for apartment buyers.
	20	Israel and the OECD signed a cooperation agreement.	Israel and the OECD signed an agreement regarding surplus rights, immunities and concessions granted to the organization. The agreement addresses the legal status of the organization's activities in Israel. This agreement is conditional for membership in the organization and constitutes a significant step towards accepting Israel's membership.
	20	Regulations signed for the entry of virtual operators into the cellular market.	The Minister of Communications signed the regulations for easing the entry of virtual cellular operators into the market, that are expected to increase the competitiveness of the market and reduce tariffs.
	24	Banking activities restricted in the United States.	The President of the United States announced a program for restricting the commercial activities of the large financial corporations in the United States in an attempt to reduce the level of risk that they take. Far-reaching legislation will limit the size of the banks and will impose a series of investment restrictions on them.
	25	The Prime Minister announces a new immigration policy.	The government approved a policy on work immigrants in Israel that tightens the conditions for employing them, with the aim of reducing their numbers. The Minister of Finance has set a goal of 30 to 50 thousand workplaces that would become available in the economy within a year, as a result of the reduction in the number of immigrants.

January 2010	25	The Bank of Israel interest rate for February 2010 was left unchanged at 1.25 percent.	
February 2010	2	Electricity prices fall by 10 percent.	The plenum of the Electricity Authority approved a reduction in tariffs in the wake of the natural gas revolution in the economy. Electricity tariffs for domestic consumers will be reduced in mid-February 2010 by 9.6 percent, while the tariff for the business and public sector will be reduced by 16.3 percent. The lowering of tariffs is a result of the increasing use of natural gas in electricity production.
	2	Assistance to those affected by raising the retirement age.	The Ministry of Finance will transfer NIS 60 million a year to a fund for assisting people who have been harmed by the raising of the retirement age ?.
	9	The Deposit Law is widened to include large bottles.	The Deposit Law was widened and will now apply as well to large plastic bottles—from 1.5 liters and up.
	16	The vehicle market is opened to competition.	The Economics Committee approved an amendment to the Free Import Order, in terms of which cars may be imported directly from car dealers in Europe and the United States, and not only through the vehicle importers.
	18	Restricting credit for purchasing groups.	The Bank of Israel has imposed restrictions on the banks in providing credit to purchasing groups, because of the risk involved in their activity.
	19	The United States Federal Reserve will raise the interest on emergency loans to banks.	The United States Federal Reserve announced that it is raising the interest rate on emergency loans to the banks, from 0.50 percent to 0.75 percent, in the wake of the improvement in the conditions of the financial market.
	22	The Bank of Israel interest rate for March was left unchanged at 1.25 percent.	
	24	The Fitch rating agency lowered the rating of the large banks in Greece from A to BBB.	
	25	The number of localities participating in the Wisconsin Plan has been increased.	An order was signed increasing the number of localities participating in the Wisconsin Plan—thereby adding 2,800 income-maintenance recipients to the program.
	25	The “Netivei Israel” project is approved.	The government approved the “Netivei Israel” project for the national distribution of railways and roads. The project cost of NIS 27.5 billion will be spread between 2010 and 2020.
March 2010	1	Changing the system of taxation on alcohol.	The Minister of Finance signed an order for changing the system of taxation on alcohol. The order, which will apply from March 1, 2010, raises the tax on 92 percent of alcoholic beverages.
	1	The capital market is opened to foreigners.	Amendment of the law regulating **investment advice will enable overseas investment** advisers and portfolio managers to offer their services in Israel.

March 2010	2	The concessions to unemployed people are canceled in the wake of the fall in unemployment.	In the wake of the decrease in unemployment, it has been decided to cancel the concessions for people entitled to unemployment benefits, concessions that were instituted as part of the package deal initiated by the Histadrut with the Ministry of Finance and the employers in the wake of the crisis.
	3	Greece presents a cutback program of four billion euros.	The Greek government, struggling with a deficit of 12.7 percent of GDP, presented a series of cutbacks intended to reduce the deficit by 4 percent by the end of the year. Among other things, the government intends to raise the value added tax to 21 percent, to reduce the salary benefits to public-sector employees, to freeze the ceiling of pension payments, and to raise taxes on luxury goods.
	14	The S&P rating agency approved an "A" rating for Israel.	The international rating agency S&P approved an "A" rating for the new government bonds of 1.5 billion euros issued in Europe, whose date of redemption is 2020.
	16	Discount of up to NIS 50 thousand for purchase of land in the north.	The Minister of Construction and Housing approved the granting of economic incentives for strengthening localities in the Galilee and the north, as part of which significant discounts will be given to people purchasing land in the these areas.
	17	The Knesset passes the new Bank of Israel law with 28 votes in favor and one against.	Among other things, the new law precisely defines the Bank's aims and determines priorities between them; it clearly confirms the Bank's independence by determining the policy tools and their implementation for achieving the aims. The law also changes the decision-making apparatus for the Banks major decisions: henceforth these will be made by a monetary committee. The law also determines the method of approval of salary changes for the Bank's employees.
	18	Approval of an economic development plan in minority communities.	The government approved a multi-year economic-development program of NIS 778 million for 2010-2014 for minority communities—in the Arab, Bedouin, Druze and Circassian sectors. The program will focus on four major areas: economic development and employment, housing and real estate, transportation access, and personal security and enforcement.
	18	Two-year budget approved.	The government approved the Ministry of Finance's proposal that the next state budget, for 2011-2012 would be a two-year budget. The budget for each of these years will grow by 2.6 percent, and not by 1.7 percent, as was the case until now. The government also decided that the deficit target in the state budget will be reduced from 5.5 percent of GDP this year, to 3 percent in 2011, and that the deficit and the government debt would be gradually reduced by 2014.
	23	The United States healthcare-reform bill was approved by Congress.	The United States healthcare-reform bill, whose aim is to give medical coverage to people that the insurance companies have refused to insure, has been approved. Insurance companies will now not be able to refuse to insure people with pre-existing conditions.
	28	The Bank of Israel interest rate for April was raised by 0.25 percent to 1.5 percent.	

April 2010	9	The reform in ports tariffs was approved.	At the heart of the reform is the pricing of the port services, based on their cost and on the gradual cessation of the cross-subsidy between exports and imports. The reform will come into force in October and will be spread over ten years.
	9	The interest rate in the eurozone was not changed, and stands at 1 percent.	
	9	The Fitch credit-rating agency lowered the credit rating of Greece by two notches to BBB-minus.	
	12	Emergency loans of 30 billion euro to rescue the Greek economy.	Finance ministers of 16 euro bloc countries decided to provide Greece with an emergency loan of 30 billion euro to enable the country to meet its urgent financial obligations. The loan, bearing an interest rate of 5 percent, will be spread over three years.
	12	Discounts on electricity bills and medications for Holocaust survivors	The government decided that about 7,000 needy Holocaust survivors would receive a significant discount on their electricity bills. Furthermore, tens of thousands of survivors will receive a discount of up to 90 percent for purchasing medication.
	13	The Supervisor of Banks is working to ease the movement of customers between banks.	The Supervisor of Banks has facilitated the transfer of authorizations for debiting credit cards when a person moves to a new bank or changes credit cards.
	15	Volcano erupts in Iceland.	A volcano that erupted in Iceland caused aviation chaos throughout northern Europe. Thick smoke covering the region's skies led to the cancellation of many flights, and also affected Israeli exports to Europe.
	15	The Chief Scientist approved the investment of NIS 17.2 million in nine startup companies.	
	15	The Ministry of Finance fully adopts the recommendations of the Hodek Committee.	The Ministry of Finance has started the full implementation of the recommendations of the Hodek Committee, in term of which the structure of bond offerings will be changed, and they will be offered according to obligatory prospectuses that will be classified by type of bond, and will include minimum conditions.
	16	The Bank of Israel joins the credit arrangement of the International Monetary Fund.	The IMF approved the expansion of the NAB arrangement (for granting credit to countries in times of crisis). Thirteen additional countries, including Israel, are to join the arrangement. As part of the agreement, the Bank of Israel has undertaken to place 750 million dollars at the Fund's disposal in the event of need.
	17	The government approved the appointment of Stanley Fischer as the Governor of the Bank of Israel for a second term.	

April 2010	21	The Chinese government is taking steps to curb the rise in housing prices.	The Chinese government has taken the following steps: the mortgage banks in the country are forbidden to grant housing loans in areas that have experienced a sharp rise in real-estate prices during the past year; loans will be granted to home purchasers only if they prove that they live in the city; and the local authorities are authorized to limit real-estate transactions to one apartment for each purchaser.
	26	The Bank of Israel interest rate for May 2010 was left unchanged at 1.5 percent.	
	27	Europe delays the assistance to Greece.	The German chancellor again refuses to agree to the official request to activate the European assistance plan.
	27	The S&P credit-rating agency lowered Portugal's credit rating by two notches to A-minus.	
	28	The S&P credit-rating agency lowered Spain's credit rating from AA-plus to AA.	
	28	The Labor and Welfare Committee decided not to renew the "Lights to Employment" program (the Wisconsin Plan).	The Labor and Welfare Committee decided not to extend the license of the Wisconsin Plan in the wake of opposition by Knesset members.
	30	Greece agrees to the preliminary conditions for the granting of the assistance package.	Greece agreed to accept the demands of the IMF and the European Union to implement cuts of 24 billion euro as a preliminary condition for receiving the assistance package.