

# **Recent Economic Developments 130**

January - April 2011

**Bank of Israel  
Research  
Department**

Jerusalem, June 2011

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Catalogue # 3077511130/2

<http://www.bankisrael.gov.il>

Printed in Israel by Ayalon Press, Jerusalem

## Part 1: Review of Recent Economic Developments, January to April 2011

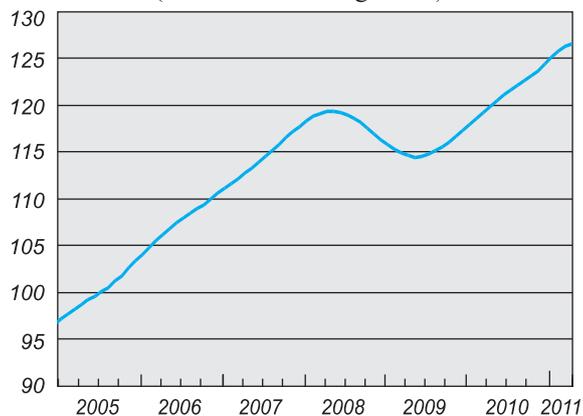
### Main Points

In the period reviewed, January-April 2011, the Israeli economy continued to grow. The GDP gap was positive, inflation rose, the economy approached full employment, and exports and investment rose against the backdrop of the recovery in the United States and many European countries. The improvement in the state of the economy was reflected in the growth of GDP in the first quarter by 4.7 percent (and of the business-sector gross product by 5.8 percent), similar to the annual growth rate for 2010 (4.7 percent), and above the potential GDP growth. The growth was also reflected in the composite state-of-the-economy index, which rose by 6.2 percent during January-April in annualized terms (Figure 1.1).

The GDP gap, which decreased in the fourth quarter of 2010 (Figure 1.2), was positive in the review period, both because the growth rate was higher than the potential GDP growth rate, and because the unemployment level was low. The positive gap in this period caused inflationary pressures, and encouraged the growth of investment and imports of investment goods in order to expand the production potential. This process was accompanied by a rise in the interest rate in the economy, the aim of which was to bring about correct pricing of investment and saving in the economic

Figure 1.1

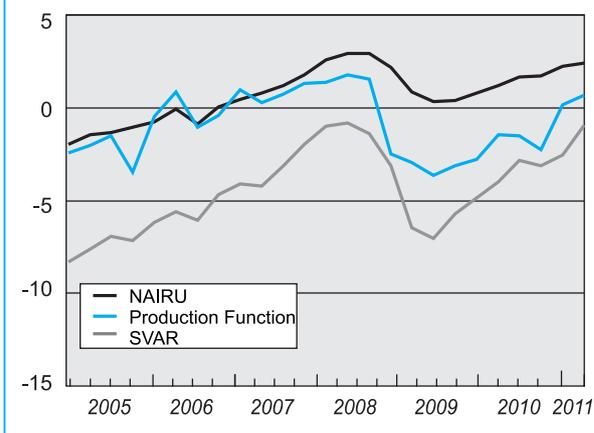
The level of economic activity,\*  
2005- April 2011  
(index: 2005 average=100)



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

Figure 1.2

GDP gap  
2005-April 2011



growth environment and to curb inflation. Sources and uses reacted accordingly. A rapid rise in private consumption in the first quarter, a high level of consumer confidence, a rise in credit purchases, a continuing rise in purchases from the food networks, and a rise in retail purchases—all point to consumers' optimism about the economy.

In the period reviewed activity expanded in the various industries, particularly manufacturing. The demand for apartments continued to be high, as was the level of activity in the construction industry—despite the steps taken to restrict mortgages, the rising interest rate, and the shortage of skilled workers in the industry. Activity in the commerce industry also continued to expand.

Unemployment in the first quarter of 2011 fell to 6.0 percent, similar to the rate on the eve of the financial crisis, and among the lowest rates in the past twenty-five years. The employment rate rose slightly, and the participation rate fell slightly. The number of salaried positions and available positions grew, the number of full-time positions grew, and the number of part-time positions fell. These data indicate an expansion of the labor market and that the economy is nearing full employment. Despite this expansion, there are still no signs of wage pressures. The reasons could be that workers have joined the labor force at low wage levels, and that there is a delay in the response of the average wage.

Exports and imports of goods and services grew in the first quarter of 2011, particularly goods. From January to April of 2011 imports of all types of goods grew, and a particularly high growth was recorded in imports of investment goods and raw materials. Exports of high-tech and mixed-high-tech goods grew considerably in the review period, against the backdrop of the expansion in world trade in the first quarter of the year.

Tax revenue grew during January-April 2011 relative to the previous period, and rose in accord with the budget forecast—with growth concentrated on direct taxes, while indirect taxes fell—and expenses were lower than the seasonal path of the budget. The domestic deficit in this period was, therefore, low in relation to the seasonal path consistent with the deficit ceiling determined in the budgetary framework.

Prices rose rapidly in the review period, mainly housing, food, and energy. The seasonally adjusted CPI also rose rapidly, and inflation in the past 12 months and inflation expectations for the coming 12 months were above the upper limit of the inflation target throughout the period. Prices of financial assets fell slightly during the period, as did the public's asset portfolio. Prices of privately owned apartments continued to increase sharply.

The Bank of Israel interest rate rose rapidly in the review period in reaction to rising inflation and inflation expectations. The interest rate in January was 2 percent, and in February, March, and April rose to 2.25, 2.5, and 3 percent, respectively. The size of the increase in April surprised the market and led to a significant decrease in inflation expectations. Furthermore, the Bank of Israel continued to intervene on a large scale in the foreign currency market by buying foreign currency.

In the period reviewed an earthquake erupted in Japan, causing a tsunami and a nuclear accident, and resulting in great damage to the Japanese economy. A wave of protest in Arab countries led to the fall of the regimes in Tunisia and Egypt, and endangered other regimes. The European debt crisis continued. Portugal requested assistance from the European rescue fund, and Greece's chances of going bankrupt increased. The European economy grew, mainly due to growth in Germany. In contrast, the United States had a low growth rate: the continuing slump in the labor market and the lack of progress in solving the fiscal problems hampered the United States' recovery from the crisis.

## Aggregate real activity<sup>1</sup>

Aggregate real activity in the Israel economy in the period reviewed attests to the consolidation of growth. National accounts data for the first quarter of 2011 show that GDP grew by 4.7 percent, and that the business-sector gross product rose by 5.8 percent (Table 1.1). The figures are a result of expansion in all sources and uses, except for public consumption.

Private consumption continued to grow at a rapid rate in the first quarter (6.8 percent). Consumption excluding durables grew (3.7 percent), and that of durables grew sharply (32.8 percent), a result of growth in the purchase of private vehicles (67 percent), and household equipment (77.2 percent). Public consumption declined in the first quarter by 5.7 percent, a development that is in line with the high public expenditure in the fourth quarter of 2010.

Investment in fixed assets rose for the fifth consecutive quarter, a rise fueled by investment growth in the various industries (29.6 percent) and investment in machinery and equipment (74.2 percent). Against this, investment in non-concrete assets (34.9 percent) fell. The continuing high rate of investment, and the consistent rise in imports of investment goods in recent times, herald a demand for increasing the economy's production capacity, which, at least partly, is not being met by domestic capital or the local labor force (in view of the low unemployment rate). The growth rate of investment in residential construction (12.0 percent) is also higher than that of the previous quarter.

Exports of goods and services (excluding diamonds) grew in the first quarter by 14.7 percent, and imports of goods and services (excluding diamonds) grew by 13.6 percent, against the backdrop of a rise in global demand (the Triple Trade Index, Figure 1.10). The increase in exports and imports (29.6 and 27.8 percent, respectively) is mainly a result of the growth of trade in goods. The growth in imports of goods is mainly a result of the increase in their prices, while the growth in exports is mainly a result of the quantity of goods exported.

Private consumption prices rose in the first quarter, an indication of a growth trend in the economy. The Terms of Trade Index (export prices divided by import prices, excluding diamonds) fell in the first quarter, because import

<sup>1</sup> National accounts data throughout the review are in annualized terms and seasonally adjusted. Export and import data are for exports of goods and services, excluding diamonds, and imports of goods and services, excluding security imports, ships, aircraft, and diamonds.

prices rose more than export prices, and showed a worsening relative to pre-crisis terms of trade.

### Real industrial activity<sup>2</sup>

The expansion of activity in the business sector in the review period was reflected in the positive net balance of this sector in general, according to the Assessment of Business Trends Survey conducted by the Central Bureau of Statistics, and the Bank of Israel's Companies Survey. According to the Companies Survey, manufacturing output expanded in the first quarter, a development that is reflected in a high net balance, and the Index of Industrial Production (excluding diamonds) also rose in January-March by 16.3 percent in comparison with the previous quarter. In contrast, the Purchasing Managers Index fell in the review period by 9.9 percent compared with the previous period. The expansion of activity in the business sector encompassed all levels of technology, with the highest rate being recorded in the mixed hi-tech companies (Figure 1.3).<sup>3</sup> According to the Assessment of Business Trends Survey, the manufacturing companies expect an expansion in activity and employment in the coming months.

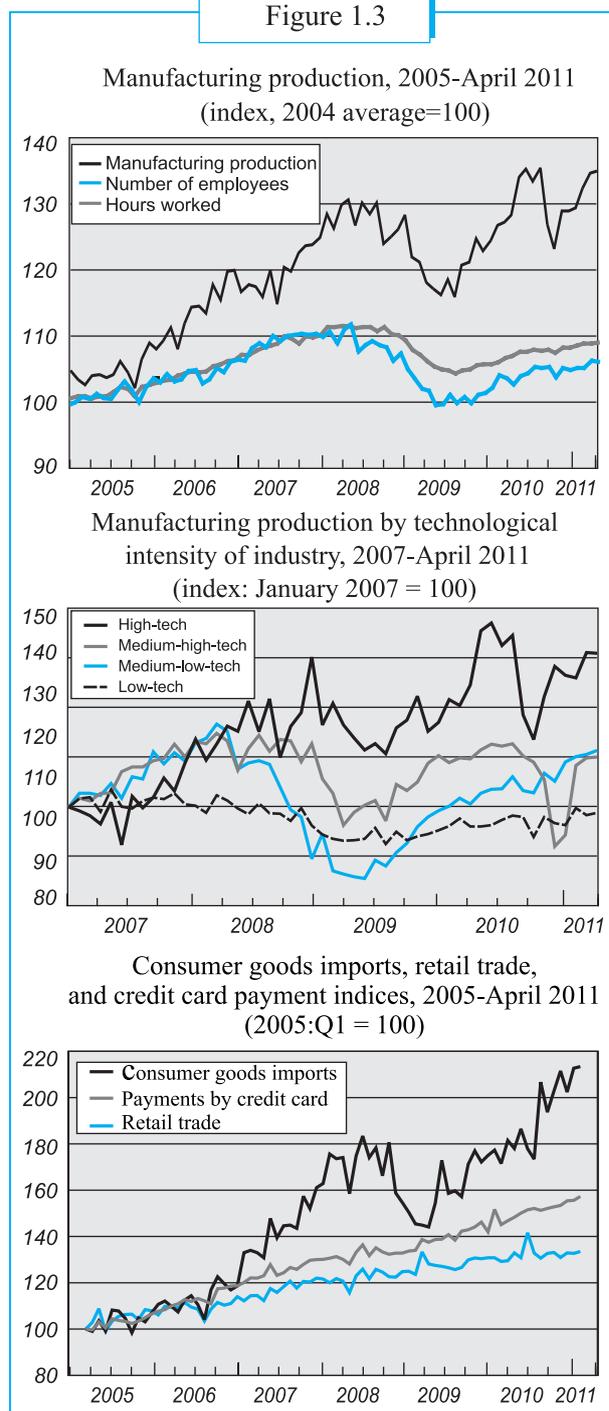
In the construction industry, both supply and demand continued on their expansionary trend in the period reviewed. At the same time, signs of supply constraints are intensifying, and the effects of the steps to curb demand are not yet evident in the market. Apartment prices are rising faster than rental prices, the demand for apartments is growing, the observed risk of real-estate companies is falling, and the number of mortgages is increasing. Prices of privately owned apartments rose in January-February by 13.8 percent compared with the same period last year, while the housing index, which measures rental prices, rose by only 6.5 percent over the same period.<sup>4</sup> The number of new apartments demanded rose by 10 percent compared with last year, and the number of new apartments sold rose by 18 percent. The observed risk of real-estate companies, which is reflected in the spread between the bonds of these companies and government bonds, decreased by 46 percent relative to the same period last year (Figure 1.14). The total volume of mortgages continued to rise, and the average monthly rise in January-March of one percent was higher than in most of 2009 and 2010.

<sup>2</sup> Data on real activity by industry are in annualized terms, seasonally adjusted.

<sup>3</sup> The discrepancies between the results of the Companies Survey and the data of industrial production and employment in the industry are apparently due to differences in the periods they relate to.

<sup>4</sup> Original data in annualized terms. Rental prices rose by 6.0 percent in January-April compared with the same period last year.

Figure 1.3



Regarding the supply of apartments, investment in residential construction and the number of building starts increased, and there has been an acceleration in the construction of buildings and in building completions. Investment in buildings and construction works, and the investment in residential

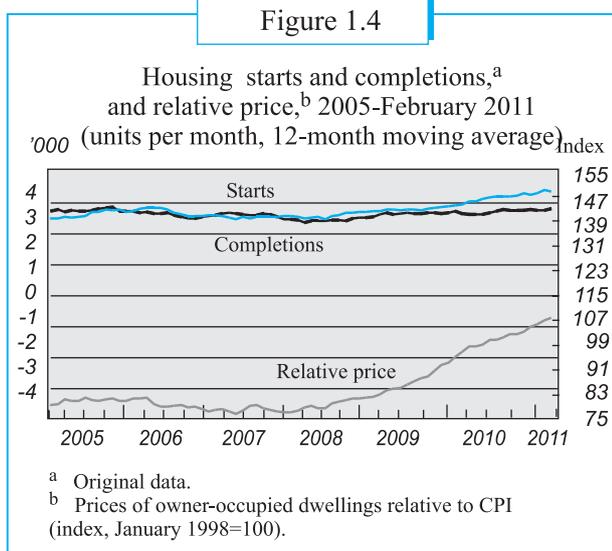
construction grew in the first quarter by 12 percent. The number of building starts of apartments rose in January-February by 30.7 percent (Figure 1.4).<sup>5</sup> The Companies Survey for the first quarter points to rapid construction of buildings and a growth in the volume of completions.<sup>6</sup>

Supply constraints have intensified, as evidenced in a marked slowdown in the completion of apartments, and a shortage of skilled workers. Construction completions of apartments fell in January-February by 16.9 percent relative to the previous period. The number of employees in the construction industry fell by 3.4 percent in the first quarter, and the number of jobs available in the industry rose by 2.2 percent in January-April, evidence of a shortage of suitable workers. According to the Companies Survey for the first

fact that without them the demand would have been even greater. At the same time, it appears that the rise in the interest rate did lead to a reduction in demand for apartments for investment purposes.

The growth of activity in wholesale and retail commerce continued in January-April, compared with the previous period, despite the negative net balance in this industry in the Business Trends Survey. Total credit card purchases rose (6.8 percent; Figure 1.3), as did the revenue of the marketing chains, the sales of the food chains, and the revenue index in the trading sector. The number of jobs available in the wholesale trade grew in January-April by 9.5 percent, and grew slightly in organized retail trade during this period relative to the previous period. The number of Israeli bed-nights in hotels fell by 6.7 percent relative to the previous period, but the number of foreign tourist bed-nights grew by 25.0 percent, approaching the level prior to the crisis (Figure 1.5). These developments, the positive expectations of companies in the trading industry of sales for the next quarter, the level of consumer confidence, and private consumption data for the first quarter—all signal that the public's expectations of the future are positive.

Figure 1.4



quarter, the shortage of skilled workers and land prices are significant supply constraints.

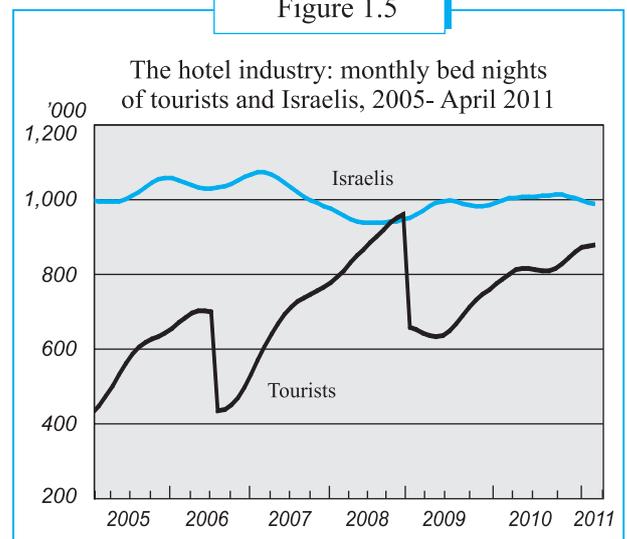
Steps to curb demand: in the review period the Bank of Israel restricted the variable-interest component to a third of the size of the mortgage, with the aim of protecting the banking system and cooling the real estate market.<sup>7</sup> During the review period the Bank of Israel interest rate was raised from 2.0 percent to 3.0 percent, because, among other things, of the rise in apartment prices. The continuing expansion of demand in the review period shows that the steps adopted until now for reducing demand are insufficient, despite the

<sup>5</sup> Original data in quarterly terms.

<sup>6</sup> The most significant supply constraints according to the survey are the shortage of skilled workers, which grew by 0.1, and the price of land, which fell by 0.2.

<sup>7</sup> For details see the diary of events at the end of this review.

Figure 1.5

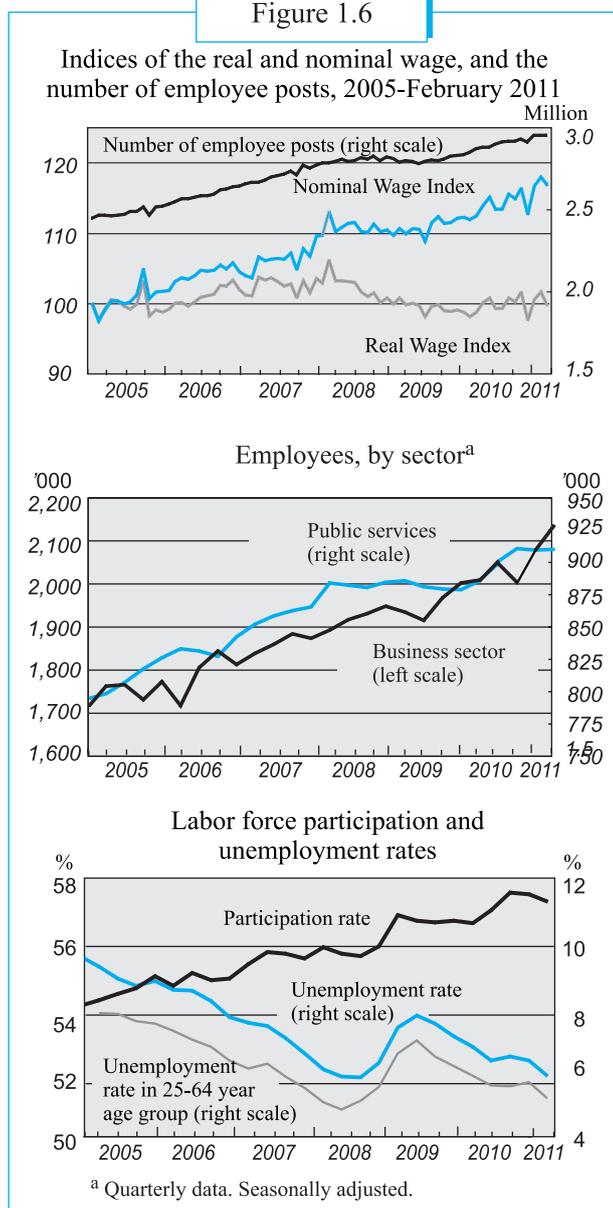


## The labor market

The state of the labor market continues to improve, and unemployment continues to fall (Table 1.3 and Figure 1.6). The rate of unemployed people in the labor force fell in the first quarter of the year to 6.0 percent, similar to the level on the eve of the crisis, and among the lowest levels in the past 25 years. The rate of employed people in the working-age population is 54 percent, as opposed to 52.5 percent prior to

the crisis.<sup>8</sup> The number of participants in the labor force fell (by 0.3 percent), but remained high. The number of public-service employees increased in the first quarter (by 2.7 percent), and the number of employees in the business sector remained unchanged. This expansion was also reflected in the continuing rise in the number of full-time positions, and the continuing decline in the number of part-time positions. At the same time, the number of involuntary part-time employees grew.

Figure 1.6



The nominal salary for a salaried position fell by 0.1 percent in January-February relative to November-December 2010, and the real salary for a salaried position fell during the same period by 1.4 percent (Figure 1.7),<sup>9</sup> figures that indicate an absence of wage pressures in the economy. The absence of these pressures in a low unemployment environment

Figure 1.7

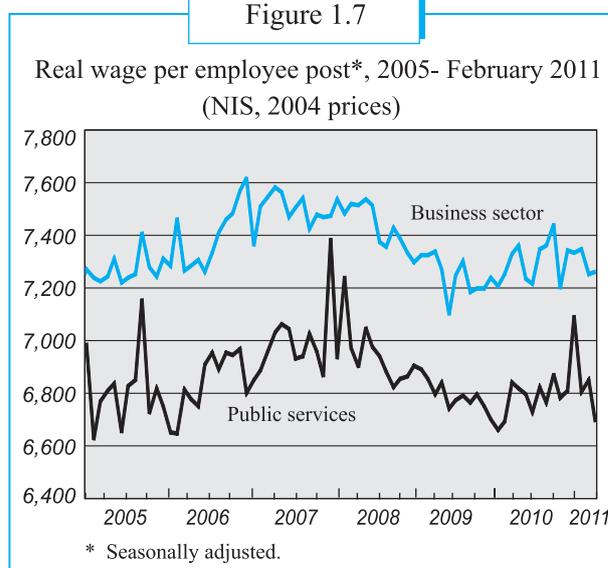
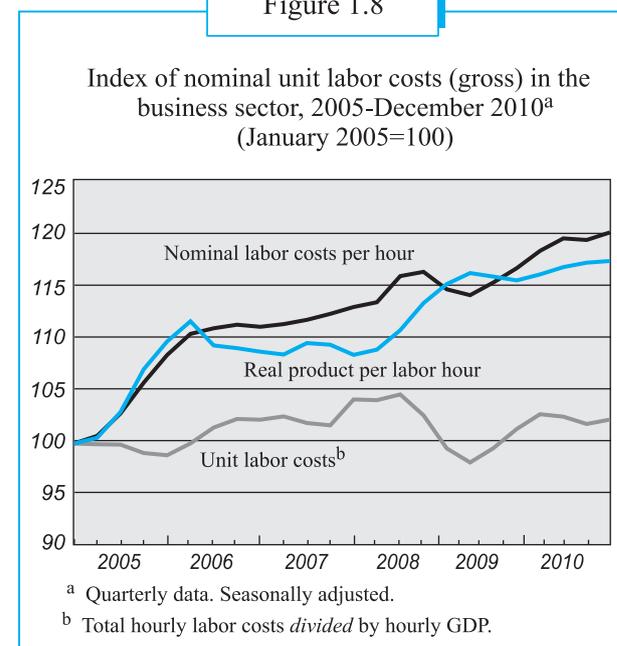


Figure 1.8



<sup>8</sup> From this it follows that the number of employed people grew by 209 thousand during the past two-and-a-half years, while the unemployment rate returned to its previous level.

<sup>9</sup> Nominal salaries rose by 3.7 percent since the same period last year (less than the inflation during the period), and real salaries fell by 0.1 percent.

raises the hypothesis that a substantial proportion of people recently joining the labor force earn less than the average wage.<sup>10</sup> It is also possible that the intensity of the recent rapid inflation caught both the employers and the employees by surprise, and that salaries will rise in the coming months to compensate for this.

An agreement was signed in May with the social workers, granting them a salary increase of NIS 1,000 over and above the salary increase previously negotiated with the public-sector employees, and determines a minimum salary of NIS 7,100 for social workers working full-time in NGOs.

### The government<sup>11</sup>

Tax revenues grew during the review period by 0.7 percent, in accord with the taxation forecast—a slowdown relative to the 5.6 percent growth in the previous period. If the increase in tax revenues continues according to the budget forecast, the annual deficit is expected to be lower than the deficit ceiling. The rate of growth of direct taxes slowed from 3.2 percent in the previous period, to 2.4 percent, and a decrease was recorded in indirect taxes (-0.4 percent, as opposed to 8.1 percent in the previous period). Tax revenues in the review period were NIS 0.8 billion higher than the government budget forecast, and domestic expenditure without credit was lower than the seasonal course of the budget by NIS 0.4 billion. Overall, the domestic deficit in the review period was NIS 1.3 billion lower than the seasonal path consistent with the budget's deficit ceiling. The surplus in domestic activity, excluding credit, from January to April stood at NIS 1.5 billion, larger than in the same period in the years 2009 and 2010 (Table 1.4 and Figure 1.9).

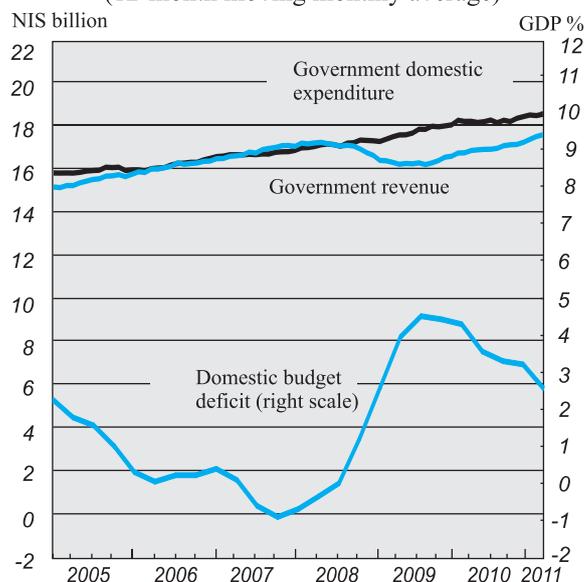
In February the government decided on a series of easing measures amounting to NIS 1.1 billion. The steps included a yearly NIS 300 million subsidy for public transportation, a change in the method of calculating the price of water and canceling the excise on fuel amounting to NIS 760 million a year. The steps will be financed by postponing the reduction of income tax for the two highest deciles in 2012, and an across-the-board cut in the budget of government ministries.

<sup>10</sup> Supporting this claim is the negative correlation at the industry level between the growth in nominal salary in the industry and the growth in the number of salaried positions in the industry during the past six months.

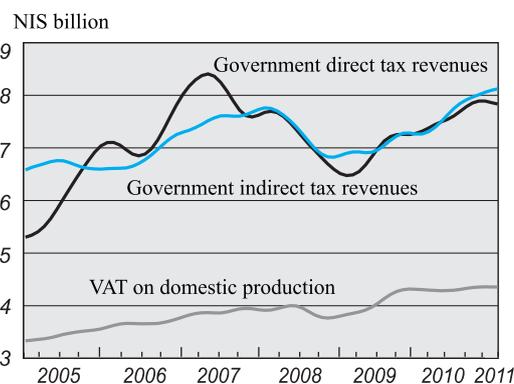
<sup>11</sup> Government data refer to the period January to April 2011. Tax revenues are presented in fixed prices, seasonally adjusted, and taking into account legislative amendments, and one-time income.

Figure 1.9

Government revenue and expenditure and the deficit  
2005-April 2011  
(12-month moving monthly average)



Trend data of government tax revenues after deducting one-time revenues and the effect of changes in legislation

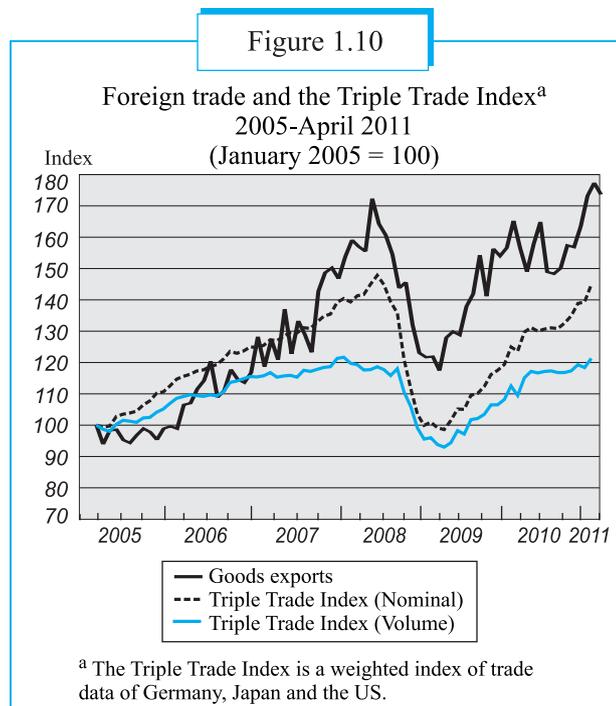


### Foreign trade<sup>12</sup>

During January-April 2011 imports of goods grew by 13.1 percent, and exports of goods by 12.2 percent in dollar terms compared with the previous period (Table 1.5 and Figure 1.10). The growth in exports resulted from the growth in

<sup>12</sup> Foreign trade data (Table 1.5 and Figure 1.9) are presented for January-April 2011 in dollars, seasonally adjusted, without ships, aircraft, diamonds, and energy,

the export of hi-tech products (13.8 percent) and mixed hi-tech products (23.9 percent) following declines in the two previous periods (2.9 percent and 22.5 percent, respectively). Exports grew despite appreciation of the effective exchange rate in the review period.

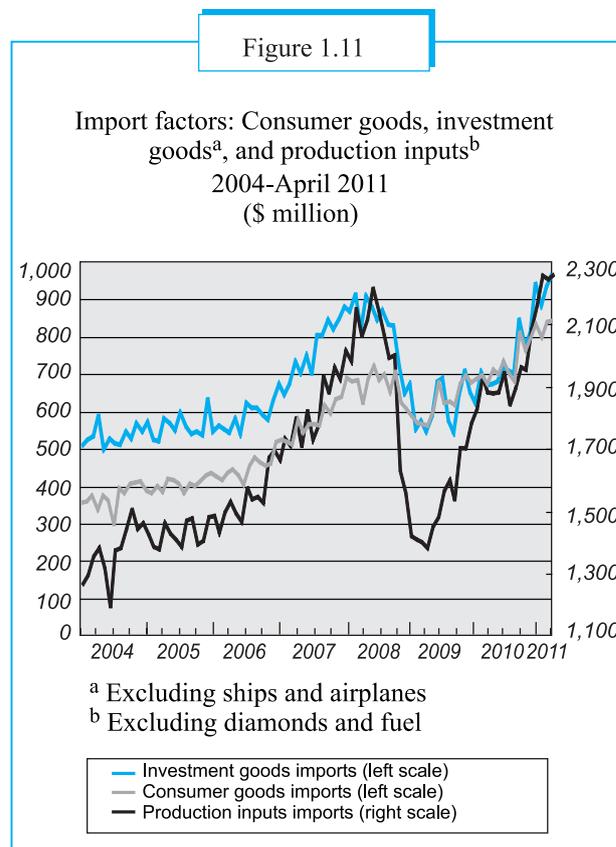


Imports grew in the review period (Figure 1.11) in the wake of increased imports of investment assets (18.7 percent), raw materials and consumer products, and as a result of the appreciation of the effective exchange rate (Figure 1.15). Among the investment goods, imports of machinery and equipment (the majority of this category) grew by 29.1 percent, as opposed to an increase of 0.2 percent in imports of vehicles. Imports of investment assets grew at a rapid pace in the past six months, exceeding the record levels prior to the crisis. This growth in demand for investment assets may be intended to fill gaps that were created during the crisis. It is also possible that due to the positive GDP gap and the low unemployment, manufacturers find that increasing imports of investment assets is a more efficient way to increase output than recruiting new employees or competing for skilled employees.

The trade deficit (including energy materials) in January–April 2011 was 5.0 billion dollars, as opposed to 3.9 billion dollars in the previous period, and 2.2 billion in the same period last year. The growth in the deficit was due to the increase in imports (including energy materials), while exports grew less. The rise in imports was affected by the

depreciation in the euro and the dollar (3.6 percent and 4.7 percent, respectively), and by rising energy prices (28.9 percent), compared with the same period last year.

Parallel to the rise in Israel’s exports and imports, global trade, measured by the Triple Trade Index, grew in the first quarter of 2011 by 6.3 percent compared with the previous quarter. This growth was reflected both in price rises and in the quantity traded. In April 2011, the IMF updated the growth forecast of real global trade from 7.1 percent to 7.4 percent.



### Inflation and monetary policy

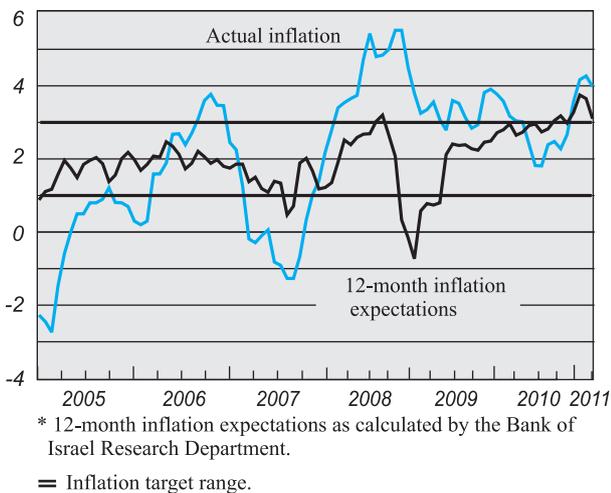
The CPI rose during the review period by 1.3 percent (Table 1.7), and the seasonally adjusted growth rate was even higher (1.4 percentage points). The major contributors to the rise in the index were privately-owned-housing prices (2.1 percent), energy (6.3 percent), food (3.2 percent), and transportation and communication (2.9 percent). The rise in the CPI was moderated by clothing and footwear prices, and fruit and vegetables (whose effect is seasonal), which fell by 8.3 percent and 4.0 percent, respectively. The price rises in

food and energy are a result of the continuing trend of rising food and energy prices worldwide in the review period.

The inflation rate in the past 12 months was above the 1-3 percent inflation target throughout the review period (Figure 1.12).<sup>13</sup> The rate was affected mainly by privately owned housing, transportation and communications, food, and fruit and vegetables prices. Inflation expectations for the coming twelve months, which are derived from the capital market, were also above the upper limit of the inflation target throughout the review period. Expectations decreased and approached the target in April, following the surprising increase in the Bank of Israel interest rate by half a percent. Housing prices, according to the housing prices index, rose by 13.8 percent relative to the same period last year, a relatively low rate compared with the previous period, but still high in itself. The housing index, which measures rental housing prices, rose during the review period by 2.0 percent, and by 6.0 percent relative to the same period last year. Stock prices in Israel fell in the review period by 2.3 percent (Figure 1.13), and the risk premiums of the business sector also fell (Figure 1.14). The fall in the stock price indices was the major factor behind the fall in the public's asset portfolio of 0.4 percent in the first quarter compared with the previous period (original data). The high inflation, the continuing rise in apartment prices, and the continuing expectations of high inflation in the review period led the bank of Israel to

Figure 1.12

Inflation in previous 12 months, inflation expectations, and the inflation target, 2005-April 2011



<sup>13</sup> Since the beginning of 2005, the inflation rate in the previous 12 months has been above the inflation target for 47 percent of the time, and below the target for 21 percent of the time.

Figure 1.13

Leading share indices, Israel and around the world, 2005-April 2011\*

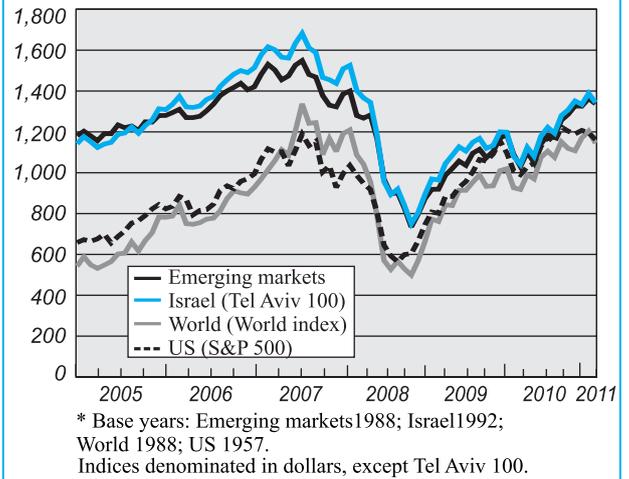
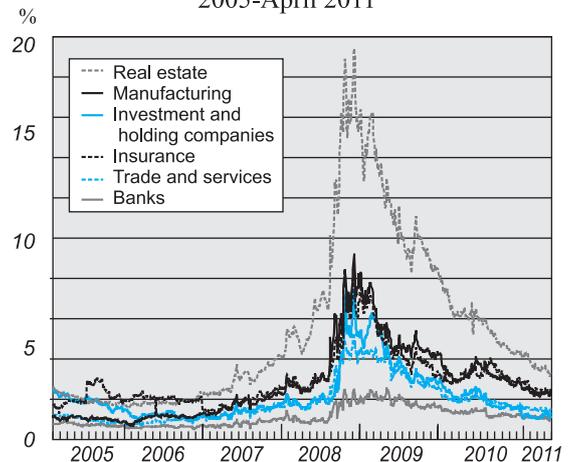


Figure 1.14

The gap between the weighted average yield of CPI-indexed corporate bonds and Galil government bonds, by industry, 2005-April 2011



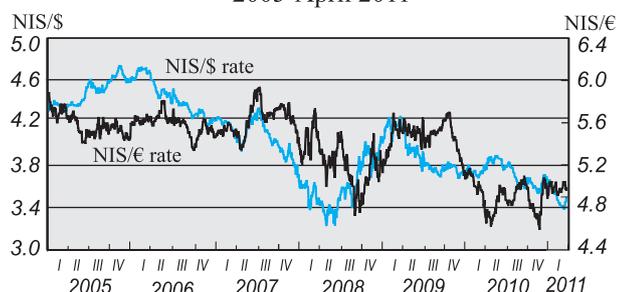
continue to raise the interest rate. Interest in January was 2.0 percent, in February it was raised to 2.25 percent, in March to 2.5 percent, and in April—to 3.0 percent.

The average nominal effective exchange rate in January -April appreciated by 2.3 percent against the average of the previous period (Table 1.7). At the start of the period the shekel weakened against the dollar and the euro (Figure 1.15). The nominal exchange rate of the shekel began appreciating against the dollar in mid-February, and continued to do

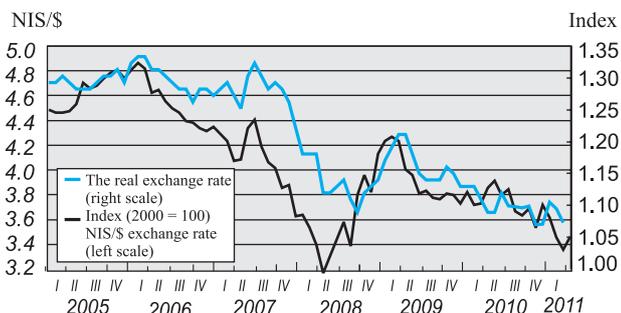
so to the end of the period—a sharp appreciation of 9.4 percent in the nominal effective exchange rate. The Bank of Israel intervened in the foreign currency market during the period by purchasing 3.8 billion dollars. The purchases were concentrated in January (\$2.1 billion) and in February (\$1.5 billion).

Figure 1.15

The nominal NIS/\$ and NIS/€ exchange rates, 2005–April 2011



The nominal NIS/\$ exchange rate and the real effective exchange rate,<sup>a</sup> 2005–April 2011



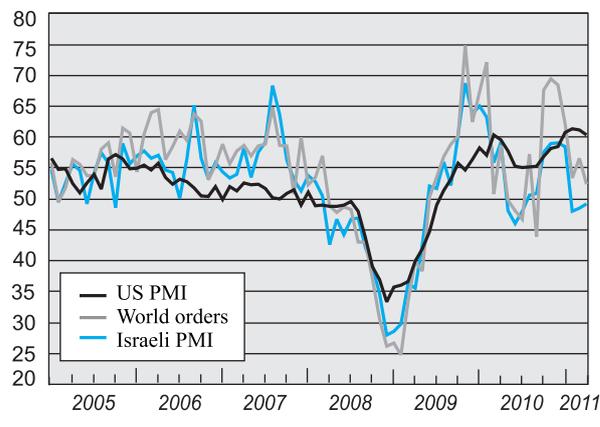
<sup>a</sup> The real effective exchange rate is the trade-weighted geometrical average exchange rate of the shekel against the 28 currencies of Israel's 38 main trading partners adjusted for the difference between inflation in Israel and in those countries.

## The global economy

The IMF's global growth-rate forecast for 2011 is 4.4 percent, less than the growth in 2010 (5.0 percent). The forecast includes decreasing unemployment, higher inflation, and expansion of world trade. At the same time, the Global Purchasing Managers Index fell in the review period by 10 percent compared with the previous quarter (Figure 1.16). The growth rate of the European Union rose in the first quarter (3.1 percent, in contrast to 0.9 percent in the previous quarter, in annualized terms, seasonally adjusted). This rise was influenced mainly by the growth

Figure 1.16

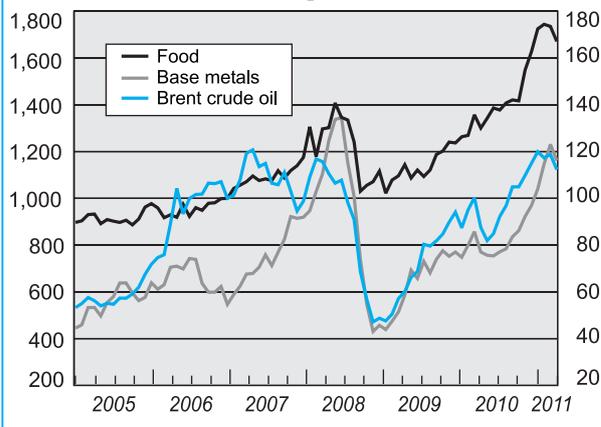
Purchasing Managers Index, 2005–April 2011



in Germany (6.1 percent, in contrast to 1.5 percent in the previous quarter). In Germany unemployment also decreased, reaching 6.3 percent in March. Unemployment in the EU as a whole fell to just 9.9 percent in March. In the wake of the expansion of activity in Europe and the increase in inflation, the ECB raised the interest rate by a quarter of a percent to 1.25 percent in April. The OECD Composite Leading Indicators, designed to provide early signals of inflection points in business cycles, show that the growth in the developed economies is not uniform: most of these economies, as well as China, Russia, and South Africa expanded in January–March, while Brazil, India, Finland, Spain, Britain, Greece, and Sweden experienced a slowdown in activity. The situation in the United States is also unclear: on the one hand, the growth rate in the first quarter was only

Figure 1.17

Price indices for base metals, food and energy 2005–April 2011



1.8 percent (in annualized terms); the unemployment rate, which fell up to March, rose again in April to 9.0 percent, and the administration and Congress are not making progress in reducing the burgeoning deficit; on the other hand, the Purchasing Managers Index in the United States rose in the review period by 6.5 percent compared with the previous period, and from February to April 700,000 salaried jobs were added to the labor market. The Fed did not raise the interest rate in the review period, but has begun to signal that when the current quantitative easing program comes to an end, there will not be a further easing program for the time being.

Prices of metals, energy, and food rose sharply in the review period (13.1 percent, 28.9 percent, and 17.9 percent, respectively). These increases were a result of seasonal and environmental factors, such as weather conditions and natural disasters, political crises in the oil-producing countries, and of growing demand from the developing countries, a consequence of their growth (Figure 1.17).

Several events during the review period had an adverse affect on economic growth worldwide: the earthquake in Japan in March and the tsunami and the nuclear disaster that occurred in its wake caused damage estimated at 300 billion dollars, which is one percent of Japan’s capital stock, or 6 percent of GDP. The disaster significantly affected economic activity in Japan, and its ramifications for world trade are still unclear. Several cases were reported of shortages of raw materials which are produced only in regions that were affected by the earthquake, and for which there are no substitutes. In February a wave of Arab protests erupted, which led to the fall of the regimes in Tunisia and Egypt, to military intervention by NATO forces in Libya, and to destabilization of the regimes in Saudi Arabia, Jordan, Bahrain, and Syria. The wave of protests caused an increase in energy prices worldwide in light of the uncertainty surrounding the stability of several oil-producing countries, as well as increasing Israel’s regional risk.

The debt crisis in the eurozone countries continued in the review period. In March the government in Portugal fell, after failing to pass an additional program, the fourth, of reducing the deficit. This failure and the rise in bond yields to 7.8 percent in March forced Portugal to request assistance from the European rescue fund and from the IMF. In May the EU and the IMF decided to grant 78 billion euro in assistance to Portugal. Receipt of the assistance was made conditional on continuing the fiscal consolidation, reforms to increase the competitiveness of the Portuguese economy, and strengthening the banking system. In the review period fears increased that the Greek government would not be able to repay its debts, and would, sooner or later, have to reach a debt arrangement or write off debts. These fears were

reflected in sharp increases in Greece’s CDS spreads and bond yields (Figure 1.18). Discussions in Europe on future changes in the conditions of the Greek public debt (debt restructuring) increased pressure in the markets.

Figure 1.18a

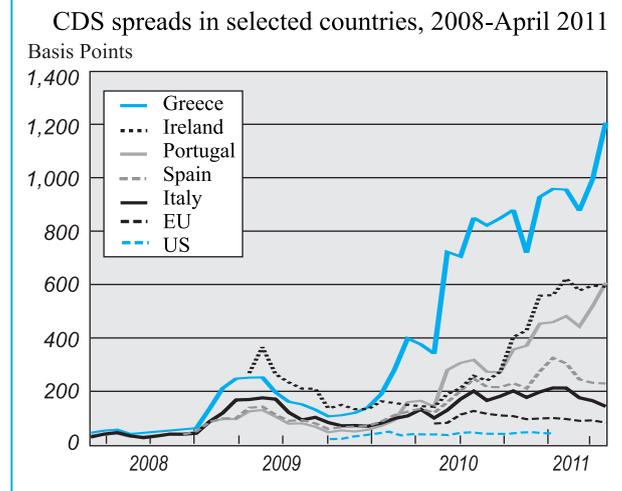


Figure 1.18b

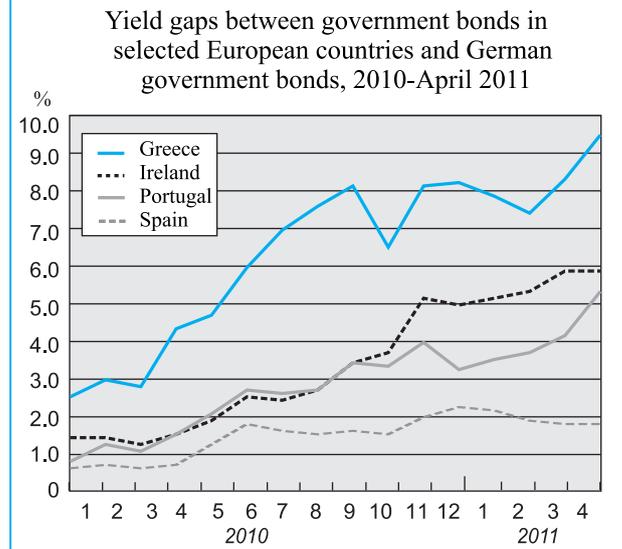


Table 1.1 National Accounts, 2010-2011  
 (percentage change in annual terms, at constant prices, seasonally adjusted)

	Change from previous quarter						Year-on-year change <sup>a</sup>	Last month for which data available
	2010					2011		
	2010 <sup>a,b</sup>	I	II	III	IV	I		
GDP	4.7	5.0	5.5	4.8	7.6	4.7	6.8	Mar
Business-sector product	5.4	6.8	6.7	5.1	8.7	5.8	8.0	Mar
Private consumption	5.0	0.5	7.1	0.7	8.8	6.8	4.8	Mar
Gross domestic investment	2.5	82.4	-7.6	2.1	20.0	33.3	16.2	Mar
Fixed investment	12.6	13.7	26.5	20.8	19.7	23.7	20.6	Mar
Goods and services exports excl. diamonds	10.7	2.3	20.3	-0.5	3.5	14.7	7.5	Mar
Goods exports <sup>c</sup>	17.1	22.7	19.5	-4.2	-1.7	29.6	12.3	Mar
Services exports <sup>c</sup>	5.6	-20.2	10.8	15.1	23.2	16.7	10.6	Mar
Goods and services imports excl. diamonds <sup>d</sup>	9.4	9.9	15.3	-4.8	12.9	13.6	7.6	Mar
Goods imports <sup>e</sup>	18.5	30.0	7.8	8.0	14.1	27.8	12.5	Mar
Services imports <sup>e</sup>	-2.7	-10.6	-0.2	-2.9	3.8	7.8	2.7	Mar
Public sector consumption	3.1	4.4	-1.3	9.7	4.7	-5.7	3.1	Mar
Public consumption excluding defense imports	2.8	-0.1	0.7	8.4	5.6	-5.0	2.6	Mar
Domestic use of resources	4.0	11.7	1.2	2.6	9.7	8.3	6.0	Mar

<sup>a</sup> Unadjusted data.

<sup>b</sup> Compared with previous year.

<sup>c</sup> New calculation - excluding subsidies.

<sup>d</sup> Excluding defense imports, ships and aircraft.

<sup>e</sup> New calculation - excluding taxes.

SOURCE: Based on Central Bureau of Statistics data.

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Table 1.2 Indicators of Business Activity, 2010-2011  
(percentage change, in annual terms, seasonally adjusted)

	Change from previous quarter						January - April 2011		
	2010 <sup>a,b</sup>	2010				2011	Change from previous period	Year-on-year change <sup>a</sup>	Last month for which data available*
		I	II	III	IV	I			
Composite state-of-the-economy index	5.0	6.6	6.7	5.4	5.4	6.6	6.2	5.9	Apr
Unit labor cost	2.0	1.0	-1.2	-3.9	-3.1				Dec
Large-scale retail trade	3.4	5.2	-0.5	14.6	-8.5	0.3	0.5	1.7	Apr
Manufacturing production (excl. diamonds)	7.8	11.7	23.4	-16.1	1.7	16.3	16.3	5.2	Mar
Index of trade revenue	7.4	12.7	0.2	4.9	5.3	8.1	8.1	4.6	Mar
Index of trade and services revenue	7.7	14.8	2.3	3.9	8.4	6.3	6.3	5.2	Mar
Index of services exports	11.0	-10.1	22.8	1.9	16.8	-8.2	-6.3	6.8	Apr
Tourist arrivals	25.7	23.1	23.5	-8.3	47.0	-32.5	-27.4	-1.1	Apr
Residential construction									
Starts	12.8	49.0	-12.1	-12.0	25.2		94.0	8.5	Feb
Completions	0.7	-50.5	170.7	-20.9	-11.9		-25.4	14.9	Feb
ILA land permits (units) <sup>a,c</sup>	24,892	9,683	2,837	5,079	7,293			-30.2	Feb
Nonresidential construction									
Area of starts <sup>a,e</sup>	-7.1	-17.0	8.6	20.0	-28.0				Dec
Survey of companies (net balance, percent) <sup>d</sup>									
Weighted balance of the business sector	23	27	17	20	27	22			Mar
Output of manufacturing firms	23	31	22	10	32	32			Mar
Sales by trading firms	23	28	17	24	21	^-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 (January-February vs. November-December).

^ Not significant at 10% level.

<sup>a</sup> Unadjusted data.

<sup>b</sup> Year-on-year.

<sup>c</sup> Land transactions authorized by the Israel Lands Administration in the relevant period.

<sup>d</sup> 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.

<sup>e</sup> Period average, year-on-year change.

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

## RECENT ECONOMIC DEVELOPMENTS NO. 130, JANUARY–APRIL 2011

 Table 1.3. Indicators of Labor Market Developments, 2010-2011  
 (percentage change, seasonally adjusted)

	Percent change from previous quarter						Change from previous period	Year-on-year change <sup>a</sup>	Last month for which data available *
	2011/I	2010				2011			
	('000)	I	II	III	IV	I			
Civilian labor force	3,186.8	0.1	1.3	1.4	0.4	0.0	0.0	3.0	Mar
Israeli employees	2,994.9	0.5	1.7	1.3	0.5	0.5	0.5	4.4	Mar
<i>of which:</i> in general government	924.7	0.3	1.9	-2.1	3.7	2.7	2.7	6.3	Mar
in business sector	2,082.4	1.1	2.3	1.5	-0.2	0.1	0.1	3.6	Mar
Foreign workers and Palestinians (unadjusted) <sup>b</sup>	287.3	2.0	-2.9	1.0	2.5	0.4	0.4	1.0	Mar
Average hours worked weekly per Israeli employee	36.8	-1.1	-1.1	0.8	1.1	0.5	0.5	1.6	Mar
Weekly Labor input in business sector (incl. foreign workers and Palestinians)	101,893.6	-0.8	0.2	1.9	1.4	0.1	0.1	4.0	Mar
<i>of which:</i> Israelis	89,157.3	-1.1	0.6	2.0	1.3	0.0	0.0	4.4	Mar
Weekly labor input in general government (Israelis)	20,584.4	-3.7	2.7	0.2	5.6	2.8	2.8	13.5	Mar
Unemployed	191.9	-4.3	-4.8	3.3	-1.8	-7.0	-7.0	-16.3	Mar
Work seekers	181.2	-6.2	-1.4	0.3	-2.0	-2.8	-1.8	-4.1	Feb
Claims for unemployment benefit	71.7	-9.6	-5.2	-4.7	3.4	-4.5	-3.0	-10.8	Apr
Balance of employment <sup>c</sup>		2.3	1.2	0.6	1.8				Dec
Vacancies <sup>a</sup>	61.1	4.1	27.5	6.8	5.7	0.6	4.3	41.2	Apr
(NIS)									
Real wage per employee post <sup>d,e</sup>		1.3	-0.1	0.1	0.9	-1.3	-1.4	-0.2	Feb
In general government		1.2	-0.0	0.3	1.4	-1.9	-2.6	0.2	Feb
In business sector		1.4	-0.7	0.9	0.1	-1.2	-1.2	-0.4	Feb
Nominal wage per employee post <sup>e</sup>	8,419.5	1.5	0.3	0.5	2.2	0.1	-0.1	3.6	Feb
In general government	8,033.1	1.5	0.7	0.6	2.6	-0.4	-1.2	4.0	Feb
In business sector	8,627.9	1.7	-0.3	1.4	1.4	0.5	0.3	3.4	Feb
Percent, seasonally adjusted									
Participation rate		56.7	57.1	57.7	57.7	57.4			Mar
Employment rate		52.8	53.4	53.9	53.9	54.0			Mar
Unemployment rate		6.9	6.5	6.6	6.5	6.0			Mar
Depth of unemployment <sup>f</sup>		36.3	36.0	32.1	33.3	29.9			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 (January-February vs. November-December).

<sup>a</sup> Unadjusted data.

<sup>b</sup> Due to an error in the method of calculation, the data from January 2008 have been recalculated.

<sup>c</sup> Posts filled minus terminations of employment, as a percentage of the total number of employees in businesses in the Employers Survey Sample.

<sup>d</sup> at 2004 prices.

<sup>e</sup> Including foreign workers and Palestinians. Seasonally adjusted data.

<sup>f</sup> 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 derived from the CBS Survey of Vacancies.

Table 1.4. Government Budget Performance, 2010-2011

	2010						January - April 2011			
	2010 <sup>a</sup>	I	II	III	IV	2011 I	Change from previous period	Year- on-year change	Last month for which data available*	
Domestic deficit, as percent of GDP	-2.5	-0.8	-2.3	-0.4	-6.5	1.8			Mar	
Total deficit excluding credit, as percent of GDP	-3.7	-1.9	-3.3	-1.8	-7.8	0.9			Mar	
Deviation from domestic budget path, excl. credit extended <sup>b</sup>	(NIS billion)									
Revenue	10.5	2.0	3.8	2.2	10.5	0.9		-1.4	Apr	
Expenditure	-1.3	0.0	-2.1	-2.8	3.7	-4.7		0.0	Apr	
Deficit	11.8	2.0	3.9	5.0	1.3	5.6		-1.5	Apr	
Total deficit excluding credit	-30.2	-3.6	-6.7	-3.7	-16.2	1.8			Apr	
Real change year-on-year (percent)										
Government domestic revenues excluding credit	5.5	12.3	3.3	1.5	5.3	11.1		10.3	Apr	
Government tax revenue	7.6	9.8	8.7	5.7	6.3	8.3		8.3	Mar	
of which: income tax, net	4.1	2.6	2.0	6.5	5.4	10.7		9.8	Apr	
VAT, gross	9.3	14.9	14.5	3.8	5.0	7.1		5.7	Apr	
Government expenditure	1.0	9.3	-6.7	-2.0	4.2	1.3		2.3	Apr	
National Insurance allowances	4.0	4.3	4.1	3.6	3.8	0.6		0.6	Mar	
of which: Unemployment benefit	-18.5	2.3	-26.4	-24.6	-21.7	-12.9		-12.9	Mar	
Income support <sup>c</sup>	-1.0	2.0	-2.2	-0.9	-2.8	-6.0		-6.0	Mar	
Payments to the National Insurance Institute by the public	7.5	5.0	10.5	8.8	5.7	4.6		4.6	Apr	

\* 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 (January-February vs. November-December).

<sup>a</sup> Compared with previous year.

<sup>b</sup> The path is determined in accordance with the deficit target.

<sup>c</sup> Not including income support in old-age and survivors' pensions.

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

## RECENT ECONOMIC DEVELOPMENTS NO. 130, JANUARY–APRIL 2011

 Table 1.5. Foreign Trade, Balance of Payments, and the Reserves, 2010-2011  
 (Seasonally adjusted)

							January - April 2011		
	2010					2011	Change from previous period	Year-on-year change	Last month for which data available*
	2010 <sup>a,b</sup>	I	II	III	IV	I			
	(rate of change, percent) <sup>c</sup>								
Trade in goods <sup>d</sup>									
Goods imports	19.0	8.5	1.8	1.7	9.0	9.8	13.1	26.2	Apr
<i>of which:</i> Consumer goods	14.3	3.7	1.3	1.3	12.2	3.9	8.2	22.1	Apr
Capital goods	12.8	4.5	2.1	5.3	14.2	13.4	18.7	46.2	Apr
Intermediates	23.4	12.1	1.8	0.6	5.7	11.0	13.0	20.5	Apr
Goods exports	16.2	5.3	-2.7	-0.2	0.5	10.7	12.2	6.5	Apr
<i>of which:</i> Manufacturing	16.3	5.3	-2.5	0.3	0.1	10.7	12.2	7.1	Apr
<i>of which:</i> High-tech	12.3	-0.5	5.2	-0.2	-0.7	11.0	13.7	9.7	Apr
Balance of payments      \$ million									
Goods and services exports	80,469	19,665	20,071	20,061	20,672				Dec
Goods and services imports	75,869	18,807	18,677	18,562	19,824				Dec
Balance of trade in goods and services account	4,600	858	1,394	1,499	849				Dec
Balance of trade in current account	6,762	1,851	1,835	1,724	1,352				Dec
Surplus/deficit in financial account (excl. foreign exchange reserves) <sup>b</sup>	2,657	2,137	-2,516	328	2,707				Dec
<i>of which:</i> Nonresidents' direct investments <sup>b</sup>	5,157	1,296	-218	1,650	2,430				Dec
Nonresidents' portfolio investment <sup>b</sup>	9,076	3,784	632	306	4,354				Dec
Residents' direct and portfolio investment <sup>b</sup>	17,580	5,105	3,665	6,291	2,520				Dec
Bank of Israel reserves, end of period <sup>b</sup>	70,913	62,476	63,096	66,271	70,913	74,526	9.2	20.1	Apr
Net foreign debt (percent of GDP) <sup>b,e</sup>	-23.7	-25.3	-24.2	-23.4	-23.4				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 (January-February vs. November-December).

<sup>a</sup> Compared with previous year.

<sup>b</sup> Unadjusted data.

<sup>c</sup> The change relates to the dollar values of imports and exports.

<sup>d</sup> Not including ships, aircraft, diamonds, and fuel.

<sup>e</sup> GDP in calculated at the end-of-period NIS/\$ exchange rate.

SOURCE: Based on the Central Bureau of Statistics.

Table 1.6. Indicators of Economic Development in Advanced and Developing Countries<sup>a</sup>  
(annual change, percent)<sup>b</sup>

		2009	2010	2011	2012
				Projection	Projection
World GDP		-0.5	5.0	4.4	4.5
	Advanced countries	-3.4	3.0	2.4	2.6
	Developing countries	2.7	7.3	6.5	6.5
World trade		-10.9	12.4	7.4	6.9
	Advanced countries				
	Imports	-12.6	11.2	5.8	5.5
	Exports	-12.2	12.0	6.8	5.9
	Developing countries				
	Imports	-8.3	13.5	10.2	9.4
	Exports	-7.5	14.5	8.8	8.7
Commodity prices (US\$)	Oil <sup>c</sup>	-36.3	27.9	35.6	0.8
	Nonfuel	-15.8	26.3	25.1	-4.3
Inflation (CPI)	Advanced countries	0.1	1.6	2.2	1.7
Short-term interest (%) <sup>d</sup>	Dollar deposits	1.1	0.5	0.6	0.9
	Euro deposits	1.2	0.8	1.7	2.6
Unemployment rate	Advanced countries	8.0	8.3	7.8	7.4

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

<sup>b</sup> Except for unemployment and interest rates (percent).

<sup>c</sup> The average price of a barrel of crude oil (UK Brent, Dubai, West Texas) in 2010 was \$79.03, excluding freight costs. Estimated price for 2011 is \$107.16 and for 2012, \$108.

<sup>d</sup> Six-month Libor rate for US dollar deposits, and three-month Libor rate on euro deposits.

SOURCE: World Economic Outlook (IMF), April 2011.

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Table 1.7. Selected Price Indices, the Effective Exchange Rate, Nondirected Bank Credit, Interest Rates, Yields, and the Share Price Index, 2010-2011 (rates of change, percent)

	(Change from previous quarter)						January - April 2011		
	2010 <sup>a</sup>	2010				2011	Change from previous period	Year-on-year change	Last month for which data available*
		I	II	III	IV	I			
CPI <sup>b</sup>	2.7	-0.9	1.5	1.2	0.7	0.7	1.3	4.0	Apr
Consumer price index, seasonally adjusted <sup>b</sup>	2.6	-0.1	0.7	0.7	1.3	1.5	1.5	3.9	Apr
Price index of owner-occupied homes <sup>b,c</sup>	14.0	2.8	3.7	3.0	3.9	3.6	2.4	13.9	Feb
General share-price index <sup>b</sup>	12.6	10.4	-13.8	10.8	6.8	-2.6	-4.8	4.5	Apr
	Change in period average <sup>d</sup>								
Real effective exchange rate <sup>e</sup>	-5.0	-3.4	-8.1	-3.2	-5.4	-3.2	-0.4	-3.2	Apr
Nominal effective exchange rate	-4.8	-2.4	-7.8	-3.5	-5.5	-2.3	-0.8	-2.4	Apr
Nondirected bank credit	4.1	0.5	1.8	1.8	2.0	2.3	2.5	7.7	Apr
Effective interest rate in daily deposit auction <sup>f</sup>	1.6	1.3	1.5	1.7	2.0	2.3	2.5	1.3	Apr
Yield on 5-year bonds <sup>g</sup>	0.9	1.3	1.1	0.7	0.5	0.8	1.0	1.3	Apr
Risk premium <sup>h</sup>	-38.2	-1.0	-4.2	4.8	-2.6	37.3	32.8	34.0	Apr
	Change during previous 12 months <sup>i</sup>								
CPI	2.7	3.5	2.8	2.0	2.5	4.0		4.0	Apr

\* 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 (January-February vs. November-December).

<sup>a</sup> Compared with previous year.

<sup>b</sup> Last month in period compared with last month of previous period.

<sup>c</sup> Not part of the CPI.

<sup>d</sup> Quarterly average compared with average of previous quarter.

<sup>e</sup> 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 rate if inflation in Israel and the rates of inflation in those countries.

<sup>f</sup> Period average interest rate.

<sup>g</sup> Period average yield.

<sup>h</sup> As measured by the 5-year credit-default-swap (CDS). Calculated as the difference between the monthly average in the quarter and the monthly average of the previous quarter.

<sup>i</sup> Year-on-year change in period average.

SOURCE: Central Bureau of Statistics and Bank of Israel.

## Part 2: Broader Review of Selected Issues

### The Increase in the Minimum Wage in 2011 and 2012

- In accordance with an agreement between representatives of workers and representatives of employers, and subject to an expansion order, the minimum wage is set to be revised to NIS 4,100 in July, 2011, and to NIS 4,300 in October, 2012.
- The increase in the minimum wage is expected to reduce the incidence of poverty by 0.1 percentage point. In order to reduce poverty significantly, improved compliance with the law is required.
- The increase in the minimum wage is forecast to result in at least NIS 428 million in increased public expenditure over 2011-13, due to direct salary costs. An additional increase in public expenditure is expected as a result of indirect costs resulting from the updated minimum wage and from the updated salaries of workers employed in government bodies and in other budgeted institutions through contractor companies.

The minimum wage for full time work of 186 hours per month is set according to the current Minimum Wage Law (since 1997) at 47.5 percent of the average salary, as per chapter 1 of the National Insurance Law<sup>1</sup>. It is supposed to be updated each year, in April, based on these figures. Since the current version of the law came into effect, there have been several times in which the minimum wage has been updated, aside from the legislated automatic mechanism. For example, in 2002-05 the minimum wage was frozen as part of the policy during the recession, and in 2006 there was an update in the minimum wage as part of a coalition agreement<sup>2</sup>. The most recent update of the minimum wage under that agreement was in July, 2008, and from then until April, 2011, the minimum wage was higher than 47.5 percent of the average wage, and so its nominal level remained unchanged for almost three years (Figure 2.1).

The minimum hourly wage was most recently updated in April, 2011, to NIS 20.90 so that the monthly wage was increased by about NIS 40, to NIS 3,890.30. At the end of December, 2010, an agreement was signed between the Histadrut and the Coordinating Office of Economic Organizations to raise the minimum monthly wage to a

<sup>1</sup> The average wage according to that definition is NIS 8,190 per month, as of January, 2011.

<sup>2</sup> That agreement was supposed to raise the minimum wage gradually to NIS 4,600, but not all the increments were implemented.

level of NIS 4,100 (NIS 22 per hour) in July 2011, and to NIS 4,300 (NIS 23.10) in October 2012, in addition to the minimum wage revision which occurred in April<sup>3</sup>.

Figure 2.1



The agreement was expanded to the public sector in March 2011. The deal's application to workers and employers in the business sector who are not represented by the organizations that signed it depends on an expansion order, which the Minister of Industry, Trade, and Labor is supposed to give. The updates in the minimum wage according to the deal, if it is expanded to the overall economy, will bring two consecutive increases of 5 percent (each time) in the nominal minimum wage. The real minimum wage is expected to increase 5 percent, and then 2.4 percent<sup>4</sup>, in accordance. The minimum wage has undergone large updates in past, as well. In 2001, it was updated by 10 percent (a real rise of

<sup>3</sup> In the construction industry, an industry-wide minimum wage is generally used, which is not expected to be updated with the change in minimum wage.

<sup>4</sup> In accordance with Bank of Israel forecasts of inflation and the minimum wage increases in 2011-12. For details, see the Bank of Israel Monetary Policy Report 2011, January-March.

9 percent), and two years before that it was updated twice consecutively by 6 percent (with a similar real rise).

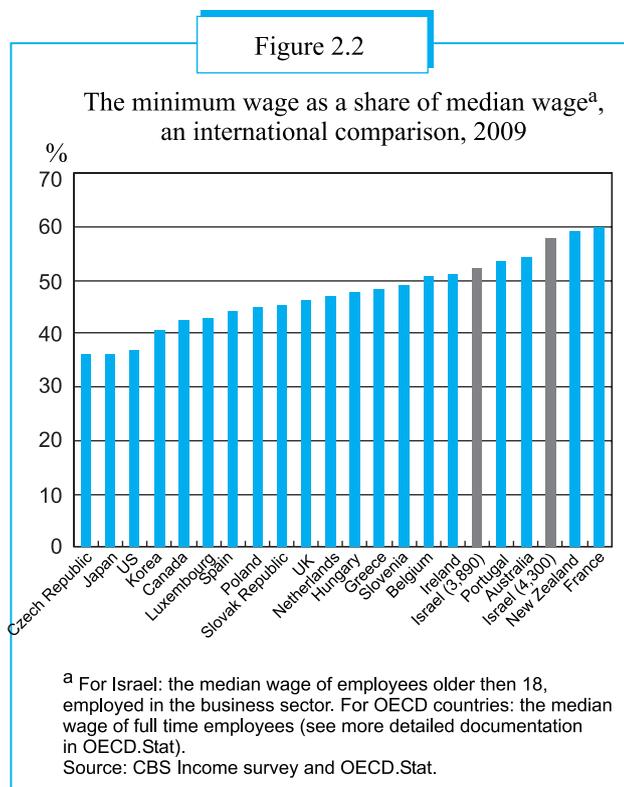
An international comparison denotes that the minimum wage, according to its statutory definition in Israel, is high relative to average wage<sup>5</sup> and relative to median wage. The high ranking of the minimum wage relative to the median wage in Israel, compared with other OECD countries (Figure 2), comes against the background of the high level of inequality of income from salary among full time employees (in international comparison, as well). Raising the minimum wage to NIS 4,300 will be accompanied by a rise in Israel’s relative position.

A minimum wage is intended to assure a suitable standard of living for those who earn that wage, and to reduce the incidence of poverty and wage gaps among employees<sup>6</sup>. However, the weak compliance with labor laws, particularly

the minimum wage law, reflected in data from Israel<sup>7</sup>, takes away from the impact of these laws. The effects of a change in the minimum wage on employment, incidence of poverty, and prices of goods have been studied and discussed in economic literature in Israel and around the world, and the results are not uniform. The impact on employment is one of the issues most extensively studied. There are studies which point to a weak negative impact of updated minimum wage on employment levels, and this is in any case dependent on the economic environment and on the industry. From the perspective of the limitations of minimum wage to extricate from poverty, many countries operate other tools alongside the minimum wage which are intended to increase the income of low wage earners, such as a progressive tax system and negative income tax. (For further analysis, see that section in this publication). Here we estimate the expected impact of a rise in minimum wage on incidence of poverty and on public expenditure.

### Effects of an update to the minimum wage

The hourly wage of about 14 percent of employees in the economy in 2009 was lower than the minimum wage<sup>8</sup>. On an industry level, industries with an especially high percentage of employees whose salary reaches up to the minimum wage level are hospitality (hotels), agriculture, and construction. The construction industry is not tradable, while the hotels and agriculture industries are tradable. Flug, Kasir and Rubinstein (2000)<sup>9</sup> examined the impact of changes in the level of minimum wage between 1973 and 1994, and found that raising the minimum wage leads, in the long term, to somewhat of a decrease in employment in tradable industries, while in non-tradable industries part of the impact of the rise in minimum wage is seen in



<sup>5</sup> The minimum wage in Israel is 47.5 percent of the average wage, which puts it, as of 2009, in second highest place among OECD countries, after New Zealand, according to this metric.

<sup>6</sup> Despite that, as seen from the National Insurance Institute (2010), for most households, a minimum wage does not pull them out of poverty.

<sup>7</sup> See, Reviews of Labour Market and Social Policies – Israel (OECD, 2009), and D. Gottlieb and A. Fruman (2011), “The expected impact of a change in minimum wage on the incidence of poverty and an update of 2009 results of research into the non-compliance with minimum wage”, National Insurance Institute Research and Planning division, as well as the report of the Public Committee Examining the Minimum Wage Law in Israel, 2000.

<sup>8</sup> According to the gross wage per hour of work, we examined if a worker earns the minimum wage or below it. This method apparently yields an underestimation, for several reasons: It does not take into account higher rates of pay for overtime hours; the gross wage sometimes includes additions to salary that are not taken into account for minimum wage (such as various premiums, a “thirteenth month” of salary, and seniority additions) so that the gross wage may be considerably higher than minimum wage for employees who are earning minimum wage; and reporting of work hours in surveys may well be problematic and make it difficult to identify those earning minimum hourly wage.

<sup>9</sup> K. Flug, N. Kasir, and Y. Rubinstein (2000), “The impact of minimum wage on employment in (certain) industries with unskilled labor in the Israeli economy” (Bank of Israel).

higher prices of products, and so the impact on employment is moderated. A high share of employees whose salary is below the minimum points to a low level of compliance with the minimum wage law and to the relative vulnerability of minimum wage earners, especially those who are employed in industries with an abundance of non-Israeli workers. The latter are not surveyed by Central Bureau of Statistics surveys, so we don't have the same current data regarding their salary and work hours. However, it appears that a lack of adherence to their rights and enforcement of labor laws regarding them are even more severe, which impacts the salary and employment of Israelis at the bottom of the wage scale, and is likely to strengthen the negative impact of a rise in the minimum wage on employment.

An update of the minimum wage is expected to influence primarily employees whose gross salary is at the minimum wage level and also employees whose gross salary is between the current minimum wage level and the new minimum wage level<sup>10</sup>. For the purpose of the simulation, which assumes that compliance with the minimum wage law remains at its current level, we assume, as did Gottlieb and Fruman (2011) that:

A. The current distribution of wages is unchanged at salary levels up to the new minimum wage level. (There is somewhat of a dragging of salary of all employees whose salary is between the old minimum wage level and the new level, in accordance with the rate of the increase in the minimum wage, but the salary of those earning above the new minimum wage and below the old minimum wage won't increase as a result of the agreement.

B. Employment in the short term won't fall as a result of the rise in the minimum wage. This is a reasonable assumption given the background of findings in literature, which document a weak impact on employment as a result of an update to the minimum wage, as well as the agreement which serves as the basis for the increase in minimum wage and the state of the economy. Figuring the effects of a change in the minimum wage on incidence of poverty under the given assumptions, shows that the poverty line will rise a bit as a result of the rise in distribution of wages following the minimum wage hike, and the incidence of poverty will fall by only a minuscule amount.

Full compliance with minimum wage, which represents a situation in which the entire distribution of wages which is below the minimum wage will rise to at least the minimum wage, will lower the incidence of poverty by 0.7 percentage points (Table 1). The fact that the incidence of poverty

<sup>10</sup> An update in the minimum wage can have other effects, such as wage claims and a drop in demand for workers (due to the closing of businesses, for example), and can also have an effect on the salary of those earning above the new minimum wage. In this analysis we are not considering these effects.

shows almost no change despite the rise of the poverty line comes from the relative definition of the poverty line (which is equal to half the median income per standardized household member) generally used in Israel, and from the fact that in some households where one of the earners is earning the minimum wage level, there are other earners, whose salary is higher than the minimum wage and won't be effected by changes in it. The members of these households are also usually not classified as poor. With that, a rise in the poverty line reflects the increased absolute income of the working poor.

Another perspective of an update in the minimum wage based on the agreement which was signed is the update in salaries of government workers and employees of public services whose salary<sup>11</sup> is lower than the new minimum wage, as well as employees who work at government offices through contractor companies, and the update of other indirect expenses. According to Bank of Israel statistics, over 30 percent of government office workers<sup>12</sup> receive income supplement to bring their salary level to that of minimum wage, and this group is set to grow in a situation in which the minimum wage rises. Raising the minimum wage to NIS 4,300 is estimated to bring an additional budget expenditure of at least NIS 428 million in direct salary costs between 2011 and 2013<sup>13</sup>. An additional increase in public expenditure is expected as a result of indirect costs connected with a rise in the minimum wage and from the update in salaries of workers employed at governmental bodies and other budgeted institutions through contracting agencies. This is all relative to a situation in which the minimum wage would be updated through the mechanism set by law (in line with the rise in the minimum wage in April of 2011 and 2012). This is only a rough estimate of the increased budget costs resulting from an updated minimum wage, for several reasons:

<sup>11</sup> The part of the salary which is, by definition, considered for minimum wage calculation, net of seniority pay.

<sup>12</sup> The database at the Bank of Israel includes salary figures for about 68,000 government workers and various government authorities (Central Bureau of Statistics, National Insurance Institute, and others). According to Central Bureau of Statistics figures, the number of workers at the central government, National Insurance Institute, various national institutions and local municipalities total about 337,000. Assuming that the distribution of salaries at both groups of workers is the same, the budget addition required by the rise in the minimum wage is about five times as high as the result of the sample found in Bank of Israel data. The calculation is based on the period up to the next increase in the minimum wage, in accordance with the law (April, 2013).

<sup>13</sup> This calculation assumes that those who receive income support today will continue to receive the support in line with the new minimum wage level, and that for those whose portion of their salary considered in minimum wage calculations is lower than the new minimum wage level will be allocated a salary increase on a uniform basis.

Table 2.1: Effect of an update to minimum wage on income and on incidence of poverty<sup>a</sup>

	Until April 2011	April 2011	October 2012
Minimum monthly wage (NIS)	3,850	3,890	4,300
Minimum hourly wage (NIS)	20.7	20.9	23.1
Number of employees who will receive higher salaries <sup>b</sup> ('000; percent of employees)	Not relevant	127.4 [5.4%]	304.7 [13%]
Average increase in monthly salary (NIS)	Not relevant	35	443
Poverty Line <sup>b</sup> (NIS)	1,814.6	1,814.8	1,829.0
Incidence of poverty when compliance level remains unchanged	25.0%	25.0%	24.9%
Poverty line under full compliance with minimum wage law <sup>b</sup> (NIS)	1,849.5	1,850.0	1,870.2
Incidence of poverty under full compliance with minimum wage law	24.4%	24.3%	24.3%
Change in incidence of poverty as a result of improved compliance with law (percentage points)	0.6	0.7	0.6

<sup>a</sup> According to distribution of salaries in 2009.

<sup>b</sup> The addition to salary was only granted to earners over 18 years old who work at least 7 hours per week and earn between the old and new minimum wage levels. The poverty line is calculated per standardized person. Employees who work less than 7 hours per week did not receive the increase.

Data based on Central Bureau of Statistics income survey

(1) The public services include many additional workers who are not part of this calculation, and we don't know how minimum wage earners are distributed among them; (2) The distribution of the share of minimum wage earners in the population which the Bank of Israel statistics cover is not necessarily identical to the distribution of salary among the other public sector workers included in the calculation; (3) The calculation does not include workers who are employed at government bodies and in budgeted institutions through contracting companies; (4) There are additional budget expenses which are derived from the updates of non-salary expenses which are based on the minimum wage (such as various allowances).

## Conclusion

The minimum wage is expected to be updated in two parts to a level of NIS 4,300 by October, 2012—an 11 percent change from its nominal level in April, 2011. In view of the expected developments in prices, the real rise in the minimum wage will be more moderate, and reach 8 percent. If the minimum wage were to be updated according to the legislated mechanism, it would have risen by April of 2012 to about NIS 4,143, a nominal rise of 6.5 percent relative to its level of April, 2011, and a real rise of only 4 percent (these rises depend on developments in the economy's average wage and inflation). Under quite conservative assumptions,

that the rise in the minimum wage will not lead to a change employment levels and that the salary distribution of 2009 will remain after the minimum wage is increased, the effect of the minimum wage rise—based on the agreement between the Histadrut and employers—on the incidence of poverty will be tiny, though it will increase the income of the poor. This deal to update the minimum wage reflects an agreement between representatives of employers and workers, so that it is reasonable that the negative consequences on demand for workers in the short term will be limited, at least by the employers represented in the agreement. The update to the minimum wage will be accompanied by budgetary costs for income supplement of public sector workers whose salary is below the minimum wage. The additional budget expenses derive, to no small degree, from the wage structure in the public service, which recently as well as in the past has been the focus of public criticism.<sup>14</sup>

<sup>14</sup> A detailed criticism was given, among others, in the framework of two public committees which dealt with the salary of workers in the public sector (the “Zusman Committee” of 1989, and the “Minimum Wage Committee” of 1990).

## From School to Work: Employment of Young People in Israel

- **About one-half of the young people entering the workforce do not have any post-secondary education. About half of them attended a vocational high school and only about 10 percent took a vocational training course in other frameworks.**
- **The relative rate of employment among young people without post-secondary education has fallen in recent years.**
- **The employment of young people in some of the manufacturing professions (such as industrial mechanics) has declined while employment in service professions (such as sales) has increased. However, the teaching of service professions is not emphasized in vocational schools.**
- **Steps have recently been taken to increase the scope of vocational training in high schools. In contrast, there is now less emphasis on post-secondary vocational training courses, as is also the case for employment guidance for young people.**

About half of the young people in Israel who have recently entered the workforce lack any post-secondary education and many of them lack any of the skills that are in demand in the labor market. In many countries, greater efforts are now being made to improve the transition of this sector (called the “Forgotten Half” in the US) from school to work. An analysis of the employment characteristics of young people, which goes beyond an analysis of employment in general, is important for two reasons: first, the initial working years are critical in establishing a stable employment trajectory and achieving a reasonable wage; and second, the situation of young people usually reflects the latest developments in the labor market.

In his book examining this issue,<sup>15</sup> Neumark divides the transition from school to work into two main stages: the first involves the acquisition of labor market skills during high school, which includes vocational studies, universal tools and life skills; and the second involves practical vocational training, on-the-job training and the accumulation of work experience.

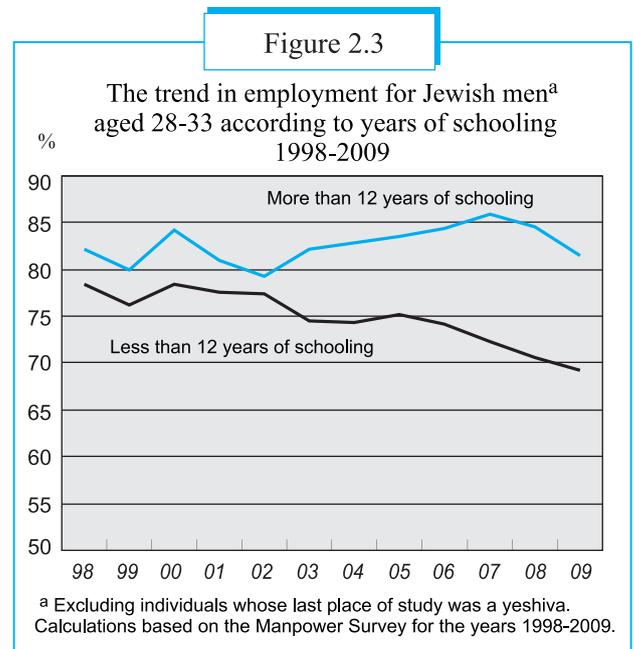
In Israel, policy regarding the school-to-work transition is focused primarily on the first stage and about one-third of

high school students study in vocational tracks.<sup>16</sup> In contrast, there is little employment guidance for young people and the scope of vocational training available to those with little schooling is negligible. Although use is made of knowledge acquired in high school during military service and in some cases a civilian profession is acquired during that period, in most cases military service leads to the obsolescence of vocational knowledge acquired in high school and makes the transition to employment more difficult in the absence of additional vocational training and career guidance.

The goal of this discussion is to shed light on the training, employment and wages of young people in Israel, with respect to their trends over time and in comparison to other countries, and to present some of the relevant models available to policy makers. This includes an analysis of the school-to-work transition process and its various stages.

### Characteristics of young workers

Figure 2.3 shows that the rate of employment among individuals aged 28–33<sup>17</sup> who lack any post-secondary education has declined during the last 12 years. The figures



<sup>16</sup> The public debate also focuses on vocational training in the high school stage. See, for example, Ruby Natanzon and Roi Levi, “Recommendations for the creation of a vocational training model in Israel”, December 2010. They mention the intention of putting greater emphasis on post-high-school vocational training.

<sup>17</sup> This age group was chosen for the analysis since human capital is still being accumulated at earlier ages. In addition, the size of earlier age groups is unclear due to issues of military secrecy regarding the number of individuals serving in the army.

<sup>15</sup> “Improving School to Work Transitions”.

Table 2.2 Employment and training of Israelis aged 28–33

	Jewish men <sup>a</sup>		Jewish women		Arab men		Arab women	
	Up to 12 years of schooling	More than 12 years of schooling	Up to 12 years of schooling	More than 12 years of schooling	Up to 12 years of schooling	More than 12 years of schooling	Up to 12 years of schooling	More than 12 years of schooling
Share in category	41.3	58.7	33.4	66.6	72.1	27.9	67.2	32.8
Rate of employment	70.5	84.6	60.2	82	79.3	85.2	15.4	65.8
Average wage	7,186	10,542	4,359	7,043	5,420	6,089	2,705	4,823
Last place of study (breakdown in percent):								
Elementary or junior high school	5	-	5	-	30.5	-	31	-
Vocational or agricultural high school	51	-	35	-	10.5	-	7	-
Academic high school	44	-	60	-	59	-	62	-
Non-academic high school	-	25	-	25	-	40	-	32
Academic institution	-	75	-	75	-	60	-	68
Proportion who have taken a vocational training course								
	11.5	32.6	9.1	45.3	4	20	3	25

\* Calculations based on the Labour Force Survey for the years 1998–2009

<sup>a</sup> Apart from individuals whose last place of study was a yeshiva.

were calculated for Jewish men (excluding those whose last place of study was a yeshiva) since they have not displayed any major changes in employment behavior in recent years, in contrast to women and Arabs, for example.

Table 2.2 also compares the characteristics of young people who did not continue on to post-secondary education to those who did, according to a demographic breakdown. There are two main findings from the table: first, the employment of less-educated Jewish men is lower than that of similar Arab men; and second, very few of the less-educated group have taken any sort of vocational training course that could have facilitated their transition from school to work. In fact, those in the better-educated group have a greater tendency to take vocational training courses.

Jewish men: does not include the ultra-Orthodox. Calculation based on the Manpower Survey, apart from information on vocational training courses taken from the Social Survey.

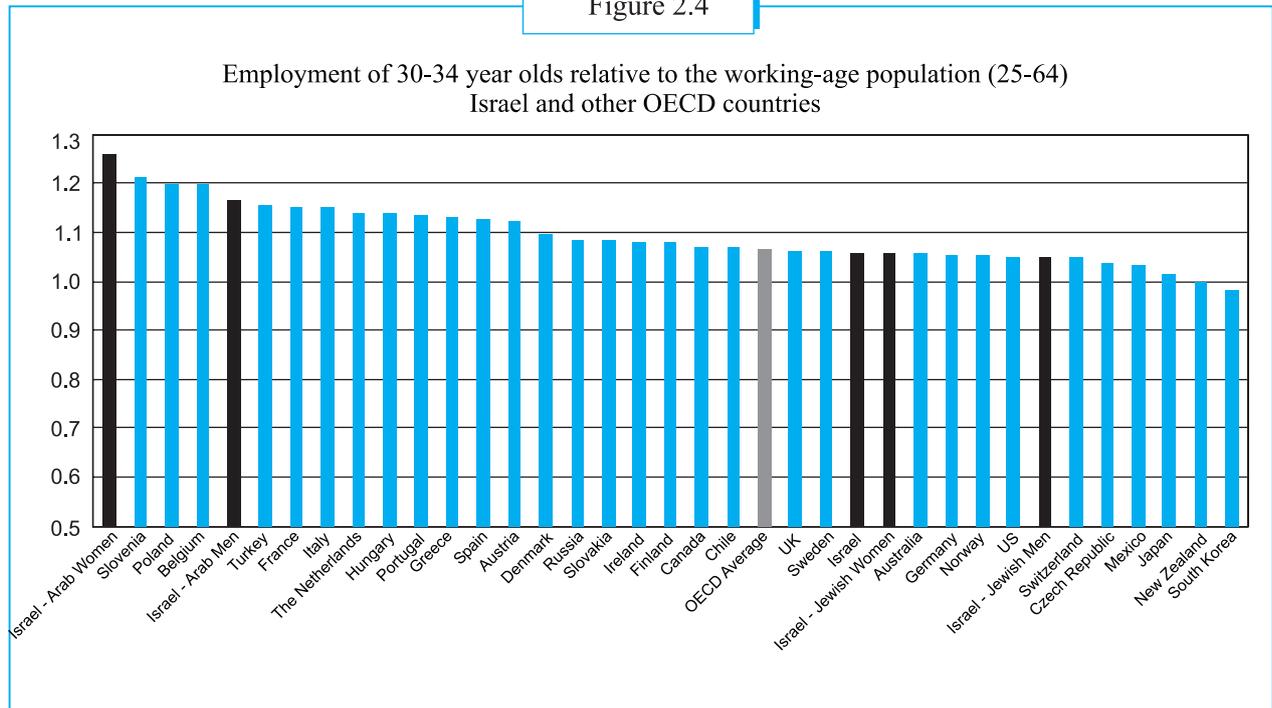
Figure 2.4 presents an international comparison of the rate of employment among young people relative to the rest of the population. It shows that the average employment rate of young people in Israel is similar to that of the OECD. It also reinforces the finding from Table 1, according to which the rate of employment of young Jewish men is lower than that

of other groups in Israel, such as women and Arabs. This can be explained primarily by the fact that Arabs and women tend to leave the labor market at an earlier age, for reasons specific to each population. Thus, Arabs tend to work in physically demanding jobs in which their effectiveness declines with age (Yashiv and Kassir, 2009) and women are characterized by intermittent employment due to periods of childrearing.

Another possible reason is that women serve less time in the army than men and Arabs do not serve at all. Thus, the long interim period in which Jewish men are neither learning nor working is liable to make their integration within the labor market more difficult. On the other hand, military service can provide life skills such as work ethic and discipline and in some cases soldiers participate in vocational training courses that make it easier for them to integrate within the labor market later on.

Tables 2.3 and 2.4 present data on the trends in total employees and relative wages in selected occupations that have either grown rapidly or are in decline, as well as the average years of schooling in those occupations. A comparison of the data to the breakdown of students studying in technological tracks in high school (Table 2.5) shows that the group studying computers constitutes a

Figure 2.4



large proportion of the students in technological schools, which reflects the situation in the labor market. In contrast, subjects related to service professions, which have become increasingly dominant in the labor market, are taught on only a small scale in the schools, while professions related to manufacturing, some of which are on the decline in the labor market, are in fact taught on a large scale. An example is the study of monitoring and control systems (one of the subjects in industrial mechanics), which is not a profession currently in high demand in the market. This only emphasizes the ongoing challenge to planners of vocational training in high schools and post-secondary frameworks.

The level of detail by occupation in the Income Survey is less than that in the Manpower survey (on which the number of employees is based) and therefore in some of the occupations the wage is the average for a broader group.

### Policy in Israel and the OECD countries

We will focus on two fundamental questions relating to the policy for training and employment of young people in Israel.<sup>18</sup> The first asks to what extent the government should be involved in the financing and administration of

vocational training in high schools and post-secondary frameworks. On the one hand, employers can meet the need for a skilled workforce by organizing vocational training courses on their own and indeed they are more familiar with the skills required by the labor market. On the other hand, the involvement of the government in vocational training may be necessary since the narrow profit motive that guides employers may produce a demand for training that is too specific or is only appropriate to declining industries or to industries that already have sufficient workers in a particular profession, where the goal is to increase supply and bring down wages.

The second question is to what extent emphasis should be placed on vocational training during high school as opposed to training just prior to entering the labor market and on-the-job training. In most countries, the answer to this question can be seen in the large scale of vocational training and acquisition of experience during high school. This is not the case in Israel, however, where military service delays the entry of many high school graduates into the labor market. One of the main justifications for training and acquiring vocational experience in high school is that they open a window to the working world, particularly for students who have difficulty academically and are on the verge of dropping out of the school system. On the other hand, a specific professional skill is not sufficient in a world of rapid technological progress, which calls for tools that can

<sup>18</sup> The discussion of these questions is based to a large extent on an OECD policy paper: "Learning for Jobs", Synthesis Report of the OECD Reviews of Vocational Education and Training, 2010.

Table 2.3 Growing occupations among 28–33 year olds<sup>a</sup>

Occupation	Number of employees			Relative wage		Years of schooling
	1998	2008	Difference	1998	2008	
Computer technicians and programmers	8,077	17,065	8,988	2.3	2.3	15.4
System analysts and computer science academic professionals	812	5,445	4,632	1.3	1.2	16.6
Salesmen and sales consultants	6,547	10,757	4,210	1.5	1.4	13.6
Social and community counselors	1,004	4,382	3,379	1.1	1.2	14.1
Food service workers	1,434	4,582	3,148	0.9	1.1	12.7
Warehouse workers	4,206	7,038	2,833	1.1	1.1	11.9
Computer engineers	2,676	5,246	2,569	2.3	2.8	17.1
Travel agents, insurance agents and advertising	1,290	3,851	2,561	1.1	1.1	13.3
Electrical and electronic engineers	2,581	5,046	2,466	1.7	1.8	16.9

\*The level of detail by occupation in the Income Survey is less than that in the Labour Force survey (on which the number of employees is based) and therefore in some of the occupations the wage is the average for a broader group.

<sup>a</sup> Occupations in which the number of employees has grown and the relative wage is high or is characterized by an upward trend.

 Table 2.4 Occupations in decline among 28–33 years olds<sup>a</sup>

Occupation	Number of employees			Relative wage		Years of schooling
	1998	2008	Difference	1998	2008	
Secretaries	14,241	12,151	-2,090	0.9	0.8	13.1
Practical nurses	2,915	1,129	-1,786	1.3	1.2	14.5
Floorers	2,007	664	-1,343	1	0.9	11.3
Civil engineers and technicians	1,529	664	-865	1.1	0.8	14.2
Police and detectives	4,253	3,453	-801	1.3	1	12.4
Printing workers (general)	1,768	1,062	-706	1.3	1.2	11.7
Furniture carpenters	1,625	1,129	-496	1	0.9	11.8
Mechanical engineers	1,386	930	-456	1.3	1.1	12.5
Concrete and non-metallic mineral workers	1,004	598	-406	0.9	0.5	11.1

\*The level of detail by occupation in the Income Survey is less than that in the Labour Force survey (on which the number of employees is based) and therefore in some of the occupations the wage is the average for a broader group.

<sup>a</sup> Occupations in which the number of employees has declined and the relative wage is low or is characterized by a downward trend.

Table 2.5 Proportion of students in selected technological tracks  
(Grade 12 students in 2011)

Specialization	Proportion of students
Programming and system analysis	14.8
Design	12
Human resources management	10.7
Accounting	8.7
Communication systems	8
Electronic communication	6.5
Monitoring and control systems	5.1
Biotechnology systems	4.9
Computer-assisted planning and design	2.6
Mechatronics	2.4

Source: Department of Education, Information and Technology Branch.

be used in the acquisition of additional skills or a change in profession as part of post-secondary and on-the job training. Therefore, vocational training in high schools should be on a high level and have up-to-date content, in order for it to also provide basic skills that can be applied in various types of employment (such as teamwork, communication skills, discipline, work ethic, problem solving, initiative, information gathering ability, etc.), with the goal of achieving employment flexibility. Recently, steps have been taken to increase the scope of training during high school although less emphasis is being placed on post-secondary vocational training courses and policy regarding employment guidance for young people is almost non-existent.

The Ministry of Education recently defined the following targets: increasing the proportion of students in technological education from 30 to 40 percent (which is similar to the average in the OECD countries), increasing the proportion of engineers (the Tov Project) and increasing the proportion of students that receive practical work experience during high school (“Launch into Industry”). On the other hand, the public expenditure on vocational training has dropped sharply over the years and as a result the vocational training system is less effective, particularly for young people making their initial entry into the labor market.

In addition to the policy for vocational training, consideration should also be given to the transition from school to work or, in the case of many young people in Israel, from the army to the labor market. As part of the Maftaich program for integrating the ultra-Orthodox into

the labor market, a diagnosis is made of an individual’s abilities and skills and according to the results he is referred to workshops on integrating in the labor market, high school completion courses, vocational training, higher education or employment. Such a model does not exist for the general population and is worth considering.

### Three Years since the Introduction of the Earned Income Tax Credit\*

- During the three years since the passing of the Earned Income Tax Credit Law,<sup>19</sup> there has been a significant increase in the number of eligible individuals, the number of actual recipients and the amounts paid out. This primarily reflects the extension of the law in its third year, to cover mothers with children up two years old, on a countrywide basis.
- Most of the payments (80 percent) were made to weaker segments of the working population that are in the two lowest income quintiles. The largest payments per standard individual were made to recipients in the lowest income quintile.
- The proportion of eligible individuals who actually request a credit has not changed significantly during the three-year period and has remained around 45 percent. In the third year of the law, this proportion was higher in the areas where the law was in effect throughout the entire period than in the areas where the law was first implemented.
- Due to changes in legislation, the law was temporarily cancelled for most eligible individuals in the “combined-program areas” during the last eight months of 2010. Unless the law is amended this may lead to a sharp drop in the number of credit recipients and in the average amount paid out, and may reduce the incentive to work provided by the law.

The Earned Income Tax Credit (EITC) Law, which provides a subsidy to low wage earners, went into effect in 2008. The law was implemented in 2008 and 2009 (during which payments were made for the months worked in 2007 and 2008) in a selected number of areas (hereafter: the “combined-program areas”).<sup>20</sup> At a later stage (in 2010 for

\* Thanks to Israel Tax Authority-Shaam (automated data processing system) employees who helped a lot in providing the data.

<sup>19</sup> The original name of the law was the Negative Income Tax Law, which was changed to the Earned Income Tax Credit Law in 2010.

<sup>20</sup> The cites in which the law went into effect: Jerusalem, Ashkelon, Sderot, Nazareth, Nazareth Illit, Ein Mahel, Baka-Gat, Mishmarot, Ein Iron, Arara, Kfar Pines, Kfar Kara, Or Akiva, Hadera, Pardes Hana-Karkur, the Sama Region (Muawiya, Barta and Ein a-Sala) and Netanya.

work months in 2009), the law was extended to working mothers<sup>21</sup> with children up to the age of two nationwide. The law focuses on working families with children, and on workers aged 55 and over, who earn between NIS 1,920 and NIS 6,237 on average per month.<sup>22</sup> The amount of the monthly credit is calculated according to months of work, wage level and family composition and can reach up to NIS 440 (for eligible individuals with three or more children). For families with two eligible individuals, the maximum monthly credit can reach NIS 880. Payment is made in the subsequent year and requires that the worker files a request for payment.<sup>23</sup>

This survey examines the trends in the eligible population, in the takeup rate, actual credit payments and the impact on the economic welfare of recipients during the first three years of implementation.

#### a. Eligibility<sup>24</sup>

##### Description of the eligible population

The number of potential recipients (workers who according to the Tax Authority are eligible for the credit) grew from 64 thousand in the first year of implementation to about 103 thousand in the third year. The increase was a result of the extension of eligibility to the self-employed starting from 2008 (which added 1,200 recipients)<sup>25</sup> and to mothers of children up to the age of two nationwide (an addition of about 34 thousand mothers of children residing outside the combined-program areas; see below for more details).

The size of the eligible population of salaried workers living in the combined-program areas (which can be compared over the years) remained stable during the period 2007–9 at a level of between 64 and 68 thousand. This population was

<sup>21</sup> Children who had not reached two years of age during the tax year. This also included single-parent families in which the father is the head of the household.

<sup>22</sup> For families with one or two children and individuals aged 55 or over, the upper wage threshold is NIS 5710. The ceiling of NIS 6237 applied to eligible individuals with three or more children.

<sup>23</sup> For further details, see “The Negative Income Tax – Results of the First Year of Implementation”, Bank of Israel, Discussion Paper 6.2010 at <http://www.bankisrael.gov.il/deptdata/neumim/meum358h.pdf>.

<sup>24</sup> The data on the population of eligible workers during the period 2007–09 is based on macro data obtained from the Tax Authority. The more detailed analysis was carried out on a random sample that consisted of 10 percent of salaried workers, based on Form 126 which is submitted to the Tax Authority by employers. Data on eligibility, amounts paid and takeup, as well as data from the Population Registry, was added to the database.

<sup>25</sup> There was no estimate made of potential eligibility among the self-employed.

characterized by employment stability during the five years prior to the law and a relatively stagnant wage level in the vicinity of the minimum wage.<sup>26</sup> The employment stability of eligible individuals over time explains the continuity of eligibility among most of this group since the introduction of the credit. Thus, about 60 percent of those eligible in 2008 were also eligible in the preceding year. Among the new eligible individuals, about one-fifth had not worked in the previous year. Of those who had worked for two consecutive years, about half became eligible as a result of reaching the eligible age (23 for parents and 55 for mature individuals) or due to the birth of a child, with the other half becoming eligible due to changes in their wage level (with about one-third becoming eligible because their wage rose above the minimum threshold). The monthly wage of newly eligible individuals, who had not worked in 2007, was significantly lower than that of individuals who were eligible in the previous year as well, and of newly eligible employees who had worked in 2007 (Table 2.6). The proportion of Arabs (including residents of East Jerusalem) grew from 28 percent of the already existing eligible individuals to 34 percent of eligible individuals who joined the workforce in 2008.

An examination of the eligible population residing outside the combined-program areas is possible only for the 2009 year of eligibility, the first year in which the program was implemented outside the combined-program areas. During that year, about one-third of all eligible individuals, who consisted of mothers of children up to the age of two, lived outside the combined-program areas. These working mothers had a lower monthly wage (by about 7 percent) they worked for fewer months and were eligible for the smaller credits (by about 6 percent) than other eligible individuals. The representation of population groups such as female immigrants and single mothers in the population of eligible individuals outside the combined-program areas is similar to their proportion of eligible mothers with children up to the age of two within the combined-program areas (Table 2.7).

##### Expected changes in the terms of eligibility

The Earned Income Tax Credit Law specified that until the law is applied nationwide in 2010 (on the basis of income in 2009), it will be applied in the same areas as the Lights to Employment program (welfare-to-work program). This extension of the law was postponed until 2012 (on the basis of income in 2011). In May 2010, the Lights to Employment program was discontinued and as a result the legal basis for implementing the EITC program in the combined-program

<sup>26</sup> For further details on the employment history of potential recipients, see “The First Year of Implementation of the Negative Income Tax Program”, Bank of Israel, Recent Economic Developments, 126, 2010.

Table 2.6 Comparison of salaried eligible individuals in the combined-program areas according to period of eligibility, 2008

Characteristics	Eligible individuals in 2008			
	Eligible individuals who were also eligible in the previous year <sup>a</sup>	New eligible individuals who worked in 2007	New eligible individuals who did not work in 2007	All eligible individuals
Monthly wage in NIS	4,023	4,172	3,507	4,034
Number of work months	11	10	7	10
Annual wage in NIS	43,529	42,761	23,372	41,640
Arabs (excluding East Jerusalem), percent	14	11	16	13
Arabs in East Jerusalem, percent	14	9	18	13
Immigrants from the 1990s, percent	25	29	19	26
Ultra-Orthodox, percent	12	8	10	12
Single mothers as a percentage of total women	26	22	19	20
Total eligible individuals	35,799	22,140	5,061	63,000
Number of observations	3,402	2,104	481	5,987

<sup>a</sup> Eligible individuals during the 2007 and 2008 years of eligibility.

Table 2.7 Breakdown of eligible individuals residing outside the combined-program areas (2009 year of eligibility)

Population group	Number of eligible individuals	Percentage of total	Percentage in the combined-program areas <sup>a</sup>
Female immigrants	5,500	16	17
Single mothers	3,100	9	9
Eligible mothers with one or two children	19,600	58	59
Eligible mothers with three or more children	14,200	42	41
Number of eligible individuals	33,800		8,200

<sup>a</sup> Calculated as a percentage of total eligible mothers with children up to the age of two; average for the 2007 and 2008 eligibility years.

Table 2.8 Applicability of the EITC

Year of payment	Period for which payment is made	Definition of eligibility
2008	1–12 2007	Salaried workers in the combined-program areas
2009	1–12 2008	Salaried and self-employed workers in the combined-program areas.
2010	1–12 2009	Salaried and self-employed: all eligible individuals in the combined-program areas and mothers of children up to the age of two nationwide.
	1–4 2010	Eligible individuals in the combined-program areas apart from mothers of children up to the age of two.
2011	1–12 2010	Mothers of children up to the age of two nationwide.
2012	1–12 2011	Salaried and self-employed workers nationwide.

areas was cancelled until nationwide implementation. In contrast, the eligibility of mothers with children up to the age of two, which is based on the Law for Assistance to Working Mothers (the “Nannies Law”),<sup>27</sup> is not restricted by area of residence (Table 2.8).

The temporary cancellation of the law in the combined-program areas will significantly reduce the size of the annual credit and will also reduce the number of recipients. The credit is paid out according to months worked during the eligibility year and as a result of the cancellation the calculation will only include the first four months of 2010. Thus, the average annual credit per recipient in the combined-program areas (not including mothers of children up to the age of two) will be reduced by about two-thirds. Since the takeup of eligibility is positively correlated with the amount of the credit, it is expected that the takeup rate among eligible individuals in the combined-program areas (apart from the mothers of children up to the age of two) will decline to 30 percent and that the overall takeup rate will decline to 35 percent, a drop of about one-quarter in the number of credit recipients.<sup>28</sup> In addition, the lack of consistency in the implementation of the law has harmed

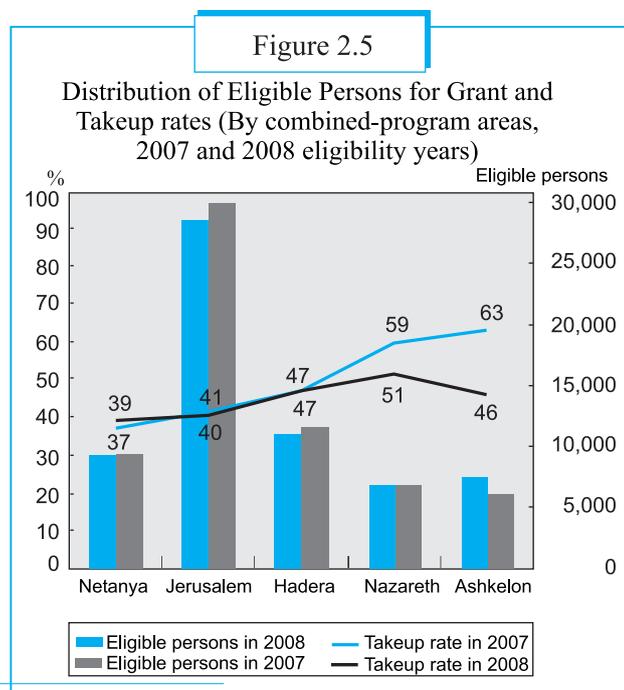
its credibility among potential recipients, who belong to weak populations groups with respect to level of education and earning ability. As a result, the takeup rate will also be adversely affected in the future and positive changes that the law is meant to bring about in the behavior of weak groups in the labor market will be delayed. The elimination of the gap in the applicability of the law is needed to prevent this negative result.

**b. Utilization of eligibility to an EITC**

**Takeup rate**

The takeup rate has been stable over the years at about 43–45 percent (Table 2.9).<sup>29</sup> In 2009, the rate was lower in areas where the law was being implemented for the first time relative to the combined-program areas. This gap is the result of a lower level of awareness relative to areas in which the law had already been in effect for three consecutive years. It is also the result of the unique characteristics of eligible individuals living outside the combined-program areas (i.e. mothers of children up to the age of two), such as the smaller-sized credit they are eligible for, which reduces the probability of utilization. In 2009, the average credit remained basically unchanged at a level of NIS 2,820, following an increase of 9 percent in 2008.

The analysis of eligibility utilization over the years (in the combined-program areas; salaried employees only) reveals a high level of variation in the takeup rates between various groups and between geographic areas. Figure 2.5 presents the takeup rates in the combined-program areas during the first two years of the law. In most of the areas, the takeup rates remained unchanged in the second year, apart from Nazareth and Ashkelon where the rate was especially high due to a information dissemination activity about the program in the first year. In Nazareth, a project was jointly implemented by the Yedid organization, the Agam-Mehalev Company (which implemented the “Lights to Employment” program in that area) and the Tax Authority. The Tax Authority staff provided guidance to the Yedid volunteers and the employment counselors of Agam-Mehalev with regard to the details of the program. In Ashkelon, which was hit by missiles during operation Cast Lead, a publicity campaign was carried out by the local authorities with regard to eligibility for various assistance programs, including



<sup>27</sup> According to this law, working mothers receive an extra credit point for every child up to the age of five starting from 2012. Until then, as compensation, the EITC Law was extended nationwide to mothers with children up to the age of two.

<sup>28</sup> According to a simulation based on work months and the amounts of the credit paid in the 2007 and 2008 eligibility years. The takeup rate among those eligible for a credit of NIS 950 was 30 percent. The estimate for those eligible according to the “Nannies Law”, which is based on data for 2009, is 46 percent in the included areas and 42 percent in other areas.

<sup>29</sup> The takeup rate is calculated (for salaried workers only) as the ratio between the number of credit recipients to the number of potential recipients. The estimate of potential recipients is calculated on the basis of the Tax Authority database which includes the reports by employers of wage payments made to salaried workers. The database does not include income data for the self-employed and therefore their potential eligibility was not estimated.

Table 2.9 Eligibility for the credit and its utilization, 2007–09

Year of eligibility	Eligibility	Number of eligible individuals	Total recipients	Of the recipients: self-employed only	Takeup rate <sup>a</sup> in percent
2007	Combined-program areas: salaried employees	64,000	28,800		45
2008	Combined-program areas: salaried employees and self-employed	64,000	28,063	505	43
2009	Combined-program areas + mothers of children up to the age of two nationwide	102,600	46,477	1,222	45
2009 data according to areas					
2009	Combined-program areas only	68,800	31,970	*843	46
2009	Other than the combined-program areas	33,800	14,507	*379	42

<sup>a</sup> Calculated as the ratio of total recipients (excluding the self-employed) to total eligible individuals (excluding the self-employed) which consist of actual recipients and potential recipients (according to the Tax Authority estimate) who did not submit a credit request. The estimate was calculated for salaried employees only.

\* In the absence of accurate data, the calculation was made according to the weight of each group in total actual recipients.

the EITC. The results in the second year demonstrate the importance of repeating activities to disseminate information about the program each year, at least during the initial stages of the law’s implementation.

There are groups with relatively higher takeup rates: the ultra-Orthodox, Arabs (not including residents of East Jerusalem), single-parent families and public sector employees (Table 2.10). The high takeup rates among the ultra-Orthodox and Arabs (not including residents of East Jerusalem) can be partially explained by the relatively large size of the credit (which is positively correlated with

Table 2.10. Takeup rates according to group, percent

Group	Eligibility year	
	2007	2008
Overall takeup rate	45	43
Arabs in East Jerusalem	26	32
Arabs outside of East Jerusalem	50	47
Workers in the public sector	58	48
Long-standing citizens, non-ultra-Orthodox Jews	45	42
Immigrants from the 1990s	48	43
Ultra-Orthodox	59	55
Single-parent families	57	53

the probability of utilization ) that they are eligible for (as families with three or more children). Single mothers are eligible for a large variety of benefits and thus have greater experience in exploiting them, which applies also in the case

of the EITC. One of the reasons for the high takeup rate among workers in the public sector is the orderly reporting by their employers to the tax authorities, which is the basis for eligibility.<sup>30</sup> The lowest takeup rate can be found among Arabs residing in East Jerusalem, despite the increase for this group during the second year of the law.

### c. Payment of the credit and its impact on welfare

#### Payment of the credit

The average amount of the annual credit grew from NIS 2,560 in the first year of the law’s implementation to NIS 2,820 in the third, a real increase of 5.5 percent.<sup>31</sup> The total amount of credits paid out rose from NIS 74 million for the 2007 year of eligibility to about NIS 131 million last year (Table 2.11). Larger amounts were allocated to the 2011 budget reserve for the implementation of the law (amendment 13-01-05-22) which are sufficient for the funding of the program on a nationwide basis according to the original target date (i.e. 2010 which was deferred to 2012). The estimated cost of applying the law on a nationwide basis is about NIS 400 million (assuming a 45 percent takeup rate, similar to the

<sup>30</sup> For further details on the factors that influence the probability of takeup , see: “The Negative Income Tax: Results of the First Year of Implementing the Law”, Bank of Israel, Research Division Discussion Paper, 6.2010 at <http://www.bankisrael.gov.il/deptdata/neumim/neum358h.pdf>.

<sup>31</sup> The average change in the CPI during 2009 (during which most of the payments for work in 2007 were made) relative to the average CPI during the period of the credit’s payment for work in 2009 (7.2010–4.2011).

Table 2.11 Annual cost of the law and its budgeting

Eligibility year	Budget year	Total credits paid for the eligibility year in millions of NIS	Budget reserves (amendment 13-01-05-22) in millions of NIS	Actual budget expenditure in millions of NIS
2007	2008	74	116	35
2008	2009	78	198	126.6
2009	2010	131	489	113.8
2010	2011		400	

actual rate until now), which is approximately the amount allocated to the 2011 budget reserve.<sup>32</sup>

The gap between total credits paid out for an eligibility year and the budget expenditure is a result of the fact that the credit is paid out in a number of equal installments<sup>33</sup> every three months and of the slow processing of claims that require clarification (primarily because the employer did not submit Form 126 to the Tax Authority).<sup>34</sup> The slippage of payments to the year following the year of the request submission as defined in the law (i.e. the year subsequent to the year of eligibility) was particularly common for the 2007 eligibility year, when one-time approval was given to submit claims until the end of January 2009.

### The impact on welfare<sup>35</sup>

Most of the credit payments (65 percent) were made to weaker sectors of the population: Arabs, immigrants and the ultra-Orthodox (Table 2.12). The vast majority (87 percent) of the credits were paid to families with children; primarily to families with the three or more children. The amounts of the credit paid to Arabs and the ultra-Orthodox were particularly high due to the relatively large proportion of families with three or more children in these groups.

<sup>32</sup> The use of the reserve is conditional on meeting the target for tax collection that was assumed in the budget. This condition has apparently not been an effective constraint in 2011.

<sup>33</sup> The number of payments is dependent on the date the claim was submitted and varies between 2 and 4.

<sup>34</sup> The employer must submit this form by the end of March for the previous year but in many cases an extension was granted. In situations where the form was not submitted, approval was given for the worker to present Form 106, which the employer must submit for each worker and which contains identical information.

<sup>35</sup> Only the improvement in welfare as a result of the payment of the credit was considered, without taking into account changes in behavior. The disaggregated data we possess covers only the first two years of implementation, during which behavioral changes are not expected to have occurred (the law was passed in December 2007 and most of the credits were paid in January 2009).

A large majority (77 percent) of credit recipients earn very low incomes and are located in the bottom two quintiles of salaried workers according to labor income per standard individual in the household (Table 8). These recipients, most of whom are parents of children, received 80 percent of the total credits paid out. The poor recipients<sup>36</sup> in the lowest quintile received larger credits, both in absolute terms and per standard individual.

Table 2.12 Payments of the credit according to group (salaried workers)

	Amount of annual credit in NIS	Total payments in thousands of NIS	Proportion of total payments in percent <sup>a</sup>
All recipients	2,780	75,155	
Recipients with three or more children	3,390	36,359	48
Recipients with one or two children	2,363	28,838	39
Arabs in East Jerusalem	3,118	7,721	9
Arabs outside of East Jerusalem	2,967	11,259	15
Immigrants from the 1990s	2,639	18,686	25
Ultra-Orthodox	3,271	11,926	16
Single-parent families	2,557	8,508	12
55+	2,445	9,719	13

<sup>a</sup> Average for 2007–08.

<sup>36</sup> Our database includes income from labor only, which does not enable a calculation of the incidence of poverty among the recipients. However, according to the terms of eligibility for the EITC, the recipients have almost no other income (apart from transfer payments) and if there is other income then according to the law it is fully offset against the amount of the credit. Therefore, it is reasonable to assume that credit recipients in the lowest quintile, with an average income from labor per standard individual of about NIS 800 (even taking into account transfer payments), are still under the poverty line, which during the 2008 year of eligibility was NIS 1,742 per standard individual.

Table 2.13 Distribution of credit recipients according to quintile of labor income per standard individual for salaried workers<sup>a</sup>

Quintiles of labor income per standard individual	Average monthly income per standard individual in NIS	Proportion of credit recipients (percent)	Monthly credit as a percentage of labor income (calculated per standard individual in percent)	Annual credit in NIS	Total credit payments in thousands of NIS	Proportion of total payments in percent	Proportion of recipients with children in percent
1	801	39	9	3,074	32,553	44	96
2	2,095	38	6	2,604	26,716	36	85
3	3,507	19	3	2,381	11,845	16	75
4	5,586	4	2	2,167	2,580	4	32
5	13,087	-	-	-	-	-	-

<sup>a</sup> 2008 eligibility year, salaried workers only.

## Diary of Events: January to April 2011

Month	Date	Event	Details
January	1	The upper threshold of salaries for which National Insurance taxes will be paid, will be eight times the average salary in 2011, and seven times the salary in 2012.	The upper threshold of salaries for which National Insurance taxes are to be paid was meant to return to five times the average salary in 2011, and has now been changed in the Economic Arrangements Law for 2011-2012.
	1	Rise in income tax brackets	The 10 percent bracket will be raised to NIS 5,070, the 14 percent bracket to NIS 8,660, the 23 percent bracket to NIS 14,070, the 30 percent bracket to NIS 21,240, and the 33 percent bracket to NIS 40,230. The rise in the brackets is a result of linkage to the CPI, except for the 10 percent bracket, which was raised by NIS 400 in the Economic Arrangements Law for 2011-2012, over and above the linkage to the CPI.
	2	The Bank of Israel fined Bank Hapoalim NIS 7.5 million.	The background to the fine is the bank's conduct in the Hayarkon Branch affair, which was exposed in 2005, in which the police discovered a suspected violation of the Prohibition on Money Laundering Law on a scale of hundreds of millions of dollars.
	14	Fall of the regime in Tunisia and the start of a wave of protests in the Arab world.	At the end of 2010 demonstrations broke out in Tunisia against unemployment, economic distress, and oppression. After weeks of mass demonstrations, the President, Ben-Ali, left the country. This development began a wave of protest in the Arab world, which led, among other things, to the fall of the Mubarak regime in Egypt.
	16	The Fitch credit rating agency lowered Greece's credit rating.	The current credit rating reflects a level of "junk bonds". The downgrading was explained by the claim that Greece's level of public debt is too high, and that the country will therefore find it difficult to absorb shocks.
	19	The Bank of Israel imposes an obligation to report foreign currency transactions.	The Bank of Israel announced that it will demand individual reporting of foreign currency transactions in excess of 10 million dollars a day, as well as on <i>makam</i> and bond transactions in excess of NIS 10 million a day. The Bank's announcement applies equally to Israeli and foreign investors. This step is intended to cool the foreign currency market, and prevent appreciation of the shekel. Furthermore it is believed that the supervision will make it possible to show an improvement in the monetary policy targets and foreign currency policy, without harming the inflation targets.

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	20	The Bank of Israel will impose liquidity obligations on foreign currency transactions of foreign residents.	The Bank announced that it will impose a liquidity obligation of 10 percent on forward transactions and on swap transactions, similar to the announcement regarding the obligation to report foreign currency transactions. This decision is also intended to reduce the profitability of these transactions, and thereby cool the foreign exchange market.
	23	The business sector's debt rose by NIS 18 billion from the beginning of the year.	Bank of Israel data show that the business sector's debt balance grew in November 2010 by about NIS 7 billion, and that in 2010 the sector issued NIS 23.3 billion of corporate bonds.
	24	The Bank of Israel interest rate was raised by 0.25 percentage points, to 2.25 percent.	Following four months in which the interest rate remained unchanged, the Bank decided to increase it as part of a gradual process of returning the interest rate to a "normal" level that is mainly intended to keep inflation within the target range.
February	4	Contrary to forecasts, unemployment in the United States decreased to 9 percent.	Unemployment fell sharply from 9.4 percent in December to 9 percent in January 2011.
	7	A rise of 11 percent in the volume of mortgages in 2010, to NIS 237 billion.	In December alone, the volume of mortgages held by the public grew by NIS 2.25 billion, despite the steps taken to restrict the availability of mortgages.
	12	Fuel tax is reduced by 23 agorot per liter, as part of a package of public benefits.	In addition, the package includes reducing the cost of public transportation in the periphery by 10 percent, and reducing the cost of the monthly travel pass throughout the country. It was also decided to increase the low-tariff component of water accounts in order to reduce the amount charged for average consumption. The government also supports the agreement between the employers and the Histadrut (General Federation of Labor) to raise the minimum wage in the private sector.
	18	The Ministry of Finance and the Knesset Economics Committee agreed on concessions for young couples purchasing an apartment.	It was agreed that the tax exemption on a first apartment will be raised from its current NIS 1.14 million to NIS 1.35 million. This step will enable about 8,000 additional young couples a year to purchase an apartment without having to pay tax, and will reduce the cost for all first-time apartment purchasers.
	21	The planned income tax reduction for 2012 has been frozen.	The Knesset passed at first reading the freeze on the planned lowering of income tax for 2012. The freeze is meant to apply to the three upper deciles. This step is intended to finance the government's decision to reduce the tax on gasoline by 23 agorot per liter.

	21	The Bank of Israel interest rate was raised by 0.25 percentage points, to 2.5 percent.	This is the second consecutive month that the Bank of Israel has raised the interest rate in the economy, and the fifth time in the past twelve months. Supporting the decision were expectations of inflation, the encouraging growth figures, high apartment prices, and the expectation that the United States would bring forward the date on which it would start raising interest rates.
March	2	It was agreed that the minimum wage would be raised to NIS 4,300.	As agreed between the Ministry of Finance and the Histadrut, the minimum wage in the economy will be raised from NIS 3,850 to NIS 4,300 in two stages—in July 2011 and October 2012. In addition, the salaries of 350 thousand public-sector employees will be raised by 1 percent, to 7.25 percent.
	7	The Moody's credit rating agency downgraded Greece's debt rating by three levels.	In the credit agency's assessment, the means of fiscal consolidation and the structural reforms required to stabilize the debt indices in the country are still very ambitious and open to significant implementation risks.
	10	The Moody's credit rating agency downgraded Spain's credit rating.	The agency downgraded Spain's credit rating and warned of further downgradings, claiming the government's plans to heal the banking sector would cost more than expected, and would add to the country's heavy debts.
	10	Purchases of apartments by investors fell by 34 percent in January.	It further emerges from Ministry of Finance data that the proportion of investors in the market fell to only 25 percent in January. The number of apartment-purchasing transactions fell in January by 19 percent compared with December.
	11	An earthquake with a magnitude of 8.9 on the Richter Scale in northern Japan.	The earthquake, regarded as the strongest to have hit Japan in the past 140 years, and the tsunami that occurred in its wake, caused a severe humanitarian disaster in the north of the country, and the emission of radioactivity from some of the nuclear reactors. The disaster has both short- and medium-term ramifications, both at the domestic level and on markets worldwide.
	16	The US Federal Reserve maintained the interest rate at 0.25 percent.	In addition, as expected, the Fed left unchanged its \$600 billion quantitative easing program. The Fed responded to the sharp increase in commodity prices by saying that "long-term inflation forecasts have remained stable".
	18	The United Nations Security Council approves enforcement of the air embargo on Libya.	The steps were approved in order to protect citizens throughout the country from attacks by Gaddafi's forces. These events contributed to the escalation of oil prices, despite the fact that Libya produces only one percent of global output.
	29	The European Central Bank will provide 60 billion euros to banks in Ireland.	This step is based on assessments that the results of the resilience tests conducted for the banks in the country will be worse than previously expected.

	29	The social workers strike ended.	After 23 days of strike by the social workers, the Social Workers Union and the Ministry of Finance reached agreement on ending the strike. As part of the agreement, the social workers will receive, among other things, a 22-percent salary increase in several stages.
	29	The Bank of Israel interest rate was raised by 0.5 percentage points, to 3 percent.	The Bank of Israel surprisingly decided to raise interest by half a percentage, in order to deal with the increase in real-estate prices, and with the increase in the CPI.
	30	The Knesset ratified the law for taxing gas and oil.	<p>The legislation, which follows the conclusions of the Sheshinski Committee, raised taxes on gas production in Israel. The major change is the imposition of a new levy, called the “gas levy”, at a rate of 20-50 percent of the gas companies’ profits. The definitions in the law will apply to all the gas and oil fields that have not yet started production.</p> <p>Furthermore, as part of the law, a national investment fund will be established to oversee the use of the gas profits. The law stipulates that the fund will be managed by the Bank of Israel, which will be able to transfer some of its income to the state budget each year.</p>
April	7	Portugal has requested an economic rescue package.	Portugal is the third country in Europe to request worldwide economic assistance. The foreign minister admitted that his country needs assistance because of its massive debts and its difficulties in raising money in international markets.
	8	A further increase in the Bank of Israel’s foreign exchange reserves.	Bank of Israel data for the end of March show an increase of \$737 million compared with the previous period. Most of the increase is explained by the Bank’s profits on foreign currency. The reserves, therefore reached an all-time high of \$74.5 billion.
	11	Interest-rate developments worldwide.	<p>The ECB raised interest in the eurozone for the first time in three years, by 0.25 percent, to 1.25 percent. The interest-rate increase is due to a rise in inflation: in the past 12 months, the CPI in the euro area rose by 2.4 percent.</p> <p>In China, the high annual inflation rate of 4.9 percent led the central bank to raise the quarterly interest rate after six months to 6.31 percent.</p>
	18	The S&P rating agency threatened to lower the United States’ credit rating.	The agency left the credit rating at a perfect AAA, but lowered the forecast from “stable” to “negative”. According to the agency, the step is a result of expected medium- and long-term problems in the national budget until 2013.
	20	The Moody’s rating agency reduced the rating of the deposits of the five largest banks in Israel.	The agency attributes the downgrading of the deposits by one level to the low profitability of activity. However, in the wake of improvement in the economic situation, Moody’s upgraded the rating forecast for Bank Leumi, Bank Hapoalim, and First International Bank of Israel from negative to stable.

24	The Bank of Israel interest rate for May remained unchanged at 3 percent.	
26	The price of gold reached record heights in the wake of the weakening of the dollar.	The price of gold reached a record \$1,509 per ounce.
27	Further restriction on the variable-interest component of mortgages.	As part of the steps taken by the Bank of Israel to cool the housing market, the Bank announced that the variable-interest component of housing loans would be restricted to a third of the loan. The new directive is a continuation of the two previous steps adopted by the Bank in May and October 2010.
28	Fuel prices reach a new record.	The continuing rise in the price of a barrel of oil, in conjunction with the linkage of excise duty (fuel tax) to the last CPI, led to retail fuel prices reaching record levels: the price of a liter of 95-octane gasoline increased to NIS 7.62.

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