

Chapter 1

The Economy and Economic Policy

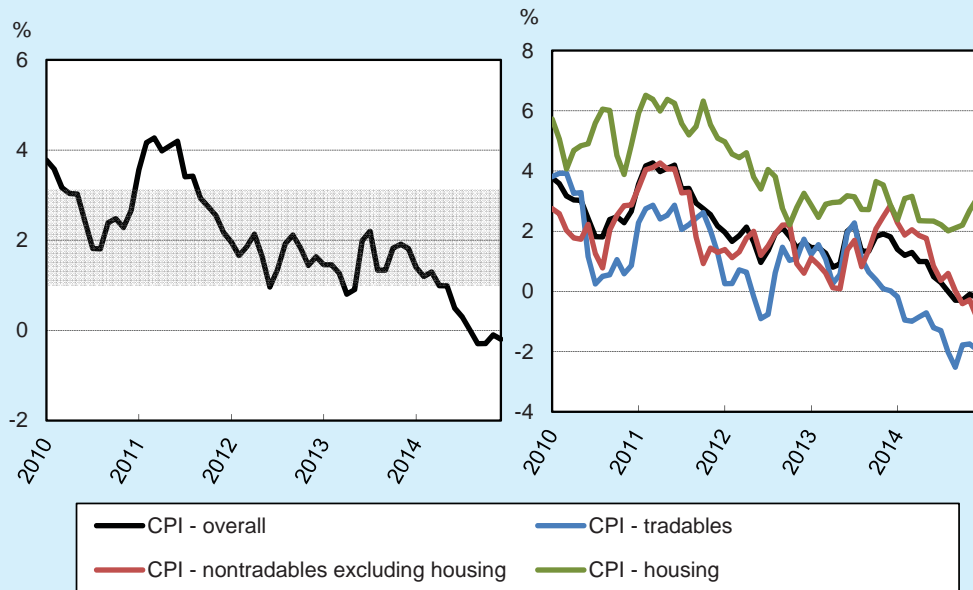
- GDP grew by 2.8 percent in 2014. Net of the effects of the start of natural gas production from the Tamar field and of Operation Protective Edge on activity, growth has been stable in the past three years at a relatively low rate of 2.5–3 percent. The continuation of the slowdown of growth in the vast majority of advanced economies is the main factor in the moderation of domestic growth in recent years. This slowdown affects the Israeli economy primarily through declines in demand for exports and in demand for domestic investment.
- Inflation in 2014 was –0.2 percent, below the lower bound of the inflation target range. It included the moderation of increases in prices of nontradable goods due to domestic supply factors, a sharp decline in oil prices, and continued declines in the prices of other tradable goods.
- The challenges faced by monetary policy in 2014 were to return inflation to within its target range, support real activity, and mitigate the forces for appreciation of the shekel while minimizing economic risks—as the monetary interest rate reached to near zero. The challenge is now common to many central banks. Some have lowered their monetary interest rates to negative levels, and several have used other tools in support of intensified monetary accommodation.
- In the past two years, fiscal policy has managed to reduce the structural deficit by raising tax rates (in 2013) and keeping within the expenditure ceiling. In 2014, the general government deficit was 2.6 percent of GDP and the central government deficit was 2.8 percent, consistent with the original budget program despite a steep increase in defense expenditure.
- Notwithstanding the relatively low growth of real activity and the reduction of the structural budget deficit, the unemployment rate continued to fall. This is credited to the flexibility of the labor market, manifested in 2014 by fewer hours worked per employed person and only a moderate increase in real wages even as inflation surprised to the downside.
- The trend of appreciation in the nominal effective exchange rate that began in 2008 continued in the first half of the year. In the second half, the shekel depreciated due to the reduction of the interest rate, the narrowing of the spreads between Israel's rate and those of the ECB and the Federal Reserve, appreciation of the dollar around the world, and continued purchases of foreign exchange by the Bank of Israel.
- Home prices and rents continued to rise. The stock of new homes for sale increased, affected by the wait for the Zero VAT program. Building starts remained stable at a high level and total activity in the construction industry moderated slightly as the year progressed.
- Total credit to the business sector remained virtually unchanged in 2014, continuing the trend of the past three years. In contrast, total household credit increased at a relatively high rate, marking a continuation of the reallocation of credit in the economy—some of which is structural.
- The discussion of the cost of living at the end of this chapter illustrates the concept's complexity. The findings indicate the possibility of a small upward deviation in the domestic price level. However, the upward deviation is significant in some industries, mainly due to natural and regulatory barriers that dampen competition.

1. MAIN DEVELOPMENTS

GDP grew by 2.8 percent in 2014.

Net of the effects on activity of the start of natural gas production from the Tamar reserve and of Operation Protective Edge, growth has been stable in the past three years at a relatively low level of 2.5–3 percent, reflecting mainly the ongoing slowdown of demand from abroad and its effect on exports and domestic investment. As growth stabilized at a low level, there was a marked decline in the inflation rate, and it is currently negative. This year, there was a notable decline in the price index of nontradable goods (excluding housing—Figure 1.1).

Figure 1.1
Consumer Price Index, Tradables and Nontradables, Rate of Change in the Preceding 12 Months, 2010–14

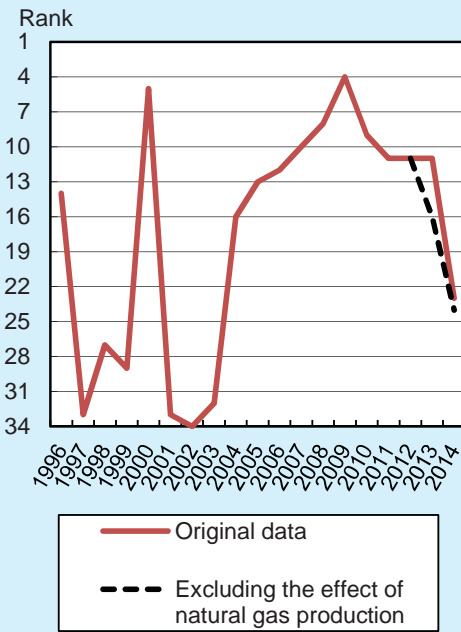


SOURCE: Based on Central Bureau of Statistics.

The continued rise in the employment rate and increases in private and public consumption helped per capita GDP to grow.

Per capita GDP growth was not strong compared with other OECD countries in 2014, after being in the upper portion of the distribution of this parameter among OECD countries in 2007–12 (Figure 1.2). This was due to a combination of foreign developments—foremost the slow and gradual emergence of many advanced economies from their acute crisis—and domestic developments including the slowing of investments in large infrastructure projects and in nonresidential construction. Concurrently, the rising employment rate and increases in private and public consumption helped per capita GDP to grow.

Figure 1.2
Per Capita Growth: Israel's Rank in OECD^a, 1996–2014



^a 1 = the highest rank, 34 = the lowest rank.
 SOURCE: Based on OECD data.

In an attempt to cope with the forces acting toward an extended slowing of activity—particularly the effect of the lengthy currency appreciation on the tradable sector and the declining inflation rate—the Bank of Israel lowered its short-term interest rate during the year to a historical low of 0.25 percent¹ and continued to intervene in the foreign currency market.² The rate cuts supported domestic demand and narrowed the spread between the Bank of Israel interest rate and those of the ECB and the US Federal Reserve, thereby also contributing to the depreciation of the shekel. With the short-term nominal rate falling to near zero, inflation also near zero, and a moderate GDP growth rate, policymakers—particularly those who determine monetary policy—were faced with an important challenge. This challenge is shared by many central banks, including those of small and open markets such as Israel

that are affected by developments in the eurozone and the US.

Twenty-six of the 34 OECD member states had an inflation rate below 1 percent in 2014 and thirteen of them (including Israel) experienced declines in the consumer price index. Several central banks responded to declining inflation rates by lowering their monetary interest rates to below zero, and a few wielded additional tools that supported the intensification of monetary accommodation. By so doing, they maintained real negative interest rates despite the decline in expected inflation. When an economy operates in a zero-inflation environment over time, low if not negative nominal and real interest rates exacerbate financial risks in several ways, all of which make investing in assets more appealing—as reflected in increases in the prices of stocks, bonds, and homes. Indeed, home prices in Israel have gone up by 90 percent in nominal terms since the beginning of 2008³, bond prices have increased by around 50

Low interest rates over time pose various risks to stability.

¹ At the end of February 2015, the rate was cut again, to 0.1 percent.
² Apart from foreign exchange purchases that were meant to offset the effect of natural gas production on the balance of payments.
³ The upward trend began in the middle of 2007, after a decade of protracted erosion in home prices.

percent⁴, and stock prices have risen at a relatively mild pace of about 20 percent, due to the lowering of growth forecasts in recent years (See Figure 2.1 and development of the forecasts therein).

The main goal of fiscal policy in the past two years was to reduce the structural deficit.

Alongside Israel's monetary policy, which operated in a below-target inflation environment, the main purpose of fiscal policy in the past two years was to reduce the structural deficit, which had been growing until 2012. This policy was predicated on two main factors: raising taxes and keeping expenditure within the prescribed limit. Thus, it applied some downward pressure on private consumption in the short term and allowed public consumption to continue supporting activity. Reducing the structural deficit is crucial: it supports lower bond yields, gives fiscal policy more maneuvering room for future years, and reduces the risk of a fiscal crisis. It is also necessary due to the lengthening of the business cycle and uncertainty about the size of the cyclical portion of the total deficit. This uncertainty reflects the limited ability of fiscal policy to support activity as the slowing part of the business cycle continues.⁵ In 2014, the general government deficit was 2.6 percent of GDP and the central government deficit was 2.8 percent, in line with the original budget program despite a large expenditure of NIS 7 billion on account of Operation Protective Edge. A decline in government interest payments that exceeded the forecast in the budget, the underperformance of several civilian expenditure items—particularly investment in transport infrastructure—and unexpectedly low inflation, which helped to reduce expenditure, are among the main factors that allowed the deficit target to be met despite the sharp increase in defense spending.

The appreciation trend that had been dominant for several years in the nominal effective exchange rate continued in the first half of 2014, followed by a sharp depreciation in the second half, partly due to the strengthening of the dollar abroad. The monetary interest rate cuts and, particularly, the narrowing of the spread between Israel's rate and those of other countries, along with continued purchases of foreign currency, managed for quite a few months to keep the continued appreciation pressures at bay (Figure 3.4). In early December, appreciation (in terms of the effective exchange rate of the shekel) resumed even though the dollar continued to appreciate abroad.

a. Real activity

The GDP growth rate has stabilized at a relatively low level in the past three years.

The GDP growth rate, net of the effect of the production of natural gas and Operation Protective Edge, accelerated slightly in 2014 relative to the previous year and resembled that of 2012. This was unlike many other advanced economies, in which per capita GDP was much higher than in 2012, mainly reflecting the intensity of the crisis that these economies had undergone and the beginning of their emergence from

⁴ The data on the rate of increase in bond prices pertain to the General Bonds Index, which includes short- and long-term bonds, government and corporate instruments, all types of indexation bases, capital gains, and coupon payments, and is calculated by the Tel Aviv Stock Exchange. The index of 5–10 year CPI-indexed government bonds rose by 70 percent during that time.

⁵ For discussion of this point, see Bank of Israel Annual Report for 2013, p. 20.

it. Thus, in 2014, for the first time in a decade, per capita growth in Israel was below the median among OECD countries.⁶

Growth in 2014, as in recent years, was powered by private and public consumption. The low real interest rates were an important factor in supporting private consumption. Another crucial factor was the labor market's response to the deceleration: a low unemployment rate and a moderate increase in wages. Thus the slowing of growth in household income was spread across the entire population, allowing consumption to be smoothed more easily at the macro level. Public consumption and private consumption increased at similar rates, helping per capita GDP growth to remain in positive territory.

Exports (excluding diamonds) grew by about 2.5 percent in 2014—faster than a year earlier but still relatively moderate, due to continued slowdowns in markets abroad and the severe negative impact on incoming tourism that resulted from Operation Protective Edge. Unlike most industries, tourism recovers slowly from security related events, requiring many months to rebound. Accordingly, the Research Department estimates that the negative impact to incoming tourism caused by Operation Protective Edge contributed –0.2 percentage points to the overall growth rate.

Real currency appreciation, which encumbers exports and encourages imports, is one of the channels through which the slowdown abroad affects the small and open Israeli economy. Since the beginning of the crisis, the growth rate of world trade has decelerated considerably. For this reason, combined with pressure generated by the appreciation, the growth rate of exports declined markedly and with it the pace of GDP growth. The clear signs of economic recovery in the US, together with the depreciation of the shekel in the last few months of 2014, gave exports a boost in the fourth quarter. Nonetheless, until the eurozone economies emerge from their crisis, Israel's exports and per capita GDP will not easily revert to the growth rates posted in the decade ending in 2008.⁷

The current account surplus in 2014 was \$9 billion, about 3 percent of GDP. The improvements in the current account in 2013–14 trace directly to the start of natural gas production at the Tamar field, which reduced the need for importing fuel, and to an improvement in the services account. The improvement in total investment contributed to an increase in the current account surplus in 2014 relative to 2013. The decline in global oil prices in the second half of 2014, if it persists, is likely to lead to continued growth of the current account surplus and to accumulation of assets abroad by the public. The approximately 50 percent decline in oil prices in the last few months of 2014 is expected to save the economy \$5 billion annually and to contribute directly to an increase in household disposable income and a decrease in production costs.⁸

⁶ The comparison relates to the 34 current OECD member states, some of which (including Israel) had not been members of the organization at the beginning of the comparison period.

⁷ A decline in the growth rate of Israel's labor force also impedes the economy's return to the growth rates that were posted in the decade ending in 2008.

⁸ For a discussion of the implications of the decrease in oil prices for the economy, see Monetary Policy Report number 42 for the second half of the 2014.

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The unemployment rate continued to decline this year and is at a low level.

The unemployment rate continued to decline this year and is at a low level.⁹ Several factors allow a decline in unemployment even with a slowdown in GDP growth. The main factor is the flexibility of the domestic labor market, which was reflected in 2014 by a slower increase in real wages and reduced hours worked per employed person. Consequently, unit labor cost is rising only moderately, allowing new employees into the labor market without an increase in the unemployment rate. In this context, it is of interest to note that the nominal wage per employee post responds almost immediately to developments in prices and activity; therefore, a downward surprise in consumer

Table 1.1
Main developments, 2009-14

	2009	2010	2011	2012	2013	2014
Mean population (million)	7.5	7.6	7.8	7.9	8.1	8.2
Nominal GDP (NIS billion, current prices)	812	871	925	992	1,049	1,087
Per capita GDP (NIS thousand, current prices)	109	114	119	125	130	132
Goods and services exports (\$ billion, current prices) ^a	63	73	81	85	86	87
Goods and services imports (\$ billion, current prices) ^a	58	69	83	85	83	84
Current account of the balance of payments (surplus, \$ billion)	8.0	7.9	3.9	2.1	6.9	9.0
Overall government deficit (as a percentage of GDP)	4.7	3.0	2.0	3.7	3.1	2.6
Public debt (as a percentage of GDP)	75.0	71.1	69.7	68.3	67.7	67.6
Employed Israelis (thousands)	3,054	3,159	3,252	3,359	3,450	3,556
Real wage per employee post (yearly average, percent change)	-2.6	0.7	0.4	0.5	0.9	1.4
Nominal yield on 10-year government bonds (yearly average, percent)	5.4	4.9	5.1	4.6	4.0	3.1
Real yield on 10-year government bonds (yearly average, percent)	2.8	2.2	2.5	2.1	1.6	1.0
GDP (quantity rate of change, percent)	1.9	5.8	4.2	3.0	3.2	2.8
Private consumption (quantity rate of change, percent)	2.2	4.6	2.9	3.1	3.3	4.0
Unemployment rate (yearly average, percent)	9.5	8.4	7.1	6.9	6.2	5.9
Exports ^a (quantity rate of change, percent)	-9.4	12.6	5.3	5.1	0.9	2.4
Inflation (December over December, percent)	3.9	2.7	2.2	1.6	1.8	-0.2
Bank of Israel interest rate (yearly average, percent)	0.8	1.6	2.9	2.3	1.4	0.6
Real one-year interest rate (yearly average, percent)	-0.1	-0.4	0.6	0.2	-0.3	-0.7
Real effective exchange rate (yearly average, rate of change)	1.8	-5.1	-1.0	4.7	-6.0	-1.5
NIS/\$ exchange rate (yearly average)	3.93	3.73	3.58	3.86	3.61	3.58
Tel Aviv 100 Index (December over December, rate of change)	88.8	14.9	-20.1	7.2	15.1	6.7
World trade (rate of change)	-10.6	12.6	6.7	2.9	3.0	3.8

^a Excluding diamonds

SOURCE: Based on Central Bureau of Statistics and International Monetary Fund.

⁹ An historical comparison of unemployment rates is problematic due to changes over the years in the Central Bureau of Statistics labor force surveys. Nevertheless, the current unemployment rate may be estimated as the lowest since the 1985 Economic Stabilization Program.

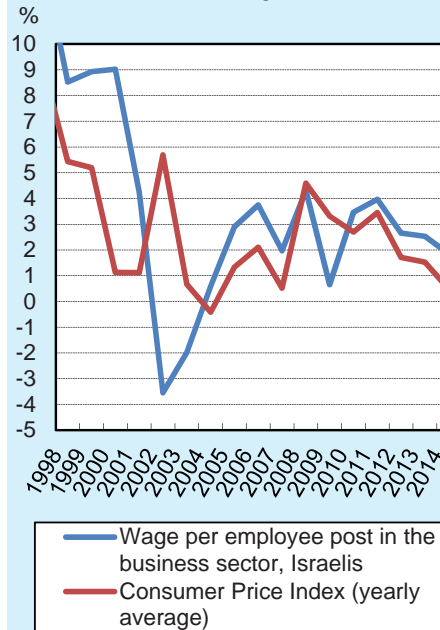
and output prices hardly spills over into an increase in the real monthly wage. Thus, the nominal wage per employee post edged upward by only 1.9 percent in 2014, 0.7 percentage points less than in 2013 and in accordance with the downward surprise in the CPI. A similar (and concurrent) correlation between inflation and the changes of nominal wage per employee post is observable throughout almost the entire past decade (Figure 1.3). This correlation, as noted, allows the business sector to absorb shocks in both inflation and activity.

The historically low level of unemployment was also supported by a decrease in non-cyclical unemployment that began in 2004. Non-cyclical unemployment captures structural unemployment, as well as frictional unemployment—the existence at any given moment of jobseekers who remain unemployed until matched with employers in need of labor. Improvement in the matching process and a low threshold wage (relative to capabilities) among jobseekers shorten the job-hunting process and help to reduce unemployment.¹⁰

At year's end, the Histadrut (General Federation of Labor in Israel) and the Manufacturers Association of Israel reached an agreement providing for an increase in the minimum wage. Under the terms of the accord, which was approved by the Government and the Knesset, the minimum wage will be raised to NIS 5,000 per month over a two-year period starting in April 2015. In a simple model of aggregate supply and demand, government intervention in setting the minimum wage is undesirable due to concern that it will impair employment and activity. However, current models suggest the possibility that employers have an advantage over low-wage employees in wage bargaining, lending support to government intervention in the labor market by means of setting a minimum wage. (For discussion, see Chapter 5, The Labor Market.) In the Israeli case, the low levels of unemployment compensation and income support lower the bargaining power of workers vis-à-vis management and support outside assistance in determining the remuneration of low-wage workers.

Figure 1.3
Inflation and Nominal Wages,
1998–2014

(annual rate of change)



SOURCE: Based on Central Bureau of Statistics.

At year's end, the Histadrut and manufacturers agreed on an increase in the minimum wage. The agreement was approved by the Government and the Knesset.

¹⁰ For a discussion of the decrease in non-cyclical unemployment in Israel, see the Bank of Israel Annual Report for 2013, pp. 128–135.

The possibility that raising the minimum wage is liable to impair employment stems from concern that manufacturers will be unable to absorb the increase in labor cost because of competition in the goods market, or will replace labor with capital. Although this concern exists, the healthy state of the labor market and the measured and phased nature of the minimum-wage increase make the concern minor. Since most minimum-wage workers are employed in industries that serve the domestic economy, employers will likely be able to pass on at least some of the upturn in their labor costs to domestic consumers.¹¹ With inflation as low as it is, the price increases occasioned by the raising of the minimum wage are expected to make a positive contribution to inflation and to the economy. Under these conditions, the expected improvement in low-wage workers' welfare and the potential support for an increase in domestic labor productivity appear to surmount the concern about a negative impact to employment among these workers. Furthermore, the wage increase does not include a permanent increase in the minimum wage as a share of the national average wage. Notably, the increase in the minimum wage does not include wage hikes for public sector employees who receive wage support to bring them up to the minimum but whose actual wage exceeds the minimum. Wage hikes for these workers should be set separately and irrespective of the minimum wage, just as the remuneration of most public sector employees is determined.

The expected improvement in low-wage workers' welfare from a minimum-wage increase, and the potential support for an increase in domestic labor productivity surmount the concern of a negative impact on employment.

b. Prices

Inflation in 2014 was -0.2 percent, below the lower bound of the inflation target range. It included this year, for the first time in a decade, a decline in the index of nontradable goods prices excluding housing services, in addition to a decline in the tradable goods price index (Figure 1.1). The increase in the housing component outpaced the overall CPI for the seventh consecutive year.

The inflation rate in 2013–14, particularly in the second half of the latter year, was lower than the forecasts of both the Research Department and private analysts and reflected a near-zero rate of increase in most CPI components. The slowing of inflation—which first became apparent in mid-2011, amid the eurozone-led debt crisis—stood out in 2014 in view of the stability of the growth rate and, in particular, the low unemployment rate and the vigorous increase in private consumption. The main reasons for this moderation of inflation were low price increases abroad and, especially, the sharp decline of oil prices; continued appreciation of the shekel; the widening of the negative output gap; and structural changes in the domestic economy that were mainly reflected in declining prices of nontradable goods. The sharp decline in oil prices in the second half of the year took 0.3 percentage points off the total CPI, mostly by lowering home maintenance and transport costs. The decline of inflation was not unique to Israel—it occurred in many countries and reflects the powerful effect of globalization.

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¹¹ The distribution of minimum-wage earners across industries appears in Table 5.2.

Although declines in the prices of most goods and services powered the fall in the CPI in 2014, two main components contributed in particular. First, communications prices continued to decline due to an increase in competition in the cellular industry that began in 2011, shaving 0.2 percentage points off the overall index. The decline in communications prices in the past three years added up to nearly 20 percent and the effect of the reform in this field seems poised to continue. Second, food prices declined more steeply than the overall index in 2014, offsetting increases in 2013. The declines in food prices stood out in comparison with changes in other developed countries' food indices and the change in global commodity prices. However, analysis of the development of subcomponents of the food price index relative to the Wholesale Price Index, and of the financial statements of the food companies (retail chains, importers, and manufacturers), shows that the decline in food prices in 2014 was not brought on by a structural change in the industry. It is possible that public awareness of the high cost of food and anticipation of the passage of the "Food Law" may have given the food companies a marginal disincentive to raise prices and may even have prompted price cuts.¹²

The CPI decline this year derived from declines in prices of most goods and services, but two main components contributed in particular—communications and food.

In contrast to these decreases, the prices of housing services, which account for 25 percent of the CPI, continued to increase, with the housing component posting a 3 percent increase in 2014, contributing 0.75 percent to the overall index. After the steep increases that coincided with the beginning of the current cycle, the rate of escalation moderated quite a bit in the past three years but continued to exceed the change in the overall CPI. The development of the housing component relative to the total index shows that the pace of growth in the supply of housing services has not yet caught up with the pace of growth in demand. Two factors contributed to this in 2014. The first was that the growth of supply in housing services moderated with the wait for the implementation of various government programs, including the Zero VAT scheme. This reflected the public's considerations in homebuying and building contractors' considerations in continuing to invest in construction projects. The second factor was the continuation of monetary accommodation, which encouraged consumption, including demand for housing services.

The housing component continued this year to rise at a faster pace than the overall CPI.

Inflation expectations for both short and long terms began to decline in the second half of the year. Short-term expectations declined sharply, to below the lower bound of the inflation target, driven directly by the expected decrease in electricity and water prices in early 2015 and the sharp downturns in oil prices abroad. The cutting of electricity and water rates is a one-off event that is expected to lead to higher prices later on—a secondary effect, brought on by increasing disposable income stimulating domestic demand. The one-time lowering of electricity and water prices and the decline in oil prices in the second half of 2014 are expected to make the factors of production less costly and allow their prices to remain modest in the near term. These favorable

¹² The food chains' gross profitability did contract somewhat in 2014, as has been the trend in recent years. The extent of the change, however, is not anomalous relative to the typical volatility of this index. See discussion of the cost of living issue in Section 4.

developments, however, may set in motion a dynamic of price declines that will be reflected in long-term inflation expectations, causing domestic demand to contract. (For discussion of this issue, see Section 3.a—Monetary and Macroprudential Policy.)

The roughly 6 percent increase in the effective exchange rate in the second half of the year, offsetting the appreciation that occurred in 2013 and the first half of 2014, was not reflected in actual or expected inflation. The steep and substantive decline in oil prices and the stability of global commodity prices may have acted in concert to offset the effect of the depreciation on both actual and expected inflation.

c. Financial markets and sources of financing

The balance of credit to the (nonfinancial) business sector increased slightly in 2014, but net of the effect of price changes it contracted somewhat.

The balance of credit to the (nonfinancial) business sector increased slightly in 2014 but net of the effect of price changes it contracted somewhat, as has been the trend in the past three years. The ratio of business credit to business sector product has declined by a sizable 30 basis points since 2008 (Figure 4.6). The main explanation for this comes from the demand side, but the supply side also contributed due to the effects of structural changes in the economy: the toughening of restrictions on banks' exposure to large borrowers, the implications of the implementation of the recommendations of the Committee on Increasing Competitiveness in the Economy ("the Concentration Committee"), and the adoption of the Basel III measures.¹³ However, these supply side restrictions were apparently not effective, because the cost of business credit, reflected in the yield spread between corporate and government bonds and in the bank credit spread, declined in 2014, as before (see elaboration in Chapter 4), indicating an increase in credit supply relative to demand. Further evidence of the ebbing of demand for business credit was the increase in domestic firms' cash flow from current activity as a share of the balance sheet. The allocation of bank credit to the business sector changed—more lending to small and medium enterprises, offsetting a decline in lending to large firms—partly due to structural changes in the economy.

The balance of household credit continued this year as well to grow at a rapid rate.

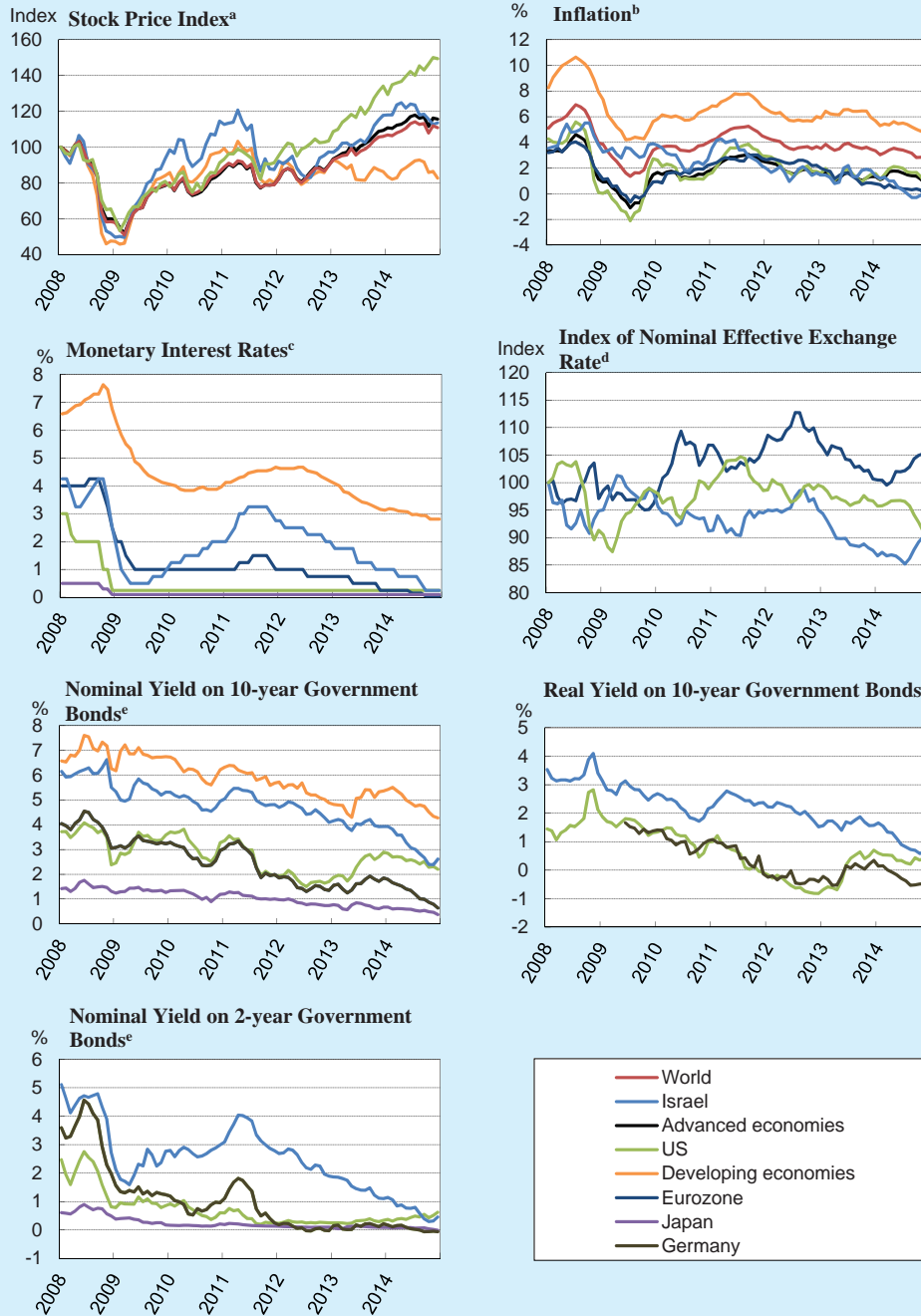
The balance of household credit continued to grow briskly, continuing the trend since 2007. New housing credit did not continue to increase, and leveled off at the high level observed since 2013. As a result, the balance of housing credit continued to grow in 2014 but the rate of increase slowed somewhat. Conversely, nonhousing credit expanded considerably, contributing to the ongoing diversion of bank credit to households.

The public's financial assets portfolio grew in 2014 due to rising prices of financial assets in Israel and abroad.

The public's financial assets portfolio grew in 2014 due to rising prices of financial assets in Israel and abroad. The share of foreign assets in the portfolio continued to expand, primarily due to an increase in institutional investors' holdings of such assets. Rising prices on stock and bond markets, in continuation of recent years' trend, were affected by a high level of liquidity reflected in the low short-term and long-term interest rates.

¹³ The restructuring of corporate ownership brought on by the implementation of the "Concentration Committee" recommendations may have reduced credit lines for firms that belonged to corporate pyramids but raised the cost of credit to the same firms in the new business structure. For elaboration, see the Bank of Israel Annual Report for 2013, Chapter 1.

Figure 1.4
Israel and the World, 2008–14



^a Based on monthly average in dollar terms. Advanced economies, developing economies, and world—based on MSCI indices; Israel—Tel Aviv 100 Index; US—S&P 500 Index. SOURCE: Bloomberg and the Tel Aviv Stock Exchange.

^b Inflation over the previous 12 months. The groups of countries are as per the IFS definition. SOURCE: IFS database.

^c SOURCE: Israel—Bank of Israel; Japan, US and eurozone—Bloomberg; developing economies—simple average of interest rates in South Africa, Mexico, Thailand, South Korea, Poland and Hungary.

^d An increase indicates depreciation. SOURCE: IFS database.

^e SOURCE: Bloomberg and Bank of Israel. The figure for the developing economies includes the simple average of yields in South Africa, Mexico, Thailand, South Korea, Poland and Hungary.

Sustained low real interest rates incorporate risks from various channels.

Sustained low real interest rates have significant long-term effects on the pricing of financial assets and business and household investment decisions, and carry three types of risks: The main channel of the effect of a low interest rate is an immediate increase in the present value of assets, due to the discounting of future value at low interest rates. In this context, it is worth noting the upturn in asset prices—particularly stocks, bonds, and dwellings—in recent years. A rise in interest rates may seriously affect asset prices, with all the attendant risks. The second risk channel, manifested particularly when risk-free interest rates are low over time, is the search for yield in return for higher risk. This search may lower the risk premium per unit of risk—termed “an increase in appetite for risk”—and its implication is a below-equilibrium return for a given risk level. In this context, the narrowing of corporate bond spreads in recent years should be noted. These spreads narrowed considerably in 2014 with continued net investment in corporate bond mutual funds by households. Notably, households’ net investment in these funds was halted in the second half of the year.¹⁴ The third channel of risk concerns the potential overheating of domestic investment. When the cost of credit is near zero, projects that generate positive but low returns become profitable but may not be worth pursuing if their inherent risks are taken into account. An increase in exposure to risky projects that are not properly priced may create a higher probability of default.

d. The housing market

Home prices continued to rise, for the seventh consecutive year.

Home prices continued to rise, for the seventh consecutive year. The real increase in 2014 was 4.7 percent, after a 65 percent upturn in 2008–13. The number of transactions and the amount of housing credit contracted with the waiting for the Zero VAT program to ensue (see Chapter 7A). Nonetheless, the pace of increase in home prices resembled that of the past two years, despite some moderation as prospective homebuyers awaited the implementation of government decisions.

With the end of Operation Protective Edge and particularly after the Zero VAT plan was set aside, demand for home purchases rebounded and price increases accelerated slightly.

Rent increased at about half the rate of home prices, leaving the average return on homeownership only slightly lower than in 2013. However, due to the significant decline in real government bond yields in 2014, representing the alternative yield in the domestic economy, the relative profitability of homeownership increased (Figure 4.2). With the end of Operation Protective Edge and, particularly after the Zero VAT plan was set aside, demand for home purchases rebounded and price increases accelerated slightly. This may have reflected demand from people who had been potentially eligible for the Zero VAT discount, after the demand built up during the period of uncertainty that began after the scheme was announced in March.

Government decisions related to increasing supply of homes and reducing home prices continued to have a prominent place in Israel’s public agenda in 2014. In recent years, the Government has resolved to carry out many programs that would increase supply but none has yet been reflected in an upturn in sales of land, mainly due to

¹⁴ See the 2014 Financial Stability Report.

infrastructure barriers. The principal government programs that support the supply side are “blanket agreements” with municipal authorities; “Netiv le-Dira” (Hebrew for “Path to a Home”), which aims to eliminate infrastructure barriers; and the establishment of a national committee for the planning of preferred housing projects, tasked with locating land for housing construction. In addition to these, the Government established an urban renewal authority to promote “build, clear, and build” projects and a public corporation for the long-term leasing of rental housing. (For discussion of the various plans to increase land supply for building, see Chapter 7A.) At the present time, however, the numerous barriers are making the Government’s plans hard to carry out. Thus, the pace of expansion in supply of homes has not accelerated in the past three years; instead, the number of building starts and completions has stabilized at around 42,000–45,000 per year, a high level compared with the previous decade.

The continued increase in home prices and the slow response of supply led the government this year to support two programs for reducing home prices—the Zero VAT plan and the “target price” plan. These plans contribute to reducing the prices of a home by reducing tax (the Zero VAT plan) or by reducing the cost of land for contractors (the target price plan). However, while the Zero VAT plan mainly operates on the demand side and is of a permanent nature, the target price plan is more flexible and works on both the demand side and the supply side. Since the number of homes expected to be sold under each of the plans is limited compared to the number of people eligible for their benefits, most households will not gain from lower prices, at least in the short term. In the end, the Zero VAT plan was not approved, while in contrast the target price plan was launched at the end of the year.

The continued increase in home prices and the slow response of supply led the government this year to support two programs for reducing home prices—the Zero VAT plan and the “target price” plan.

2. THE GLOBAL ENVIRONMENT

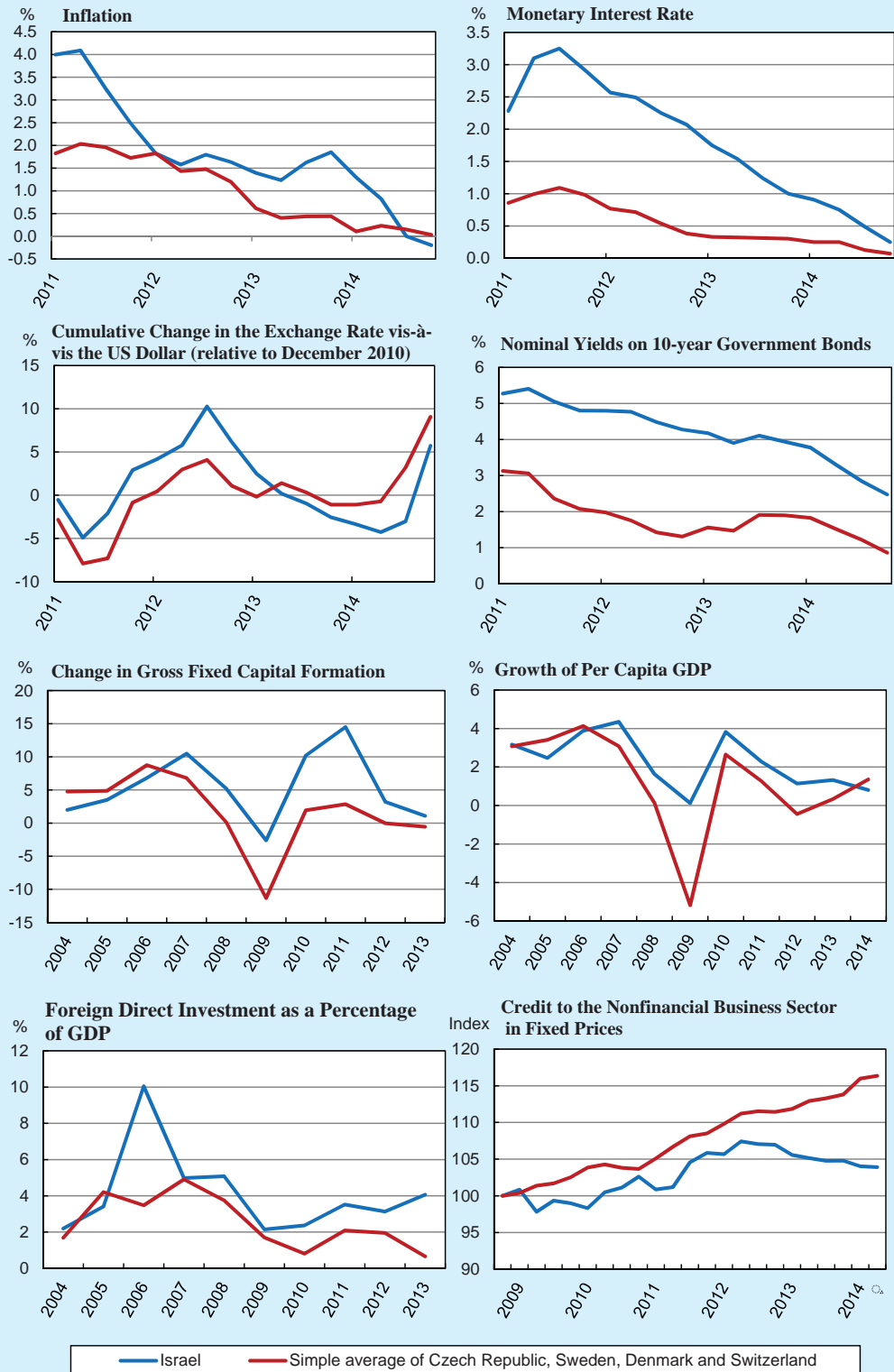
The world’s economies developed unevenly in 2014, continuing a trend that first appeared in late 2013 as business cycles, primarily those of the US and Europe, began to diverge: the US economy continued to grow and recover whereas that of the Europe remained weak. The growth rate of world trade, a major path of transmission from the overall effect of world economic activity to the Israeli economy, also remained low.

The world’s economies developed unevenly in 2014, continuing a trend that first appeared in late 2013.

One of the most visible differences between the US and European economies is the unemployment rate. The US unemployment rate declined markedly during the year, to 5.8 percent, maintaining the downward trajectory that it has established in recent years due to the improvement seen there in economic activity.¹⁵ Unemployment in the EU, in contrast, receded slightly but remained high at more than 10 percent, with major differences among member states. The uncoupling of the two large economic blocs—the US and Europe—was also reflected in the growth forecast revisions made by various international institutions in their 2015 growth forecasts: positive ones for the US in recent months and negative ones for the eurozone.

¹⁵ An analysis based on the US employment rate also shows an improvement in activity, albeit a less powerful one.

Figure 1.5
Main Indicators of Economic Activity, Israel and Selected Countries



SOURCE: Based on data from Central Bureau of Statistics, IMF, OECD, and Bloomberg.

Inflation in advanced economies, particularly those in the eurozone, moderated in 2014. The slowdown in the inflation rate, in many cases turning into a negative rate, continued to support monetary accommodation including low, and sometimes negative, monetary interest rates as well as quantitative easing.¹⁶ In response to the eurozone's moderate activity, decline in inflation, and even concern of deflation, the ECB reduced its short-term interest rate to a new low of 0.05 percent, lowered the interest rate on banks' excess reserves to a negative level, and announced a new quantitative-easing program that is to run for the next two years.

Inflation in advanced economies, particularly those in the eurozone, moderated this year.

Capital markets in advanced economies remained elevated and, in the US, prices continued to rise. In some emerging markets, however, capital markets did not rise and several even declined during the year. Expectations of interest rate increases in the US, particularly to medium terms as reflected in nominal two-year bond prices, grew in 2014 as expectations about US recovery strengthened and the Federal Reserve tapered its quantitative easing. This stood in contrast to the downward trend in two-year nominal yields in most advanced economies, which attested to expectations of continued if not intensified monetary accommodation. The divergent trends in government bond yields provide further evidence of the decoupling of the US business cycle from those of other advanced economies, particularly in Europe. It is of interest, however, to examine developments in nominal ten-year bond yields, which reflect a combination of the expected long-term growth rate and the credibility of the monetary regime in attaining price stability. Nominal ten-year bond yields declined in all emerging and advanced economies, including the US. In Europe, these yields declined considerably, and in Germany and France—the countries leading eurozone growth and with the continent's lowest risk premiums—they fell even more, to below 1 percent (0.5–0.8 percent).

Capital markets in advanced economies remained elevated and, in the US, prices continued to rise.

Against the background of the decoupling of the business cycles of the two large economic blocs—the US and Europe—it is interesting to review the economic developments and policy dilemmas that the eurozone's "satellites"—small and open economies that weathered the global crisis relatively well—faced.¹⁷ Figure 1.5 shows several indicators for use in comparing economic developments in these countries with those in Israel. The graph illustrates the strong similarity, even though the "satellites" are much more closely connected to the eurozone by nature: In activity, a shared trend in per-capita growth appears—acceleration in 2010–11 and a moderation in 2012–13—and in prices, a shared decline in the inflation rate over recent years. Long-term government yields also followed the same path, reflecting low real interest rates and shared expectations of low inflation, amid strong increases in asset prices. The graph also shows significant appreciation of these countries' currencies against the dollar in recent years, particularly from 2008 to the first half of 2014, as well as vigorous depreciation against the dollar in the second half of 2014.

The similarity between these countries and Israel in the development of main

¹⁶ The US gradually ended its quantitative easing program during the year.

¹⁷ Denmark, Sweden, Switzerland, and the Czech Republic.

macroeconomic variables presents policymakers with shared policy dilemmas. One such dilemma concerned the use of monetary tools in an environment of near-zero interest rates and very low inflation. In Switzerland, the central bank cut its rate to zero in 2011 and, after steep appreciation, announced a “floor rate” for the Swiss franc.¹⁸ In January 2015, the Swiss National Bank, in a surprising move, ended its floor-rate policy and lowered the interest rate into negative territory after making massive purchases of foreign exchange. The Czech National Bank also announced, in late 2013, a minimum exchange rate after having cut the short-term interest rate to zero. The Danish National Bank, which manages a de facto fixed exchange-rate policy relative to the euro, reduced its short-term rate to nearly zero in 2012 and to below zero in January 2015 due to pressure on the exchange rate. In Sweden, when the inflation rate fell below zero, the central bank lowered interest gradually to nearly zero by the end of 2014. In early 2015, the Sveriges Riksbank, similar to its Swiss and Danish counterparts, reduced the interest rate to a negative level.

Considerable similarity can be seen between the economies of Israel and those of the eurozone’s “satellite” countries, and it presents policymakers with shared policy dilemmas.

Despite the strong similarity in developments between the “satellites” and Israel, several differences are discernible. Inflation in Israel fell more steeply in the past year, indicating additional domestic factors. The appreciation of the shekel was steeper in 2013 and the first half of 2014—possibly due to a major improvement in the current account when the beginning of natural gas production reduced the need for imported fuel. Conversely, the shekel depreciation against the dollar in the second half of 2014 resembled that of the European “satellites” and reflected the strong effect of the US’s positive economic developments relative to other countries. Monetary interest rate cutting in Israel was steeper in 2014 but it aligned Israel’s rate with the low-interest environment of most developed countries; thus, the positive spread that had predominated in recent years narrowed considerably.

The increase in gross capital formation in recent years was more vigorous in Israel than in the satellite countries (as of 2013 data). Some of this upturn, which included large investments in gas and oil exploration, was undertaken by foreign firms; this alleviated demand for domestic credit (from banks and from nonbanking institutions), causing this indicator to grow much more slowly in Israel than in the “satellites.”

3. ECONOMIC POLICY

Economic policy supported economic activity and mitigated the risk of a future fiscal crisis.

Economic policy in 2014 was affected by four significant developments: world trade again grew modestly; the inflation rate moderated, even to the extent of one-off declines in prices, and there was a marked decline in global oil prices; housing market prices and new mortgage volume continued to increase, particularly in the first and the fourth quarters of the year; and shekel appreciation pressure persisted, chiefly in the first half. These developments in concert, along with the Government’s determination to

¹⁸ An exchange rate beyond which the central bank will not allow further appreciation, selling Swiss francs for foreign currency in any quantity necessary for this purpose.

reduce the structural budget deficit, led to a combination of accommodative monetary policy and somewhat contractionary fiscal policy. This composite economic policy stimulated economic activity and mitigated the risk of a future fiscal crisis.

a. Monetary policy and macroprudential measures

The widening of the negative output gap, coupled with continued appreciation of the shekel, lowered domestic inflation to below the lower bound of the inflation target and prompted the Bank of Israel to continue reducing its monetary interest rate. The rate cuts—75 basis points in all, bringing the rate to nearly zero (0.25 percent)—surprised the public in part, amplifying the contribution of the reductions to alleviating the appreciation pressures. Complementing the interest rate policy, the Bank of Israel continued to purchase foreign exchange—both in order to offset the effect of natural gas on the current account and the exchange rate and to moderate fluctuations that are not in line with economic fundamentals, a trend that began in 2008 and continued in the first half of the review year. Concurrent with this monetary policy, the Supervisor of Banks ordered the banking system to make a further increase in capital buffers on account of housing loans, in order to mitigate the risk to the banking system of a future steep decline in domestic home prices.

Even though the monetary interest rate was lowered to nearly zero, real short-term interest did not fall and spent most of the year at a low negative level. Real long-term rates, in contrast, declined sharply during the year, affected by declining yields abroad and a decrease in credit risk in Israel; thus, the real 10-year interest rate declined to a low of about 0.5 percent. This combination of developments may indicate a slight decline in the accommodativeness of the monetary policy as short-term interest declined to nearly zero. In the fourth quarter, as actual and expected inflation continued to decline, real short-term interest rates headed upward toward zero. In the Bank of Israel's estimation, however, these developments were the outcome of an expected one-off price decline, largely of supply-side origins, that was likely to affect economic activity favorably.

Monetary policy needs to distinguish between a one-off decline in prices, deriving from a decrease in the prices of production factors, technological improvements, and stiffer competition, and a decline in prices deriving from a decrease in demand, which has a downward effect on inflation expectations to medium and long terms as well. Analysis of developments in 2014 shows that the slowing of actual and expected inflation originated largely in a positive supply-side shock that was influenced by especially small price increases in tradable goods—and, in particular, the decline in oil prices—policy changes (the lowering of water and electricity rates), and heightened competition in the communications industry. Importantly, even a one-off and unforeseen decline in prices may influence longer term inflation expectations and, by so doing, moderate long-term macroeconomic developments. Currently, this risk is not observed because the expectations derived from the prices of long-term government bonds remain firmly in the middle of the inflation target range. Reducing

The widening of the negative output gap, coupled with continued appreciation of the shekel, lowered inflation in Israel to below the lower bound of the inflation target range and prompted the Bank of Israel to continue reducing its monetary interest rate.

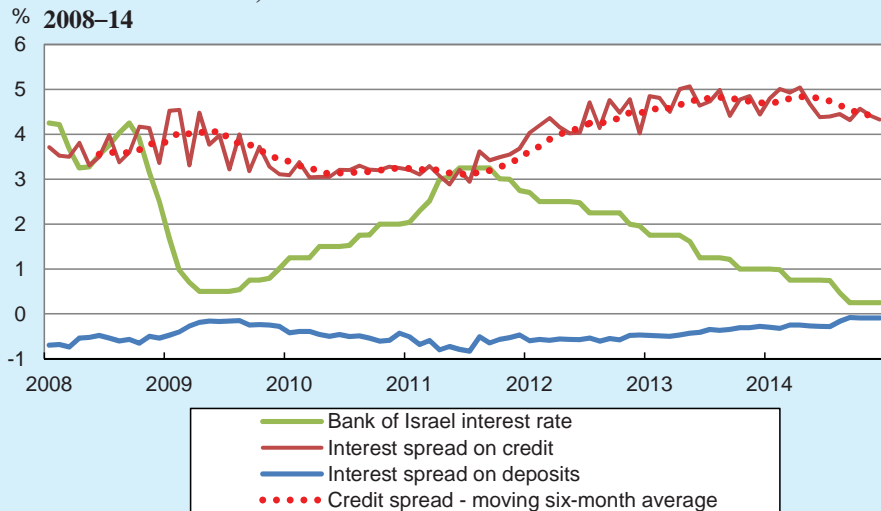
The moderation of actual and expected inflation this year originated largely in a positive supply-side shock, policy changes (lowered water and electricity rates), and heightened competition in the communications industry.

Expectations derived from long-term government bond prices remain firmly in the middle of the inflation target range.

the interest rate to nearly zero, or even to a negative rate, in an attempt to return inflation to the target range in the near term may markedly weaken the transmission from the monetary interest rate to deposit rates and credit to the public—one of the most important channels through which monetary policy operates. The main risk in taking such a step is that the lowering of nominal interest to below zero may cause the public to change its financial habits (e.g., by holding more cash, behavior that neutralizes some of the effect of monetary interest). Since the Bank of Israel assessed that the decline in prices in 2014 was a temporary phenomenon that originated mainly in a supply-side shock, the risks of offsetting the shock via additional monetary accommodation surpassed the need to bring inflation back to its target in the near term.

With the monetary interest rate having fallen to near zero, it is important to examine the extent to which the monetary interest rate impacts on economic activity through reduced bank interest rates charged on overall debt (outstanding) and on new credit and deposits. Chapter 4 presents a calculation of the correlation between the Bank of Israel interest rate and the cost of overall business sector debt, most of which is variable rate debt. It was found that this correlation remains high—that is, the business sector was able to benefit from the Bank of Israel’s reductions in the monetary interest rate. In contrast, this section calculates the correlation between the Bank of Israel interest rate and the interest rates on new credit and deposits. In examining the interest rates on the public’s (households and businesses) 1–3 month unindexed deposits and credit, it can be seen in Figure 1.6 that in periods when the Bank of Israel interest rate is near zero, the spreads on credit and deposits increase—the decline in the monetary interest rate is not accompanied by a corresponding decline in interest rates on credit

Figure 1.6
Interest Rate Spreads on New Credit and Deposits in Relation to the Bank of Israel Interest Rate, Unindexed Fixed Rate Interest for Terms of 1–3 Months, 2008–14



SOURCE: Bank of Israel.

and deposits.¹⁹ It is likely that these findings indicate a weakening of the correlation between the monetary interest rate and interest on new credit and deposits as a result of reducing the monetary interest rate to near zero.

It is likely that the weakening of the correlation between the monetary interest rate and interest on new credit and deposits results from reducing the monetary interest rate to near zero.

b. Fiscal policy

The total deficit of the general government was 2.6 percent of GDP and the central government deficit was 2.8 percent of GDP, in line with the plan set in the budget. Meeting the deficit target reflected reduction in the structural government deficit as had been planned, largely on the basis of restraint of expenditure and increases in VAT and corporate tax rates. Reducing civilian expenditure as well as a decrease in its interest payments enabled the government to accommodate the sharp increase in defense expenditure due to Operation Protective Edge without breaching the spending limit set in the budget. The tax hikes placed downward pressure on private consumption and short-term activity. In the longer run, however, reducing the structural deficit, which supports a decline in the debt to GDP ratio, increases flexibility in applying a countercyclical policy when necessary, or in approving one-off expenditures when required.

The government met the deficit target this year and reduced the structural deficit in the budget.

The defense budget is being reviewed from a long-term perspective by the Locker Committee, which has yet to present its recommendations. If it is decided to increase the defense budget in the coming years, decisions about the sources for the increase will be needed. Since the sources for such an increase are national income, it would be suitable to finance the increase in spending by utilizing all those sources, and not only the sources available to the Government at current tax rates. In other words, it should be financed through an increase in tax revenues. The extent of the tax increases depends on the added burden inherent in their collection:²⁰ the smaller the burden is, the larger the share of taxes in covering the increase in defense expenditure should be. Since Israel's levels of civilian expenditure and taxation are among the lowest in the OECD, the additional burden in tax collection in Israel is probably relatively small as well.

In late 2013, the Government replaced the fiscal rule that had been agreed upon in 2010 with one that caps the increase in spending at around 2.5 percent per year. The new rule, not yet reflected in an approved state budget, has a major drawback (shared by the previous rule): it does not establish a relation between cyclically adjusted expenditure and revenues. Namely, the rule does not allow a tax increase concurrent with a rise in expenditure, even though such a step is endorsed in economic policy; conversely, it allows tax cuts with no spending cut at times of economic upturn, an undesirable course of action. Therefore, it is proposed that the new Government adopt

¹⁹ Developments in interest rate spreads on new 1–3 month deposits and credit also present well the development for terms of 3 months to 1 year. It is important to note as well that the credit spread is affected by many other factors, and thus it is likely that the credit spread also declines in a period when the Bank of Israel interest rate is especially low, such as in the second half of 2014.

²⁰ The added burden in collecting taxes is the GDP lost due to the collection of the taxes. It is an accepted assumption that the higher the tax level, the greater the added burden.

a fiscal rule that will combine a clause about the permissible increase in spending at given tax rates and will allow a deviation from this rate of increase in the event of changes in statutory tax rates. Another disadvantage of the rule is that its maximum allowable rate of increase in expenditure is lower than the rate of GDP growth—meaning that government spending as a share of GDP will continue to fall. Given that Israel has one of the lowest shares of civilian expenditure among OECD countries as well as especially severe inequality, the continued contraction of expenditure will widen the gap between Israel and the OECD countries in providing services and redistributing income for the purpose of reducing inequality.

It is appropriate for inequality to be reduced by raising income tax starting at wage levels around the national average and by lowering VAT, or by increasing direct assistance to weaker population groups.

The significant change that the tax system has undergone in the past decade—the reduction of direct taxes and a zigzag in indirect taxes—has reduced the contribution of the mix of taxes to the lowering of inequality, as a large majority of the population pays a relatively low rate of income tax and a high rate of Value Added Tax, the highest since this tax was introduced in the mid-1970s. VAT, although efficient and easy to collect, is a regressive tax. Many countries cope with this disadvantage by charging a lower rate of VAT on basic commodities such as food and medicines. This alleviates the burden on low-income populations, which spend a relatively high share of their income on these goods, and makes VAT less regressive. One of the difficulties in lowering the VAT rate on necessities, however, is how to choose these goods without destabilizing the VAT tax base. Instead of following the path of lowering VAT on necessities, Israel chose a different approach—direct assistance to low-income populations on the assumption that such assistance is economically more efficient. However, the combination of cutting transfer payments to this population, about a decade ago, and the VAT rate increases since 2009 has negatively impacted the disadvantaged. The discussion in Chapter 8 indicates that direct taxation in Israel is low by international standards in the four lowest quintiles of equivalized household income; only in the highest quintile does the direct-tax rate resemble the OECD average.²¹ If the Government wishes to support the economically disadvantaged more generously, it should do so by raising income tax starting at wage levels that approximate the national average and by lowering VAT, or by increasing assistance to these populations.

4. ISRAEL'S COST OF LIVING BY INTERNATIONAL COMPARISON

Based on certain data, Israel's price level is high in several areas.

The concept of cost of living centers on the price level of goods and services that households consume and usually relates to an international comparison and/or an income level. In many respects, discussion of the cost of living relates to the issue of the standard of living (in its material sense) because both deal with the relation between income and prices and quality of goods and services in the economy. Below,

²¹ For a discussion of Israel's low direct taxation relative to indirect taxation, see the Bank of Israel Annual Report for 2013, pp. 251–255.

international comparisons of price levels relative to income levels are presented, and the difficulties that relate to these comparisons are discussed. The discussion addresses questions such as what is the relevant income for comparison (household or individual), the extent to which the use of data on average income yields a correct comparative picture, and the impact of the effect of exchange-rate changes on the comparison results. The main conclusion is that the cost-of-living concept, which has rooted itself in the Israeli public discourse since the social protests in 2011, is complex. The data, however, suggest clearly that Israel's price level is high in several areas and can be reduced, thereby enhancing welfare.

Comparing the cost of living among different countries is not simple. Due to variance in the prices of goods and services within each country, sometimes accompanied by variance in the level of service offered in different locations, the relevant price level for the comparison is altogether unclear. At the macro level, consumption baskets and behavior are influenced by price relations among different goods, which may tilt private consumption toward relatively inexpensive goods and thereby affect the results of the comparison.

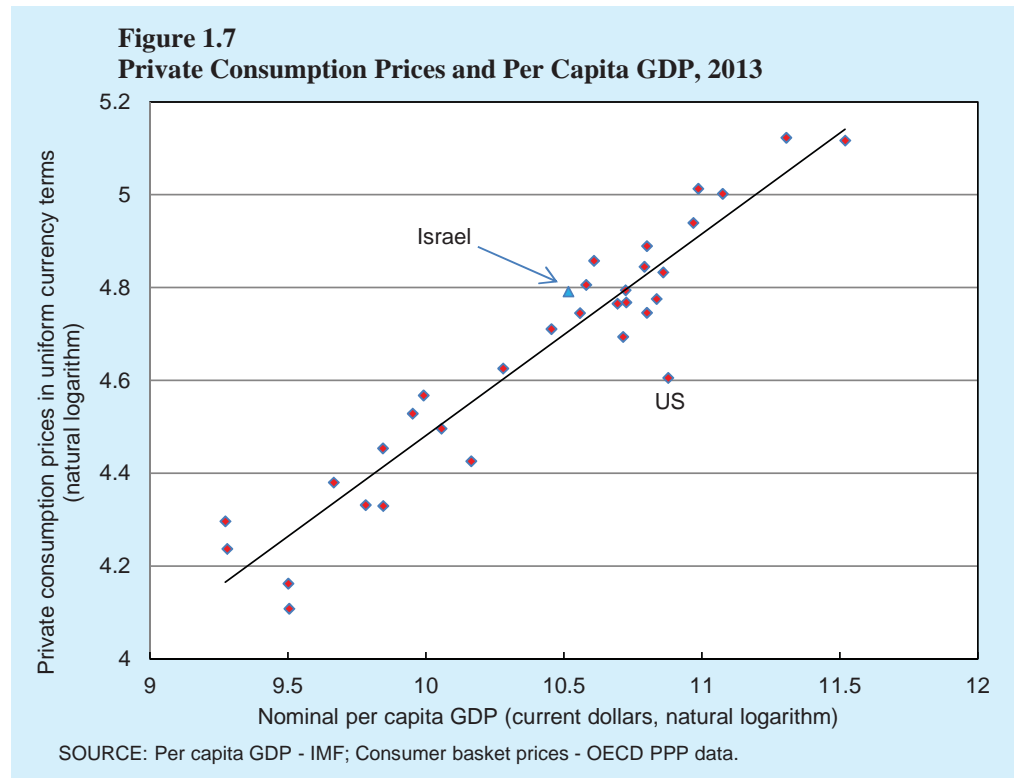
a. Examination of price level relative to income level

However problematic it is to compare prices in different countries at the macro level, such a comparison is quite common. The main use of such a comparison is to measure each country's standard of living on the basis of the conventional metric of per capita GDP. Thus, to compare different countries' levels of per capita GDP, the per capita GDP indicator is "adjusted" in accordance with each country's price level. Figure 1.7, presenting these price data in the OECD countries as a function of per capita GDP,²² shows a strong relationship between an economy's price level and its wealth.²³ As a rule, the wealthier an economy is, the higher its price level. This is because prices of goods and services in an economy include a nontradable component, which is affected by the economy's income level (the demand side) and the cost of labor in nontradable industries (the supply side), and per capita GDP usually does a good job of representing both. As noted above, another possible reason for the positive relation between an economy's price level and its income level is the quality of its consumption basket: the wealthier an economy is, the higher the quality of the goods and services traded in it will probably be.

As a rule, the wealthier an economy is, the higher its price level.

²² The accepted adjustment usually uses GDP prices and not private consumption prices, which are presented here. GDP prices also include public consumption prices, which are not relevant for this discussion.

²³ Some of the relation shown in the graph is structural, since both the units on the X-axis and those on the Y-axis are denominated in domestic currency and divided by the exchange rate of that currency against the US dollar. A graph that shows, on its X-axis, per capita GDP adjusted for PPP (Purchasing Power Parity, i.e., adjusted to the price level shown on the y-axis) also reveals a strong positive relation (graph not presented).



The figure shows that, on the basis of this comparison, prices in Israel are not particularly high.²⁴ It may also be seen that private consumption prices in the US are especially low, meaning that a comparison of prices in Israel with those in the US will usually show that prices in Israel are higher. This disparity, however, does not reflect the overall picture of prices in Israel in a comparison that includes additional advanced economies. Figure 1.8, presenting the price level of major components of private consumption,²⁵ shows that the variance in prices among countries is relatively high and that prices of food, personal transport equipment, hotel and restaurant services, and recreation and culture are relatively expensive in Israel. In clothing and footwear and home furniture, appliances, and maintenance, however, prices in Israel are compatible with the level of per capita GDP.

Notably, the exchange rate plays an important role in the price comparisons shown here. Currency appreciation, as Israel has experienced in recent years, has a downward effect on the prices of tradable goods but contributes to an upward movement of the

²⁴ Housing in this graph is measured as measured in the National Accounts; accordingly, it is housing rent, and not home purchase prices, that is taken into account here.

²⁵ The total weight of the private-consumption components presented in the graph, net of housing, electricity, and water, is around 45 percent. Additional important components are education, healthcare, communication, and "miscellaneous."

Currency appreciation contributes to an upward movement in domestic price levels in foreign-currency terms.

domestic price level in foreign-currency terms. Experience shows that the impact of exchange-rate changes on the domestic price level (measured in domestic currency) is small. In other words, there is hardly any transmission of exchange-rate changes to domestic prices (i.e., they reflect real changes in the exchange rate); therefore, currency appreciation contributes to a high price level by international comparison.²⁶

As we have shown in the past,²⁷ low competitiveness, and import barriers in some industries are probably among the main culprits in the relatively high price levels that prevail in those industries. However, additional reasons for this outcome may be detected. For example, the structure of Israel's tax system, which is skewed toward private consumption, contributes to a high price level (but also to an increase in disposable income because total direct-tax collection in Israel is low by international standards). This contribution of the tax system stands out, for example, in its effect on food prices because Israel charges VAT on food at a higher rate than other countries do. The same is true in motor vehicles, to which a steep purchase tax applies. The need to fund defense expenditure exerts pressure for high taxation relative to civilian services provided to the public; this also raises the cost of living. An additional factor that may make prices of goods higher in Israel is the small size of the Israeli economy and its distance from its trading partners. Under these conditions, inventory management may be more expensive and competitive conditions that would continually push prices down may be harder to generate. Beyond these factors, specific factors (some of which are objective) particular to various industries abet a high price level in Israel in certain cases. In the hospitality sector, for example, the negative impact on tourism whenever security problems flare presumably greatly increases the cost of capital and impairs investments in the industry. Similarly, taxation that does not take occupancy rates into account, coupled with stringent regulation, raises the cost of hotel maintenance and thereby contributes to price increases.²⁸ High food prices are supported by the demand for compliance with Jewish dietary laws by most domestic consumers and the inherent barriers to competing imports of fresh food products.

In recent years, the Government has taken several measures to make the economy more competitive and bring down the cost of living. The cellular industry reform may be the most conspicuous of them due to its sharp and clear effect on prices. Additional government steps to enhance competition, however, are also noteworthy. They include the passage of the "Concentration Law," which is meant to improve capital allocation and increase competition in the economy; the "Food Law," designed to tackle concentration in the food industry on both the production and the marketing sides; the Open Skies agreement with the European Union to stimulate greater competition in the airline industry; and approval of exemptions from customs, purchase tax, and VAT on personal imports in shipments from abroad of up to a limit of \$75 per individual purchase. The Bank of Israel's bank fee reform helped to bring those charges down.

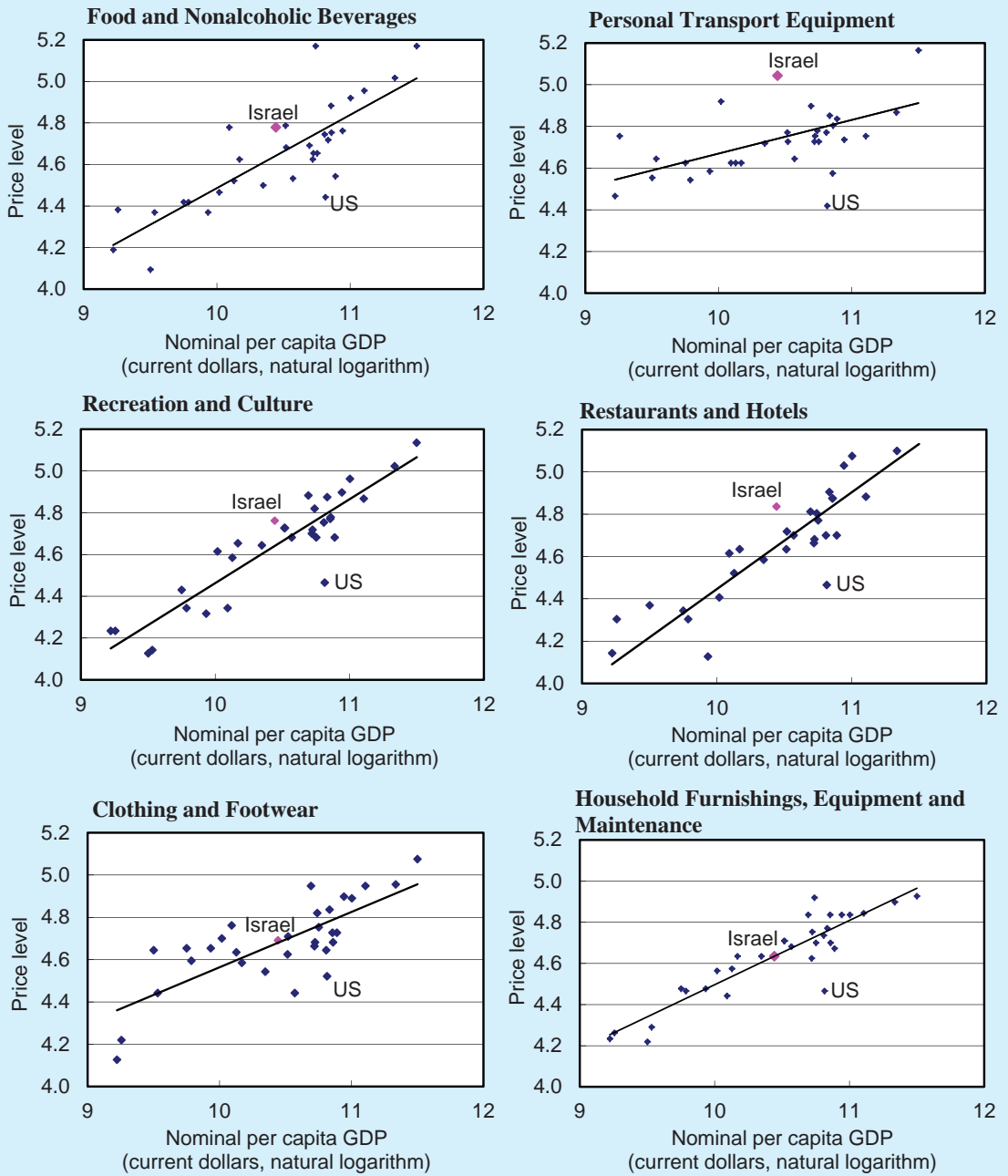
In addition to low competitiveness and to import barriers, there are other reasons that in certain industries the price level is relatively high.

²⁶ In this respect, Israel is no different from most other OECD countries.

²⁷ Recent Economic Developments no. 132, Bank of Israel, February 2012.

²⁸ See the report of a committee to reduce the cost of vacationing in Israel, October 2012.

Figure 1.8
Prices of main components of private consumption, 2011



SOURCE: OECD, PPP 2011 Benchmark Result.

These measures are expected to help stimulate domestic competition and lower prices. However, according to the committee that the ministers of the Economy and Finance in the outgoing Government appointed to recommend ways to promote competing imports and eliminate import barriers, the obstacles to greater import competition are numerous and their elimination is far off. The committee's report included a series of recommendations geared to the downing of these barriers. In view of the importance of competing imports in stimulating domestic competition and lowering prices, it is important that the new Government implement these recommendations.

According to the report of the committee for increasing competition and eliminating import barriers, there are many obstacles to greater import competition and their elimination is far off.

b. Per capita GDP as a proxy for income level

Thus far, per capita GDP has been referred to as a representative indicator of the level of personal income. The relation among per-capita GDP, income level, and labor wage cost is strong but varies among countries due to differences in, for example, the share of labor earnings in GDP, differences in employment rates, inequality, and differences in consumption baskets. Such variances may bias the estimation of individuals' purchasing power relative to the price level, skewing the estimate of the cost of living as shown in Figure 1.7. A cross-country comparison of the share of labor compensation in GDP shows that it is relatively low in Israel—around 55 percent as against nearly 60 percent on OECD average (2013 data).²⁹ Similarly, this proportion has gone down more in Israel than on the OECD average in the past fifteen years—by 4 percentage points in 2013 relative to the average in 1995–99, as against a 1.5 percentage point decline on OECD average during the same years. These data raise concern that the premise of per-capita GDP as a proxy for median household income skews downward the estimate of the cost of living as presented in Figure 1.7, on the assumption that the median household income is based mainly on wage.

One of the most significant structural changes in Israel's economy in the past decade has been the increase in the employment rate. This upturn, *ceteris paribus*, increases per-capita GDP without pushing wages up. The increase in domestic employment boosted households' purchasing power—not by inducing wage hikes, but by raising the average number of persons employed per household.³⁰ Therefore, when the cost of living is discussed, it is important to note that comparing the price of the consumption basket against personal wage or against per-capita GDP (as a proxy for household income) will yield different results.

²⁹ At issue is simple averaging among OECD countries. Iceland, Chile, South Korea, and Turkey were omitted from the calculation due to data limitations. Source of data: The Conference Board Total Economy Database.

³⁰ Another important economic change in the past decade is the reduction of government expenditure in GDP and the concurrent lowering of direct taxation. The two factors changed the structure of household expenditure and income by cutting government transfer payments and services while lowering taxes. The policy change did not affect all households equally: whereas households in the upper quintiles came out ahead from the process, those in the lower quintiles lost. The median household appears to have been basically unaffected by these changes.

c. Examining price changes in selected components of the Consumer Price Index

Since 2000 (after Israel's inflation rate settled to a level common among developed countries), the CPI (excluding housing) in Israel has increased at a lower rate than in the eurozone and US—2.5 percentage points (cumulative) less than the eurozone and 5.2 percentage points (cumulative) less than the US. However, since nominal changes in private-consumption basket prices and nominal GDP prices usually develop in tandem, a slowdown in the rate of increase in the private consumption basket is usually accompanied by the deceleration of household income growth (sometimes at a lag) and does not lower the cost of living.³¹ A good example is the slowing of the increase in nominal wage in 2014, evidently in response to the downward surprise in inflation (Figure 1.3). Accordingly, mild increases in the CPI (or even decreases) may help to lower the cost of living only if they do not concurrently suppress an increase in household income.

The decrease in the clothing and footwear component of the CPI is a good example of a price decline that does not coincide with a downturn in household income.³² Opening the economy to imports in the second half of the 1990s, together with the spread of globalization, led to the closure of plants in Israel and the almost total reliance of this industry on imports. This structural change brought on an almost uninterrupted decline in the prices of clothing and footwear for more than a decade. Prices in this component of the private-consumption basket also fell in many other countries, but the decrease in Israel was more significant. One may surmise that the reason was greater intensification of competition in the Israeli clothing and footwear sector than in many other countries.³³ Another example of a decrease in relative prices that helped to raise the standard of living and lower the cost of living is the decrease in the prices of home furniture and electrical appliances. The price of this component of the CPI relative to the total CPI (excluding housing) declined by 15 percent more in Israel than in the eurozone and was unchanged relative to the US.

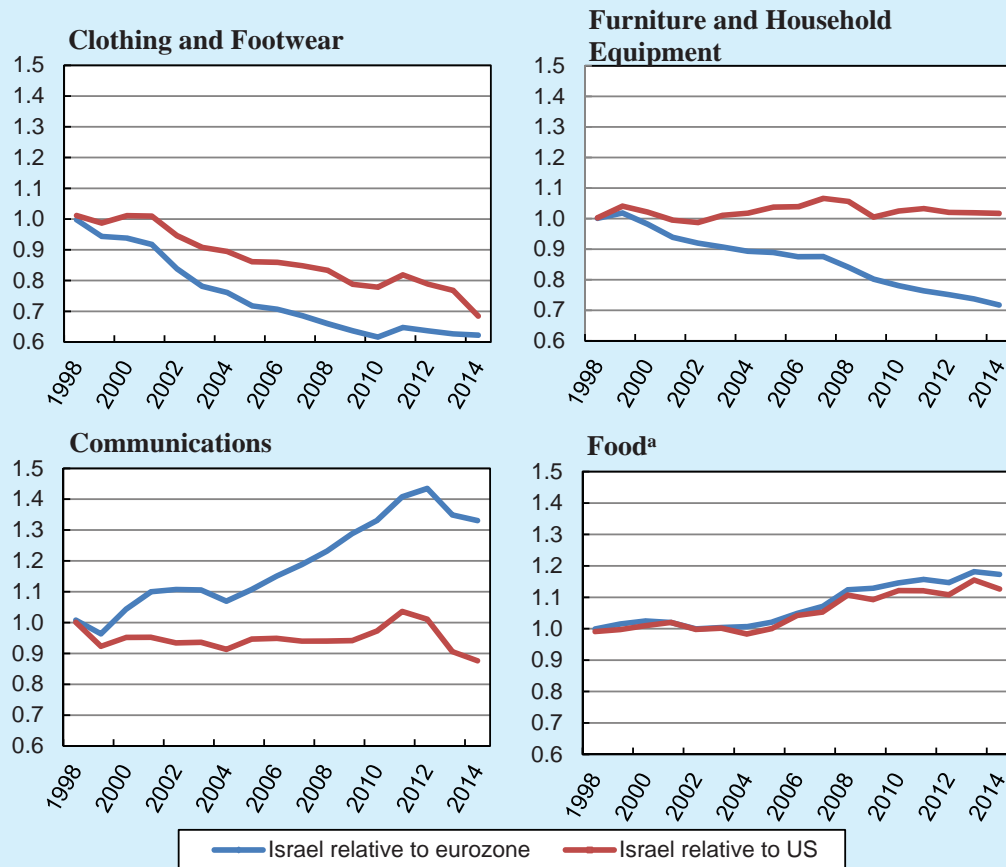
In the communications sector, too, which was opened to significant competition in 2012, prices dropped sharply in the past two years although not markedly in a somewhat longer-term perspective. Thus, whereas communications prices in Israel rose in 2006–12 at a rate similar to that of the total CPI (excluding housing), relative prices in this component decreased in the eurozone countries.

³¹ When a slowdown in price increases turns into a decline, the risk of deflation—in which inflation expectations become negative, real interest rates rise, and demand falls—looms. Since this process may feed on itself and impair growth, an across-the-board decrease in prices is not the ideal way to lower the cost of living. A better way would be a real wage increase coupled with the maintenance of an inflation rate that corresponds to the inflation target, along with a decrease in relative prices in industries that can accommodate one with no harm to economic efficiency.

³² This refers to the macro level. At the micro level, it is clear that some workers and employers were adversely affected by the opening of the clothing and footwear industry to imports.

³³ Several countries experienced even steeper declines in clothing and footwear prices in the past decade; notable among them are Norway, the UK, Ireland, the Czech Republic, and Poland.

Figure 1.9
Selected Price Indices Adjusted for Inflation Differentials (excluding housing),
Israel Relative to US and to Eurozone, 1998–2014 (Index 1998 = 1)



^a The Israeli food price index presented here includes fruit and vegetables and doesn't include meals outside the home. This is to align it with food indices abroad. The furniture and household equipment index for the eurozone and the US were adjusted by reducing the domestic services components that appear in this component. The communications and clothing and footwear components are presented as originally published.

SOURCE: Based on Central Bureau of Statistics, Eurostat, and Federal Reserve Economic Data.

The food, home maintenance, and housing (rent) components of the CPI, along with home prices, account for large portions of household expenditure. Given that their prices have risen rapidly in recent years, they made an upward contribution to the cost of living.³⁴ Some of the price increases in these components reflect exogenous increases in the prices of factors of production—e.g., energy and commodities—and of assets (applying upward pressure on the prices of land and homes), but a considerable portion of them trace to the structure of the market, which, under current circumstances, contributed to an increase in prices.

³⁴ Home prices are not included in the CPI in a direct manner. However, since nearly 70 percent of households own a dwelling, the increase in home prices as a factor that affects the cost of living is related to here.

Food prices rose much more in Israel than abroad in the past decade, with a substantial increase in 2004–08.

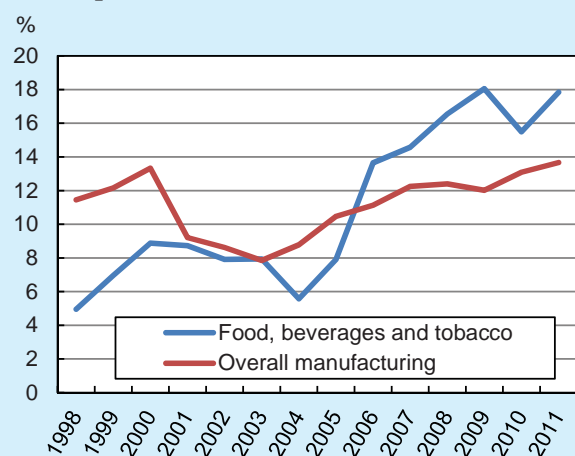
In food, prices rose much more in Israel than abroad in the past decade, with a substantial increase in 2004–08. This was accompanied by a major increase in food manufacturers' profitability in those years, even as average profitability in manufacturing at large hardly grew relative to 1998–2000 (Figure 1.10). The combination of rising food-industry profitability and a relative increase in food prices supports the assessment that the price increases did not derive from higher production costs and that food prices may be lowered, and the cost of living reduced, by bolstering competition in this industry. Notably, there was no relative decrease in food prices in 2008–13 even though the steep currency appreciation in recent years helped to bring down the cost of imported raw materials and finished food products. Accordingly, it may be presumed that profitability in the food manufacturing industry remained high in 2012–14 as well, notwithstanding the social protests in the summer of 2011. (Profitability data are based on industry surveys and are not yet available for 2012–14.) This estimation is reinforced by data from the financial statements of publicly traded food makers, which point to stable gross profitability in the past three years. Food prices in Israel posted a relative decline in 2014, following a relative increase in 2013. Therefore, it is difficult at this time to estimate whether the development of prices in 2014 represents a change of trend in the industry. The Food Law, effective January 2015, may give competition a helping hand.

It is important, however, that the intensification of competition in this industry be accompanied not only by bureaucratic measures of limited enforceability but also by the elimination of import barriers.

The increase in the cost of housing is central in the rising cost of living in recent years. The evaluation of this component, however, encounters a methodological difficulty. The main reason is that a household that acquires a dwelling to live in not only spends money on the consumption of housing services but also purchases an asset. The purchase is usually financed in part by the buyer's own equity and

The increase in the cost of housing is central in the rising cost of living in recent years. However, the evaluation of this component encounters a methodological difficulty.

Figure 1.10
Net Return to Capital as a Percent of Capital Stock^a, 1998–2011



^a A description of how capital stock is calculated appears in the Bank of Israel Annual Report for 2001, in the section on GDP by industry. In 2004, a change was made in the manufacturing surveys. A "break" is therefore possible in the series (according to the 1993 classification of industries. The classification was changed in 2011, and the figure for overall manufacturing for that year may therefore be slightly different than what is shown in the figure.)

SOURCE: Based on Central Bureau of Statistics data.

in part by taking a mortgage, which is paid back in monthly installments. The size of the installment depends on the size of the loan, the payback term, and the interest rate charged. Once payback is completed, the household owns a valuable asset. For this reason, the repayment of a mortgage loan can hardly be regarded solely as a cost incurred for the consumption of housing services.

In Israel, the cost of housing services in the CPI is measured by the proxy of rent, a conventional method that assumes that rent is a good way of expressing the cost of housing services. However, since nearly 70 percent of Israeli households live in dwellings that they own, and since most homebuyers finance their purchase by a mortgage, rent levels clearly do not reflect the economic burden felt by households that plan to purchase a dwelling, due to the increase in home prices.

The housing index (based on rent, as noted) increased by more than 10 percent in real terms in the past decade, and its share in the private-consumption basket climbed from 22 percent to 25 percent, whereas home purchase prices went up by 50 percent in real terms during that time. The latter increase was occasioned partly by a decline in long-term yields abroad and in Israel and to the role of real estate as an alternative to investing in the market. The rest of the upturn, however, originates in the inadequate response of supply. The increase in housing rent supports the assumption that the increase in supply in recent years has been insufficient and the argument that additional construction would have alleviated the pressure on home prices.

Analysis of the Household Expenditure Surveys for 2004–11 shows a steep real increase in the size of the average mortgage loan and growth in the proportion of homebuyers who take such loans.³⁵ The average down payment needed to buy a dwelling remained steady (in real terms) during that time. While some prospective homebuyers benefited from the increase in the value of the financial assets that they held because the appreciation of these assets in recent years allowed them to finance some of the increase in the price of the dwelling, others, who lacked sizable savings before the upturns in housing and financial-asset prices, now need higher rates of savings to keep up with the mortgage payments, which have gone up in real terms.³⁶

³⁵ See Friedmann, Y. and S. Ribon, “Whence the Money? Home Purchases and Their Financing: An Analysis Using Household Expenditure Survey Data, 2004–2011,” Bank of Israel, Periodic Paper 2014.05.

³⁶ Since household income rose during that time, mainly due to the increase in the employment rate and the reduction of direct taxes, the mortgage payment to disposable income ratio did not increase.

Table 1.2
Economic indicators: International comparison^a, 2003-14

	Average 2003-07				2008-13				2014			
	Israel	US	Eurozone	OECD	Israel	US	Eurozone	OECD	Israel	US	Eurozone	OECD
GDP growth rate	4.5	2.9	2.1	2.8	3.6	0.9	-0.3	0.7	2.8	2.2	0.8	1.8
Per capita GDP growth	2.6	1.9	1.6	2.1	1.7	0.2	-0.6	0.1	0.8	1.5	-	-
Per capita GDP (\$ thousand, current prices)	20.9	44.0	32.7	31.0	31.5	49.6	39.4	36.9	37.0	54.7	-	-
Population growth rate	1.8	0.9	0.6	0.6	1.8	0.8	0.3	0.7	1.9	-	-	-
Civilian labor force participation rate, ages 25-64	75.1	79.0	-	75.3	77.5	78.1	-	76.3	79.5	-	-	-
Unemployment rate	11.5	5.2	8.5	6.4	7.6	8.2	10.0	7.7	5.9	6.2	11.4	7.3
Inflation rate (during the year)	0.8	2.9	2.2	2.5	2.9	2.0	2.0	2.2	0.5	1.7	0.5	-
Exports (percent of GDP) ^b	33.0	10.2	36.4	24.1	31.7	12.8	40.4	27.1	28.8	-	-	-
Gross investment (percent of GDP)	19.5	22.6	21.3	-	19.2	19.0	19.3	-	19.0	19.8	18.0	-
National savings (percent of GDP)	21.4	17.8	22.8	-	21.5	15.6	21.3	-	22.0	17.3	21.6	-
Current account (percent of GDP)	2.6	-5.2	0.4	-1.2	2.2	-3.1	1.0	-0.6	3.0	-2.2	3.0	-0.1
Public expenditure (percent of GDP) ^c	43.0	36.6	46.4	39.2	39.4	39.4	41.0	49.3	39.4	38.4	49.1	41.6
Tax revenue (percent of GDP) ^d	33.7	25.8	38.1	34.7	30.4	24.2	37.9	34.0	31.0	-	-	-
Gross public debt (percent of GDP) ^c	86.0	64.1	77.0	75.8	70.7	100.0	94.4	100.0	67.7	109.7	108.2	112.0

^a Figures for the eurozone and OECD countries are weighted averages of the data for the countries in each group, as published in the OECD Economic Outlook.

^b For Israel - exports excluding diamonds.

^c Deficit and expenditure data for Israel are adjusted to the accepted international definition.

^d Data for the eurozone and OECD countries are the simple averages of the data for the countries in each group. Data for the eurozone do not include Latvia, Malta or Cyprus.

SOURCE: International Monetary Fund, OECD and Bank of Israel.