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Executive summary

- The economy is strong
- Income inequality has fallen, but economic disparities and a lack of social cohesion persist
- Reforming education, infrastructure and product markets will enhance inclusiveness and productivity

The statistical data for Israel are supplied by and under the responsibility of the relevant Israeli authorities. The use of such data by the OECD is without prejudice to the status of the Golan Heights, East Jerusalem and Israeli settlements in the West Bank under the terms of international law.
The economy is strong

Israel's economy continues to register remarkable macroeconomic and fiscal performance. Growth is strong and unemployment low and falling. With low interest rates and price stability, financial policy is prudent, and public debt is comparatively low and declining. The external position is solid, thanks to a dynamic high-tech sector. The average standard of living is improving, mainly due to higher employment rates. Continued accommodative macro policies and planned investments in the offshore gas fields in the coming years will spur further growth. Against this backdrop, Israelis remain on average more satisfied with their lives than residents of most other OECD countries.

Income inequality has fallen, but economic disparities and a lack of social cohesion persist

Rapid employment growth has also boosted the income of the poor, benefiting the disadvantaged groups. However, the share of working poor has risen because many workers, notably Israeli-Arabs and Haredim, are in low-paid jobs due to their weak skill sets. Workers from these communities are often trapped in low-quality jobs, implying persistent inequality and weak aggregate productivity. Moreover, low social transfers imply that the often large families in these communities face deprivation that contributes to child poverty. High house prices also weigh on the social situation and well-being. Without further policy action, these trends are likely to worsen, as Israeli-Arabs and Haredim will constitute half the population by 2059.

Reforming education, infrastructure and product markets will enhance inclusiveness and productivity

To foster stronger social cohesion, a broad set of complementary reforms in product markets, infrastructure and education are critical. Further strengthening product market competition will boost productivity in sheltered sectors. Israel has a large infrastructure deficit, especially in public transport, which causes considerable road congestion and poor air quality, impedes access to the labour market and accentuates spatial segregation of disadvantaged groups living in peripheral zones. Better infrastructure in disadvantaged areas, especially Arab cities, would improve job prospects and well-being. Above all, reforms and more public investment in education would improve the skills of Haredim and Israeli-Arabs, especially women, allowing them to find well-paid jobs in high value-added sectors.

1. Haredi boys did not participate in the PISA test, as they do not study the required material. Results are thus overestimated.

The fiscal situation is healthy, with declining public debt. But, despite recent increases, weak public spending on education and infrastructure limits the government’s capacity to reduce significant socio-economic disparities and support growth. Extra spending needs to be financed. Tax collection could be improved, and there are a number of inefficient tax exemptions.

Despite strong growth, prices have declined in the last three years. However, wage growth is picking up as the slack in the labour market disappears.

Risks of a house-price correction are still high.

Real estate supply has been too rigid to adjust to strong housing demand partly due to low interest rates, causing high and rising housing prices.

Local taxes on residential properties are too low for financing and maintaining the infrastructure needed for new housing development in poor municipalities.

Labour force participation rates for Israeli-Arabs and Haredim remain low.

The share of working poor is rising and high by international comparison. Child poverty is widespread. In-work benefits are low and insufficient for families even with two breadwinners in low-paid jobs.

Student outcomes differ significantly between educational streams, which contributes to high social and economic segregation. Inter-generational persistence of poverty is significant.

Vocational education and training is underdeveloped, and many tertiary educated graduates are employed in jobs not matching their field of studies, which harms their wages and employment prospects.

Partly due to past public underinvestment, Israel has a large infrastructure deficit, especially in public transport, which causes considerable road congestion and poor air quality. Infrastructure shortages also exist in other sectors, including renewable electricity generation and hospitals.

The management and implementation of large infrastructure projects is often deficient, and the planning process is lengthy and weak.

Arab towns often lack adequate infrastructure facilities because of a dearth of available public land, urban-planning problems and illegal construction.

Despite some progress, competition in Israeli markets remains weak and the economy is less open to foreign trade than most other OECD countries. Price levels are still comparatively high, notably for food. The business environment also suffers from excessive bureaucracy.

Fostering inclusiveness through better training and better jobs for disadvantaged groups

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Improving infrastructure and product markets

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EXECUTIVE SUMMARY
Assessment and recommendations

- Maintaining solid increases in living standards and well-being in the longer term will be challenging.
- Improving social cohesion would promote sustainable growth.
Israel’s economy continues to perform well both in terms of macroeconomic and fiscal outcomes (Figure 1). Growth has averaged 3.3% since 2000, higher than in many OECD countries, although this was partly driven by strong population growth, which accounted for half of this impressive increase. The external surplus is comfortable, and the public debt-to-GDP ratio, already well below the OECD average, is still falling. This success is largely attributable to a long history of effective macroeconomic policy settings and bold structural reforms, including the successful absorption of the wave of immigrants from the Former Soviet Union, the promotion of venture capital financing for the nascent high-tech sector and the liberalisation of higher education, all dating back to the 1990s, as well as improvements in work incentives in the early 2000s. These good results are expected to continue, thanks to the persistently dynamic high-tech sector and the forthcoming development of new gas fields. Against this backdrop, Israelis remain on average more satisfied with their lives than residents of most other OECD countries, even though well-being results are mixed in several respects, including the environment (Figure 2, Panel A). They enjoy remarkable health and labour market outcomes, with historically low overall and long-term unemployment rates. Employment growth has been the main factor reducing the gap in average living standards with the most advanced countries these last 15 years, although this driver has weakened in the past few years (Panel B).

Figure 1. Israel’s economy is performing strongly

<table>
<thead>
<tr>
<th>A. Gross domestic product</th>
<th>B. Gross public debt¹</th>
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</thead>
<tbody>
<tr>
<td><strong>Index 2000 = 100</strong></td>
<td>% of GDP</td>
</tr>
<tr>
<td>180</td>
<td>120</td>
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<tr>
<td>170</td>
<td>110</td>
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<tr>
<td>160</td>
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<td>110</td>
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<td>100</td>
<td></td>
</tr>
</tbody>
</table>


Israeli society is, however, marked by a lack of social cohesion and significant disparities, which penalise parts of the population and threaten the longer-term sustainability of these good results. Inequalities have declined slightly since 2007, thanks to higher employment rates among Israeli-Arabs and the Haredim (MoF, 2017a), but poverty remains widespread,
particularly among these disadvantaged groups, for whom the rate reaches around 50% (Figure 3). Better social and labour-market integration of these groups, which will represent half the population by mid-century, is crucial. Haredi and Israeli-Arabs’ average skills and remuneration levels are low, their families large and social transfers limited (Box 1). In addition, overall productivity growth remains slow, and the cost of living is currently

**Figure 3. Inequality and poverty remain high**
2016 or latest year available

1. Defined as the S90/S10 disposable income share ratio, i.e. the share of all disposable income received by the top decile divided by the share of the bottom decile.
2. Poverty rate relative to threshold of 50% of median disposable income.

StatLink [http://dx.doi.org/10.1787/888933672781](http://dx.doi.org/10.1787/888933672781)
somewhat higher than the OECD average despite GDP per capita being more than 15% lower (OECD, 2017a). High house prices make home ownership difficult for the middle class and young households, and living space per person is modest, given large average family size. Moreover, public transport deficiencies are detrimental to work-life balance and cause urban congestion and poor air quality.

To a large extent, these difficulties reflect persistent weaknesses in three key areas: product markets, education and infrastructure (Flug, 2017a and b). As highlighted in the 2016 Survey, product market regulations are far from best practice. The lack of competition and high non-tariff barriers in many sectors, notably electricity and the entire food chain, push up prices and contribute to duality in productivity between open and sheltered sectors, resulting in wage and income disparities. Much room exists to improve the business environment and lower regulatory burdens and bureaucracy. Haredi and Israeli-Arabs lack the skills needed for well-paid jobs. These deficiencies limit the effectiveness of their employment gains for lowering poverty and perpetuate the strong disparities in formal education between these groups and the rest of the population (Figure 4, Panel A). Contrary to other groups, for the Haredim this situation largely reflects an explicit choice of studying religious rather than secular subjects and of separating themselves from the rest of the society. Moreover, even Haredi men who do work often do not consider their jobs to be a career path but merely a means of relieving tight income constraints. Already 44% of people under 14 are currently from Arab or Haredi families, and the Haredi share is
Figure 4. **Education outcomes are poor for disadvantaged groups, whose share is growing**

A. Average overall PISA score, 2015

B. Demographic trends by community group


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Growing rapidly (Panel B). The country’s large infrastructure deficit also contributes to economic and social imbalances. Inadequate public transport accentuates the housing shortage by lowering the attractiveness of more affordable neighbourhoods and reduces access and employment opportunities for disadvantaged groups from peripheral zones. It is also the cause of considerable road congestion and worsens air quality.

With this background, the main messages of this Survey are:

- The current favourable economic situation provides an opportunity to prepare for the challenges of the future by tackling Israel’s structural weaknesses to ensure the continued increase in living standards and in the quality of life for all Israelis, including in terms of housing.
- Enhanced training and education of Israeli-Arabs and Haredim, better infrastructure and further product market reforms have complementary roles to play in making growth stronger, more inclusive and more sustainable by boosting productivity.
- Increasing the supply and quality of human capital and infrastructure requires both structural reforms and additional financial resources, which can be funded while maintaining prudent fiscal policy.

**Maintaining solid increases in living standards and well-being in the longer term will be challenging**

*The Israeli economy continues to expand*

Growth has slowed somewhat but remained robust at 3.3% in 2017. Domestic demand, supported by accommodative fiscal and monetary policies, has been the driver of activity, which was also boosted by a probably unsustainable increase in stockbuilding. Strong employment gains, low inflation and minimum wage increases are fuelling consumer spending. At the same time unemployment has declined to around 4%, i.e. at or close to full employment, and labour shortages are spreading to all sectors in the economy, while, in previous years, they were above all prevalent in the high-tech sectors and for high-skilled workers (Box 2). On the other hand,
goods exports have been relatively weak due to still moderate world trade growth and worsening
price competitiveness from shekel appreciation. However, led by the high-tech sector, services
exports have been much more buoyant and now represent 42% of the total (against less than 30%
in 1995), and the external surplus remains sizeable because of the large export share of low-
price-elasticity high-tech products (Figure 5). Despite the substantial real exchange rate increase
since 2005, market share losses have been limited compared to other advanced economies
(Figure 6). This overall robust performance has further improved Israel’s financial stability, as
reflected in its recent sovereign rating upgrade (Barkat, 2017a).

Growth is expected to be around 3½ per cent in 2018 and 2019 (Table 1). The still very
low interest rates, expansionary fiscal measures, including corporate tax cuts and higher

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Box 2. **The high-tech sector: share and development in the Israeli economy**

The high-tech sector in Israel combines the industrial sectors in the electronics,
pharmaceuticals and aircraft sectors alongside services – software and research and
development. Along with veteran companies in the industry (such as Intel, Teva and Check
Point), start-ups have been added in recent decades, financed by venture capital funds as
well as research and development centres of multinational companies. This sector has
grown rapidly and has contributed significantly to the development of the economy since
the mid-90s (CBS, 2017a). Employment in the high-tech industry increased from 7% of total
employment in 1995 to 9% in 2014, or 12% of employment in the business sector, which is
more than double the OECD-country median. This sector, whose share in GDP increased
from 6.5% to 11.4% during this period, experienced stronger growth in services than goods.
High-tech services accounted for two-thirds of the value added produced in the high-tech
sector in 2014. These developments have also benefited aggregate exports, half of which are
high-tech goods and services.

High-tech development has been based on the remarkable performance of the country in
the field of innovation (OECD, 2016a). It has been supported by high R&D spending (at 4.1%
of GDP in 2014, R&D expenditure is the second highest in the OECD); universities providing
high-quality human capital in science and technology fields; good collaboration between
academia and industry; a well-developed venture capital industry (Israel has the largest
share of early-stage and seed venture capital funding in GDP among OECD countries); and
favourable taxation for high-tech firms. In addition to these factors, the challenges Israel
faces were also an impetus for innovation and creativity (Flug 2017b). Highly dynamic
entrepreneurship in ICT, in particular in the cyber security industry, has emerged partially as
a response to security threats. The development of new technologies to respond to water
scarcity challenges has also made Israel a world leader in water-related innovation.

However, the vigour of the high-tech sector has weakened, and it has no longer been the
engine of growth since 2010. Since then, high-tech industry expansion has been about half
that of the rest of the economy. Production in this sector, which exceeded 13% of GDP in 2009,
fell by 1.7 percentage points and its share in exports stopped increasing. The most significant
challenge facing the sector is the lack of supply of skilled labour (MoF, 2016). Its employment
share in the economy, although still higher than that of other countries, has declined by more
than 1 percentage point since 2009. Moreover, investment in R&D and the dynamism of
innovation are benefiting only a limited number of sectors and are not spreading to the entire
economy. The result is that SMEs and entrepreneurs operating in traditional sectors are
largely detached from the high-tech economy, their productivity is low compared with SMEs
in other OECD countries, and only 15% of Israeli SMEs are involved in exporting.
social spending and investment, coupled with the launch of the Leviathan and Karish gas fields, will support activity (Box 3). An improved external environment should underpin exports and keep the economy at full employment. Against this backdrop, solid wage increases and stronger import price growth are expected to push inflation back up to around 1.5% by end-2018.

Growth would, however, be lower if the shekel were to appreciate further or if the geopolitical situation or the external climate were to deteriorate. Conversely, the economy could be stronger, and even overheat, if demand, supported by a better-than-expected

Figure 5. **Exports of goods by market and commodity are fairly diversified**

Share of total exports, 2016

A. Main export destinations

B. Main export commodities

Source: OECD, International Trade Commodity Statistics Database.

Figure 6. **Competitiveness has been hit by exchange rate appreciation**

1. Measured the Israeli’s unit labour costs in dollar terms relative to the weighted average of these costs for its competitors in export and domestic markets. An increase of the index indicates a deterioration of the competitive position.

2. Of goods and services.


Source: OECD, Economic Outlook Database.
Still, the Israeli economy is enjoying its 15th consecutive year of growth and remains resilient. The country’s macro-financial vulnerabilities appear low, despite the deterioration in price competitiveness since 2007 (Figure 7). The financial situation remains solid, thanks to profitable and well-capitalised banks, with few non-performing loans (Figure 8) and high liquidity (BoI, 2017a; IMF, 2017). However, risks associated with the large financial-sector exposure to the real estate market, where prices have more than doubled since 2007, have intensified.
Box 3. **The economic impact of the natural gas discoveries**

Israel's natural gas sector has recently taken off, with major offshore reserves discovered in its exclusive economic area in 2009-10. These reserves, which include the two big fields of Tamar (305 billion m$^3$) and Leviathan (580 billion m$^3$) and other smaller fields, are enough to supply the country for probably more than 50 years. Tamar is currently the only deposit exploited. It meets over 95% of the country’s current demand of 8 billion m$^3$, and its development and production as from 2013 is estimated to have increased GDP by 1.1% mainly due to the over 60% decline in energy imports. Moreover, replacing imported coal and oil by gas in power generation has cut pollution, and related royalty revenues, even though still modest less than 0.1% of GDP, have been positive for the budget.

Because of limited domestic gas demand, Leviathan’s operation, due to start in late 2019, will have a small initial positive impact (0.3%) on GDP, while its longer-term effect will depend on export opportunities. Contracts have already been signed with Jordan and in February 2018 with Egypt, and discussions are ongoing with Turkey and EU countries. In addition to royalties and corporate taxes, the gas industry will be liable for a special levy of 20-50% on profits over normal returns on investment, whose proceeds will be placed in a forthcoming dedicated sovereign fund to share with future generations. It could represent 10% of GDP in 2040 and will be invested in foreign currencies to reduce the risks of Dutch disease. This risk is currently being handled by a central bank foreign-currency purchase mechanism.

Table 2. **Possible extreme shocks affecting the Israel economy**

<table>
<thead>
<tr>
<th>Shock</th>
<th>Possible impact</th>
</tr>
</thead>
<tbody>
<tr>
<td>Increase in global protectionism</td>
<td>A new wave of isolationist economic policies and protectionism would lower global trade and exports. The effects on countries without a large domestic market, such as Israel, would be particularly harmful.</td>
</tr>
<tr>
<td>Renewed geopolitical tensions</td>
<td>Heightened geopolitical instability in the region or an intensification of the boycott campaign against Israel would weaken both domestic and external demand, with negative budgetary repercussions, which would be reinforced by a likely rise in military spending.</td>
</tr>
<tr>
<td>Financial markets and a housing market crisis</td>
<td>If house prices were to fall sharply, reversing some of the appreciation of the last decade, private consumption would suffer because of a wealth effect. That would lead to adverse effects on the labour market, which would harm borrowers’ ability to service their mortgage debts and potentially entail a further house price decline. This vicious circle would weaken the banking system with its substantial housing-market exposure.</td>
</tr>
</tbody>
</table>
Pursuing appropriate monetary-policy settings

Monetary policymakers are facing unusual challenges in maintaining price stability. At 0.1% year-on-year, inflation is well below the 1-3% target range; prices declined for three straight years before turning up in the first half of 2017 (Figure 9), despite flourishing economic activity,
recent employment and minimum-wage hikes and a job-vacancy rate at its highest level on record (Figure 10). Wages have picked up over the past two years, as firms have managed to maintain their margins thanks to significant improvements in the terms of trade since 2014. Nevertheless, zero inflation is rather hard to fully explain, but the most important additional mechanisms are the lower import prices from shekel appreciation and lower commodity prices, as well as favourable temporary product-market supply shocks: government reforms (see below) and measures to lower the cost of living through public tariff cuts, VAT reductions, and stronger competition from the expansion of e-commerce (Figure 11), encouraged by higher exemption thresholds from customs duties and VAT on these purchases. Furthermore, deflation has tended to be self-perpetuating through expectations mechanisms (Bol, 2017b).

Figure 9. Inflation developments according to the CPI

A. Headline rates across countries

<table>
<thead>
<tr>
<th>Year</th>
<th>Israel</th>
<th>Japan</th>
<th>Euro area</th>
<th>United States</th>
</tr>
</thead>
<tbody>
<tr>
<td>2010</td>
<td>1.0</td>
<td>3.5</td>
<td>0.0</td>
<td>2.0</td>
</tr>
<tr>
<td>2011</td>
<td>0.5</td>
<td>3.0</td>
<td>0.5</td>
<td>2.5</td>
</tr>
<tr>
<td>2012</td>
<td>0.0</td>
<td>2.5</td>
<td>0.0</td>
<td>2.0</td>
</tr>
<tr>
<td>2013</td>
<td>0.5</td>
<td>2.0</td>
<td>0.5</td>
<td>1.5</td>
</tr>
<tr>
<td>2014</td>
<td>1.0</td>
<td>1.5</td>
<td>1.0</td>
<td>1.0</td>
</tr>
<tr>
<td>2015</td>
<td>0.5</td>
<td>1.0</td>
<td>0.5</td>
<td>0.5</td>
</tr>
<tr>
<td>2016</td>
<td>0.0</td>
<td>0.5</td>
<td>0.0</td>
<td>0.0</td>
</tr>
<tr>
<td>2017</td>
<td>0.5</td>
<td>1.0</td>
<td>0.5</td>
<td>0.5</td>
</tr>
</tbody>
</table>

B. Inflation in Israel

<table>
<thead>
<tr>
<th>Year</th>
<th>Overall inflation</th>
<th>Core inflation¹</th>
<th>BoI's def. core inflation²</th>
</tr>
</thead>
<tbody>
<tr>
<td>2010</td>
<td>2.0</td>
<td>1.5</td>
<td>1.0</td>
</tr>
<tr>
<td>2011</td>
<td>1.5</td>
<td>1.0</td>
<td>0.5</td>
</tr>
<tr>
<td>2012</td>
<td>1.0</td>
<td>0.5</td>
<td>0.0</td>
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<tr>
<td>2013</td>
<td>0.5</td>
<td>0.0</td>
<td>-0.5</td>
</tr>
<tr>
<td>2014</td>
<td>0.0</td>
<td>-0.5</td>
<td>-1.0</td>
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<tr>
<td>2015</td>
<td>0.5</td>
<td>0.0</td>
<td>-0.5</td>
</tr>
<tr>
<td>2016</td>
<td>1.0</td>
<td>0.5</td>
<td>0.0</td>
</tr>
<tr>
<td>2017</td>
<td>1.5</td>
<td>1.0</td>
<td>0.5</td>
</tr>
</tbody>
</table>

Source: OECD, Economic Outlook Database; Bank of Israel.

1. CPI excluding energy and food products.
2. CPI excluding energy, vegetables and fruit, and administrative charges.

Figure 10. The labour market continues to tighten

A. Cyclical slack has been used up

<table>
<thead>
<tr>
<th>Year</th>
<th>% of labour force</th>
</tr>
</thead>
<tbody>
<tr>
<td>2010</td>
<td>5.0</td>
</tr>
<tr>
<td>2011</td>
<td>4.5</td>
</tr>
<tr>
<td>2012</td>
<td>4.0</td>
</tr>
<tr>
<td>2013</td>
<td>3.5</td>
</tr>
<tr>
<td>2014</td>
<td>3.0</td>
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<tr>
<td>2015</td>
<td>2.5</td>
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<tr>
<td>2016</td>
<td>2.0</td>
</tr>
<tr>
<td>2017</td>
<td>1.5</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>% of total employees</th>
</tr>
</thead>
</table>

Involuntary part-time workers
Marginally attached workers
Unemployment rate
NIRAU¹
1. Unemployment rate with non-accelerating inflation rate.
2. Three-month moving average of the year-on-year percentage change.
3. Deflated by the consumer price index.

Source: OECD, Economic Outlook and Labour Force Statistics Databases; Bank of Israel; Central Bureau of Statistics.

B. Wage growth and job vacancies

<table>
<thead>
<tr>
<th>Year</th>
<th>% change²</th>
</tr>
</thead>
<tbody>
<tr>
<td>2010</td>
<td>5.0</td>
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<tr>
<td>2011</td>
<td>4.5</td>
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<tr>
<td>2012</td>
<td>4.0</td>
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<tr>
<td>2013</td>
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<td>2016</td>
<td>2.0</td>
</tr>
<tr>
<td>2017</td>
<td>1.5</td>
</tr>
</tbody>
</table>

| % of total employees |

Nominal wage growth
Real wage growth
Job vacancy ratio

Source: OECD, Economic Outlook and Labour Force Statistics Databases; Bank of Israel; Central Bureau of Statistics.
In this context, the Bank of Israel (BoI) is rightly maintaining a very accommodative policy, keeping its official rate at the historically low level of 0.1% since March 2015. The authorities also intervene in the foreign exchange market to limit fluctuations and excessive appreciation that would result from the extraordinarily accommodative monetary policy settings by the world’s major central banks. These interventions come on top of a currency purchase programme to offset the exchange-rate pressure (or “Dutch disease”) from expanded natural gas production (see Box 3 above). The result of persistent intervention is that the BoI has foreign-currency reserves of USD 118 billion (34.5% of GDP), one of the OECD’s highest GDP shares. Since November 2015 the BoI has also provided forward policy guidance to influence investor expectations: this accommodative policy is thus expected to be maintained as long as necessary to entrench inflation within the 1-3% target range (BoI, 2018). Although shorter-term inflation expectations are below 1%, they are well anchored to the target beyond this horizon, indicating monetary policy credibility (Figure 12).

Figure 11. Packages sent to Israel from abroad are rising rapidly

![Figure 11](http://dx.doi.org/10.1787/888933672933)

1. Figures for 2016 are incomplete.
Source: Israel Post.

Figure 12. Inflation expectations are low in the short term but within the target range thereafter

![Figure 12](http://dx.doi.org/10.1787/888933672952)

Source: Bank of Israel.
Nevertheless, the risks of maintaining an accommodative monetary policy too long should not be neglected, as the favourable effects from the terms-of-trade gains could reverse quite rapidly. Low inflation does not seem related to weak demand, and tightening too late would increase the risks of overheating and rising wage pressures, which, with increased competition, would harm business profitability and investment. It would also raise the financial vulnerabilities from the housing-market tensions, which remain significant and partly result from the low interest-rate environment.

Preserving financial stability while strengthening sectoral efficiency

Israel’s financial system remains robust. However, as highlighted in the 2016 Survey, the oligopolistic banking sector continues to incur high operating costs. In response, the authorities have adopted several measures to boost competition (Table 3). These include the separation of the credit card companies from the two main banks and the creation of a central credit register accessible to all financial entities. Under the BoI’s pressure, banks have also launched plans to reduce their operating costs, develop online banking and lower their fees (BoI, 2017c).

Table 3. Past recommendations on improving the stability and efficiency of the financial system

<table>
<thead>
<tr>
<th>Recommendations in previous Surveys</th>
<th>Action taken since January 2016</th>
</tr>
</thead>
<tbody>
<tr>
<td>Monitor and respond to financial market risks. Remove the supervisory duties currently carried out by CMISD from the Ministry of Finance. Further strengthen oversight communication and co-ordination.</td>
<td>In November 2016 the “Capital Market, Insurance, and Savings Authority” (CMISA) (ex-Capital Markets, Insurance and Savings Division or CMISD) was separated from the Ministry of Finance and established as an independent public authority. In May 2017 discussions started in the Knesset about the creation of a Financial Stability Committee.</td>
</tr>
<tr>
<td>Strengthen mechanisms for dealing with banks in difficulty, for instance by augmenting the powers of the Bank of Israel for early intervention. Create a deposit insurance system.</td>
<td>The Bank of Israel, the Ministry of Finance and the Ministry of Justice have started discussions on setting up a deposit insurance scheme and a bank resolution framework.</td>
</tr>
<tr>
<td>Promote the entry of new competitors in retail banking, including non-banking credit entities, with adequate prudential and consumer protection regulation. Focus in particular on regulatory reform and supervision of the non-banking financial sector.</td>
<td>The Economic Arrangement Law of 2017-18 allowed credit unions to enter the credit market. The regulatory authority of the CMISA has been expanded to include responsibility for protecting customers’ interest in entities and organisations, including non-bank credit providers in addition to institutional investors.</td>
</tr>
<tr>
<td>Make the changes required to increase uptake of direct debit cards. Separate the credit card companies from the two largest banks.</td>
<td>In January 2017 the separation of the two largest banks from their credit card companies was approved by the Knesset. A special committee was created to monitor the impact of this measure.</td>
</tr>
<tr>
<td>Finalise the improvements to the credit-reporting system.</td>
<td>Creating a central credit register was approved in March 2016. The central bank will handle that.</td>
</tr>
</tbody>
</table>

Macro-prudential policies have been tightened since 2009, reducing the risks associated with the real estate market. The financial system’s resilience in the event of a sharp fall in housing prices and severe recession has thus been enhanced. According to 2015-16 stress tests, systemic stability would not be threatened despite substantial losses (BoI, 2016a). The household-debt ratio would also probably remain relatively low as the lower income deciles account for a relatively small share of household credit: the ratio of total debt to annual income ratio is 0.6 on average and exceeds 1 only for households in the lowest decile (for which it is close to 3). However, only 3.5% of total loans have been issued to households in that decile (BoI, 2016b). The BoI’s macro-prudential measures have also raised mortgage rates since spring 2015 (Figure 13), which, together with higher taxation on real estate investments, has reduced housing-credit demand, eased housing-market tensions and stabilised banks’ exposure (Figure 14).
Although the tighter macro-prudential policies have helped to lower risks in the housing market, a severe housing-market correction remains possible, and developments should be monitored very carefully. Further improving stability is thus desirable to fully benefit from ongoing efficiency-enhancing financial reforms such as the planned monitoring of the measures spurring competition on the credit market (see Table 3 above). Hence, further steps are needed and are being considered: a deposit insurance system, a bank resolution framework and a financial stability committee enhancing co-ordination between the BoI, the Ministry of Finance and the Securities Authority would all further strengthen financial stability.

Continuing catch-up faces longer-term challenges

Over the longer term demographic trends imply a large increase in the population (from 8.5 million in 2015 to 18.5 million in 2060), even with modest immigration, and a substantial
change in population composition. Given the high fertility of Haredi women, which is assumed to remain largely unchanged, the share of that community in the total population would triple in the next 45 to 50 years, with the total share of Israeli-Arabs and Haredim rising from one-third to one-half over this period (CBS, 2017b). Despite recent improvements, these groups have poorer labour-market outcomes and much lower productivity than non-Haredi Jews, and labour force participation remains particularly weak among Haredi men and Israeli-Arab women. Moreover, even though Israel currently has the OECD’s youngest population due to its high birth rates, the share of over-65s will nevertheless increase from 10% now to 17% in 2059.

These demographic changes mean that per capita GDP growth will probably slow in coming decades. Empirical research suggests that, if the recent rate of convergence in terms of labour market outcomes of Haredim and Israeli-Arabs with the rest of the population is maintained, productivity gains will weaken considerably relative to their already slow trend and the average employment rate will fall somewhat (Geva, 2015). In such a business-as-usual scenario, the convergence in living standards with the OECD average will cease and even reverse, with the per capita GDP gap rising from 15% in 2015 to around 20% by 2059 (Figure 15). Without reforms the number of working poor will rise (see below).

Figure 15. The gap in GDP per capita with the OECD average could shrink further with ambitious reforms

1. The business-as-usual scenario consists of the updated projections for the Economic Outlook No. 102 until 2019, with an extrapolation of real growth per capita based on Geva (2015), at an average annual rate of 1.5%. This scenario assumes that the convergence of employment rate and productivity level of Haredim and Israeli-Arabs with the rest of the population continues at the same pace as in the last decade. The no-reform scenario is also based on Geva (2015) and assumes no convergence of Haredim and Israeli-Arabs, with an annual average real growth of per capita GDP of 1.2%. The structural reform scenario differs from the previous scenarios by assuming gains from structural reforms entailing higher real GDP per capita growth by 0.6 percentage points during the period 2019-29. At the same time, the productivity of Haredim and Israeli-Arabs compared to non-Haredi Jews will increase from 60% currently to 80% and the employment rate of Haredim and Israeli-Arabs will be close to the level of non-Haredi Jews in 2059.


However, launching ambitious reforms in product markets, infrastructure and education would substantially boost growth performance and living standards. According to OECD estimates, promoting a more business-friendly environment, represented by the OECD average, could enhance efficiency and increase per capita GDP by almost 6% over a 10-year period (OECD, 2016b). Better infrastructure and educational outcomes supported by
ambitious reforms (see below) also have an essential role to play in improving labour-market and productivity outcomes in disadvantaged communities. For instance, further improving the Haredim and Israeli-Arabs’ (youth in particular) integration into society through better education and training leading to a lower productivity gap with non-Haredi Jews from around 40% currently to, say, 20% in 2059 would raise average annual per capita GDP growth by 0.2 percentage point. These reforms would shrink existing income disparities within Israeli society and the shortfall in living standards vis-à-vis the OECD average to 10% in 2059 (see Figure 15 above). By contrast, if the authorities fail in their enhanced integration efforts and these groups keep their current employment and productivity gaps, average Israeli incomes would fall to close to 30% below the OECD average in 2059, almost double the current gap.

Preserving prudent fiscal policy while addressing spending needs

Israel has succeeded in reducing its government debt from 90% of GDP in 2002 to 62% in 2016, thanks to the normal deficit-growth dynamics due in part to a prudent budgetary framework, which combines an expenditure-based fiscal rule with deficit targets, and a robust growth performance. In addition, gross debt has been pushed down by the amortisation of mortgages granted to the public until the early 2000s, sales of government-owned land and shekel appreciation (which has cut the shekel value of foreign-currency debt) (Figure 16). Currently, the annual real spending-growth ceiling is set at 2.6%, and the deficit targets are 2.9% of GDP for 2017-19 and then 2.5% and 2.25% of GDP in 2020 and 2021. This framework has recently been strengthened to ensure better compliance with these rules (Table 4). Since the 2017-18 budget the government can no longer adopt new spending or tax cuts that breach these spending or deficit limits over a three-year period without offsetting measures. A multi-year defence plan was also introduced to lower fiscal uncertainty in this domain and to slightly reduce these expenditures from their relatively high current level (6% of GDP and 15% of public spending). However, the pre-2009 downtrend in such spending as a share of GDP was not maintained, and military spending has grown steadily since then. Accordingly, further efforts to promote efficiency gains in this area would be desirable.

Figure 16. Factors contributing to the gross debt-to-GDP decline between 1998 and 2016

The budget deficit declined to 2.1% of GDP in 2016, its lowest level since the 2008 crisis. However, with public expenditure growing well above the 2.6% ceiling, the fiscal stance has become somewhat expansionary. Thanks to strong, mostly temporary, tax receipts, such as those arising from the temporarily low tax rate on dividends (which in fact will reduce future revenues) and revenues from capital gains taxation on the sale of Mobileye to Intel, the deficit is projected to have declined to 2.0% of GDP in 2017 before increasing to 2.9% of GDP in 2018, which will lead to a deterioration of the structural balance in 2018, and will slow the public debt decline. However, the planned extra spending of 1% of GDP (BoI, 2017d) is mostly on education, health care and allowances for the elderly and disabled, and is thus likely to promote more inclusive growth, if the measures are well designed and well implemented. In addition, in November 2017 the authorities also unveiled a national nursing care plan offering better protection for seniors in need of long-term care (Barkat, 2017b).

Nevertheless, Israeli civilian spending will remain among the lowest in the OECD even after the 2017-18 increases (Figure 17). Low expenditure, particularly for education, public investment and welfare (see below), limits the state’s capacity to counter large socio-

<p>| Table 4. Past recommendations on fiscal policy |</p>
<table>
<thead>
<tr>
<th>Recommendations in previous Surveys</th>
<th>Action taken since January 2016</th>
</tr>
</thead>
<tbody>
<tr>
<td>Implement effectively the plan ensuring the consistency of commitments for future spending and tax cuts with the spending ceiling and deficit-target rules.</td>
<td>New legislation that took effect in 2016 and lays out a Medium Term Budget Framework prevents the government from making new budgetary commitments or cutting taxes (without a financing source) outside the normal budget-approval process if that would violate the multi-year spending rule or deficit ceilings, respectively.</td>
</tr>
<tr>
<td>Reduce the structural deficit and pursue a gradual debt-reduction strategy by raising fiscal revenues, preferably by removing inefficient tax expenditures, raising environmental taxes, exploiting immobile tax bases and fighting against tax evasion.</td>
<td>A temporary cut in dividend taxation from 33% to 25% for shareholders of personal service corporations in the 2017-18 budget led to 0.9% of GDP increase in tax receipts and a transitory decline in the 2017 fiscal deficit.</td>
</tr>
<tr>
<td>To the extent that savings can be made on military outlays and debt service and sufficient revenues raised, increase civil spending on education, infrastructure and poverty reduction.</td>
<td>A multi-year defence budget agreement, which was approved at the end of 2015, is projected to enable the government to shift spending towards civilian and growth-supporting expenditures.</td>
</tr>
</tbody>
</table>

Figure 17. Primary civilian expenditure
2016 or latest available data

Source: OECD, National Accounts Database.
economic disparities. To better accommodate the country's economic and social needs, the spending-growth ceiling of the existing fiscal rule should be raised. At the same time, Israel needs to retain ample fiscal room for manoeuvre, given its specific geopolitical situation. Therefore, the key fiscal challenge is to maintain fiscal prudence and maintain the downturn in public indebtedness while providing the additional public resources needed to improve educational outcomes, infrastructure and social cohesion. In particular, since 2017's deficit decline is essentially temporary, adopting permanent tax cuts or unfinanced spending increases would inappropriately weaken the medium-term fiscal position.

The extra spending recommended here can be financed relatively painlessly, since the current tax burden is quite low. The government could in particular: i) abolish inefficient tax exemptions; ii) strengthen the fight against tax evasion; and iii) increase some green taxes. As recommended in previous Surveys, removing tax exemptions, such as on fresh fruits and vegetables, or the tax credit for medium-term saving in specific funds (Kranot Histalmut), would broaden the tax base (OECD, 2013), even if the former change might be regressive (Table 5). The same applies to the tax and reporting exemption for landlords' rental income below NIS 5000 per month (Gruber, 2015). Fighting tax evasion can also bring additional revenues without increasing tax rates. Although difficult to measure, the share of the country's shadow economy is estimated to be about twice as large as in the United States, the United Kingdom or Canada, even if lower than in some other countries (Gruber, 2014; Feige et al., 2012; Gyomai and Van de Ven, 2014). Tax evasion on rental incomes above NIS 5 000 seems particularly high, because the tax authority lacks the necessary information to collect these revenues (Levi-Weinrib, 2017; MoF, 2017b). The introduction of compulsory income tax reporting could reduce this evasion, as it has done in countries requiring

<table>
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<tr>
<th>Table 5. Past recommendations on tax policy</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Recommendations in previous Surveys</strong></td>
</tr>
<tr>
<td>Renew efforts to remove the VAT exemptions on fruit and vegetables and services in Eilat.</td>
</tr>
<tr>
<td>Keep the ‘green credits’, but shift from purchase tax on vehicles to taxing their use, e.g. by fee-based reserved lane systems and urban congestion charging.</td>
</tr>
<tr>
<td>Further develop environmental levies.</td>
</tr>
<tr>
<td>Review the net subsidies granted to firms, taking all tax breaks and support schemes into account. Consider paring back targeted business support by the Law for the Encouragement of Capital Investment in exchange for cuts in the rate of corporate income tax.</td>
</tr>
<tr>
<td>Pursue plans to reduce tax compliance costs for business by simplifying the tax code so as to reduce the number of payments required.</td>
</tr>
<tr>
<td>Press on with campaigns combating tax evasion. Consider strengthening the Israel Tax Authority (ITA)’s independence, unifying the collection of tax and social security revenues, and adopting a “functional” approach to tax administration, with, for instance, a unit dealing with large taxpayers.</td>
</tr>
<tr>
<td>Press on with the further development of electronic services in tax administration.</td>
</tr>
</tbody>
</table>
reporting (Ben-David and Kimhi, 2017). Such a change would need to be combined with steps to minimise the administrative burden associated with paying taxes by promoting digitalisation. The authorities have, however, given close consideration to this option and believe that the revenue payoff would not justify the extra burden imposed on taxpayers. In any case more should be done to further exploit the information already available to the Israel Tax Authority and possibly to give it access to individuals' banking data.

Moreover, the implementation of the minimum standards, best practices and other recommendations of the OECD Base Erosion and Profit Shifting project will protect the corporate tax base and level the playing field. The move towards the automatic exchange of financial account information for tax purposes between tax administrations will increase tax transparency and further support tax collection. It also creates new opportunities to revisit the way Israel taxes capital income at the individual level. Finally, although green taxes are already fairly high (OECD, 2017b), raising diesel and/or other taxes on fossil fuels and eliminating the tax break for company car purchases would also help reduce pollution (OECD, 2016b). Higher taxes on smoking (including rolling tobacco) and harmful beverages should also be considered.

Savings can also be achieved on the expenditure side by strengthening the effectiveness of public management, promoting e-government and digitalisation and further improving the public procurement process. While the government recently undertook procurement reforms to streamline and standardise tender procedures, centralise e-procurement and encourage staff professionalization, only 10-15% of central government public procurement is processed in accordance with the new programme (IMF, 2017). Conducting regular spending reviews is a good way to explore priorities and thereby identify areas for spending restraint.

Increasing public investment in infrastructure and education and adopting ambitious product-market reforms would have a positive growth impact, which would, in turn, help finance these additional expenditures. Under the assumptions of the “structural-reform scenario” discussed above, the improved budget balance resulting only from the product market reforms (i.e. excluding the expected benefits of measures enhancing the education and training system, given their long and uncertain delay of action), coupled with the gradual removal of identified existing tax exemptions and moderate increases in environmental taxation, would allow the authorities to increase their spending-growth ceiling while keeping the same deficit level and bringing debt down to below 60% of GDP over the 2020-59 period (Figure 18). In this scenario, increasing the annual spending-growth ceiling from 2.6% to 3.6% between 2019 and 2025, would provide enough fiscal room to bring childcare, training and secondary education spending relative to GDP close to the OECD average and to increase the generosity of the in-work benefit scheme (Table 6). Between 2026 and 2059, public expenditure could revert to 3.2% per year, i.e. close to the period’s post-reform estimated average trend growth rate. While debt sustainability would also be maintained even if current trends are extrapolated (in the business-as-usual scenario), failing to continue with the integration of Haredim and Israeli-Arabs would seriously curb government revenues and lead to an unsustainable debt trajectory, assuming no policy change (Geva, 2015; non-convergence scenario).

Moreover, pressures on public finances would rise if pension expenditures increase. This does not seem to be a serious risk for old-age pensions (OECD, 2016b). On the other hand the situation is different for disability pensions. Although Israel’s disability spending is higher (1.4% of GDP in 2013) than the OECD average (1.0% of GDP), the Parliament has approved in February 2018 to gradually increase the disability benefits for the working age population by 30% to 50% between 2018 and 2021 without taking into account beneficiaries' income.
Figure 18. Public debt sustainability would benefit from the enactment of further reforms

![Graph showing debt sustainability scenarios](image)

1. The business-as-usual scenario is the same as that presented in Figure 15. It thus consists of the updated projections for the Economic Outlook No. 102 until 2019. From there on, assumptions are based on Geva (2015), with an average annual real GDP growth of 3.0% and a budget deficit stable at 2.5% of GDP from 2020 onwards. According to the no-reform scenario of Haredim and Israeli-Arabs, which is also based on Geva (2015) as explained in the main text and the footnote in Figure 15, the deficit would be higher because of lower revenues due to a weaker annual average real GDP growth of 2.7%. The structural reform scenario, which incorporates the gains of structural reforms (as discussed in the main text and in the footnote of Figure 15) is based on higher real GDP growth (3.3% per year on average). This scenario assumes higher revenues due to the gradual removal of major existing tax exemptions over the 2019-25 period (see Table 6), while expenditure are projected to increase annually by 3.6% in real terms. Thereafter, tax revenues and expenditure are kept constant as a share of GDP.


Table 6. Illustrative fiscal cost and financing of additional spending in the structural reform scenario

<table>
<thead>
<tr>
<th>Policy</th>
<th>Measure</th>
<th>Fiscal balance effect</th>
</tr>
</thead>
<tbody>
<tr>
<td>Additional spending on secondary schools</td>
<td>Increase in educational spending per student as a share of GDP per capita to the OECD average.</td>
<td>-3.0</td>
</tr>
<tr>
<td>Additional spending on child-care and pre-school education</td>
<td>Increase the spending on childcare and preschool education per child below the age of 5 to the OECD average.</td>
<td>-1.9</td>
</tr>
<tr>
<td>Additional spending on active labour market policies</td>
<td>Increase in active labour market policy (ALMP) spending as a share of GDP to the OECD average.</td>
<td>-0.4</td>
</tr>
<tr>
<td>Increasing in-work benefits</td>
<td>Increasing spending on in-work benefit to the US level (from 0.1% of GDP to 0.4% of GDP).</td>
<td>-0.4</td>
</tr>
<tr>
<td>Offsetting measures</td>
<td></td>
<td>3.0</td>
</tr>
<tr>
<td>Increased budget balance induced by stronger GDP by the end of 2025</td>
<td>Increase in the budget balance associated with a 4.8% increase in GDP due to product market reforms implementation$. Under the assumption of a tax revenue-to-GDP elasticity of one, the public spending of 39.9% of GDP in 2016 is lowered by (0.399) 0.048/1.048 1.8% of GDP.</td>
<td>1.8</td>
</tr>
<tr>
<td>Removal of inefficient tax exemptions</td>
<td>Removal of tax preferences on fruits and vegetables (0.23% of GDP), medium-term saving (Kranot Hishtalmut) (0.4% of GDP), rental income (0.1% of GDP), Elat tourism services (0.07% of GDP), company-car benefits (0.02% of GDP).</td>
<td>0.8</td>
</tr>
<tr>
<td>Environmental taxation</td>
<td>Increasing the rates on fuel taxation based on Green Taxation Committee recommendations.</td>
<td>0.4</td>
</tr>
</tbody>
</table>

$1. Quantification of the impact of product market reforms in Israel assumes an increase in GDP by 6% on a 10-year horizon, according to OECD (2016b). Product market reform would thus assumed to increase GDP proportionally by 4.8% by 2025.

conditions. Official estimates of the resulting annual fiscal cost, which rise from NIS 2.2 billion initially to NIS 4.3 billion (0.3% of GDP) in 2021 could be exceeded, as they do not account for the likelihood of increased demand for these significantly higher allowances, either by older workers or those poorly integrated into the labour market, as shown by other OECD countries’ experience. An increase in beneficiaries would not only be fiscally costly but could also seriously undermine ongoing efforts to bring vulnerable workers into employment, if their 5% share in the working-age population increases to the 8-11% level seen in the Netherlands, Hungary or Norway due to poorly designed regulation and incentives. While it is clearly necessary to ensure adequate incomes for the disabled, international evidence shows that the most effective programmes in this area combine financial support and measures helping these vulnerable people to integrate into the labour market and focusing medical assessments on their work capacity and not only their disability level. Although putting more resources into disability programmes might be desirable, simply increasing benefits is unlikely to produce desired outcomes if the measure’s design is not improved to strengthen its employment focus and to prevent an improper use of more generous allowances (OECD, 2017c).

Pursuing reforms to improve housing affordability and deepen the rental market

Improving the functioning of the housing sector remains a key concern, given its importance for financial stability, inclusiveness and productivity and implications for tax policy. Since the sharp acceleration in house prices in 2007 that followed a 25% price-adjusted plunge the previous decade, the average house price has become internationally high, at nearly eight times average household income (Figure 19). A declining share of young families are owner occupiers (Brender and Strawczynski, 2015), and households’ spending on housing has increased (Figure 20), despite a relatively moderate rise in rents. Moreover, real house prices continue to grow, although there have been signs of stabilisation since end-2016. Purchases remain buoyed by a vigorous labour market and the accelerating number of households, whose growth should rise from around 45 000 per year currently to 60 000 from 2025 (NEC, 2017).

Figure 19. House prices are elevated and still rising

1. Estimate for Israel is based on IMF (2017) and the growth index of the price-to-income ratio in OECD (2017).
Housing construction has been insufficient to meet the strong demand for homes, causing shortages and higher prices. Reforms have been introduced to enhance housing supply. Land-use planning procedures have been streamlined to reduce their duration from over 11 years by decentralising small residential project approvals (Table 7). New large residential projects were approved under the accelerated procedure introduced in 2014 for a five-year period (the Vatmal programme) (OECD, 2017d) (Figure 21). A long-term strategic plan to 2040 has been adopted to meet the nation’s needs (BoI, 2017b). Provisions to reduce the housing tensions in Arab localities have been taken with the planned construction of 40 000 new dwellings houses under the five-year (2016-20) plan of NIS 15 billion to promote the economic development of the Arab sector (latafors, 2016). Moreover, several foreign housing companies are set to enter the Israeli market. This should boost competition and productivity in the construction sector, which are low by international standards (Ben-David, 2013), and reduce construction costs.
Moreover, the authorities have again raised taxes on real estate investment, which had risen sharply in 2007 (Figure 22). After a first increase in mid-2015, a welcome property tax on owners of three or more dwellings was adopted in 2017. This measure, which was invalidated by the High Court in August 2017 for procedural reasons, is expected to be adopted in the next Knesset session (see Table 7 above). The authorities also launched the “Buyer’s Price” programme to facilitate housing purchases by young households by modifying the tendering for public land: public land is sold at fixed, below-market prices to promoters who undertake to build housing at the lowest (bid) prices. By end-2017, 40 000 households were entitled to buy such a house, and their number should reach 100 000 by end-2018. In September 2017 the programme’s termination date was extended from 2017 until 2019.

<table>
<thead>
<tr>
<th>Recommendations in previous Surveys</th>
<th>Action taken since January 2016</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pursue plans to decentralise planning through permanent reforms to the Israel Land Authority and planning processes.</td>
<td>The 2014 amendment 101 to the Planning and Building Law has resulted in the devolution to the 127 local planning committees of approval of small-scale housing developments of less than 20 housing units.</td>
</tr>
<tr>
<td>Complete the streamlining of the administrative requirements for planning and building a home.</td>
<td>In 2016 a dedicated website was launched, which allows individuals to send to the authorities online the requested approvals (instead of by post). Also, a new private entity will be established to serve as a one-stop shop for permits, working with the Ministries of Health and Environment, IDF’s Home Front Command and the Israel Fire and Rescue Services and all other permit providers.</td>
</tr>
<tr>
<td>Further develop public transport infrastructure to make it easier to live in lower-price housing areas, and promote labour market participation for those living in remote areas.</td>
<td>Several public transport projects are underway, including a high-speed rail link between Jerusalem and Tel Aviv and the construction of light rail systems in Israel’s three largest cities at a cost of NIS 60 billion (4.9% of GDP).</td>
</tr>
<tr>
<td>Consider raising property taxation (Arnona).</td>
<td>Since January 2017 owners of three or more dwellings have been subject to a 1% tax on the value of those properties (but the supreme court sent this law back to the Knesset for further discussions, so it is not in force).</td>
</tr>
<tr>
<td>Consider raising rent subsidies while cutting support for home purchases. Make eligibility for social housing more uniform.</td>
<td>No action taken.</td>
</tr>
<tr>
<td>Introduce minimum criteria in rental contracts.</td>
<td>A “fair rental” law was passed in 2017, clarifying tenants’ and landlords’ responsibilities in several respects. For example, it limits the amount of financial guarantees that a landlord can ask from a tenant and lays out conditions for an apartment to be suitable for renting.</td>
</tr>
</tbody>
</table>

Figure 21. Housing supply has strengthened

Moreover, the authorities have again raised taxes on real estate investment, which had risen sharply in 2007 (Figure 22). After a first increase in mid-2015, a welcome property tax on owners of three or more dwellings was adopted in 2017. This measure, which was invalidated by the High Court in August 2017 for procedural reasons, is expected to be adopted in the next Knesset session (see Table 7 above). The authorities also launched the “Buyer’s Price” programme to facilitate housing purchases by young households by modifying the tendering for public land: public land is sold at fixed, below-market prices to promoters who undertake to build housing at the lowest (bid) prices. By end-2017, 40 000 households were entitled to buy such a house, and their number should reach 100 000 by end-2018. In September 2017 the programme’s termination date was extended from 2017 until 2019.
These multiple reforms include several useful measures. However, some are costly and could be improved. The Buyer’s Price programme, for example, does not increase the supply of public land, despite a non-negligible budgetary cost (0.2% of GDP in 2017-18; IMF, 2017). It also distorts the market because many beneficiaries of its subsidies (who are selected by lottery) will buy a “bargain” dwelling in a location that does not meet their needs, probably merely to rent it (BoI, 2017b). This ultimately stimulates renting rather than owner occupation, the government’s original intent.

In any case, assisting young households could best be done by facilitating rental rather than housing purchase and reforming the rental market, as recommended in previous Surveys. The recent changes to this weakly regulated market (limiting, for example, the maximum amount of financial guarantees that owners can ask of tenants) are welcome (Table 7). However, other adjustments should be considered to deepen this market, which is somewhat narrower (31% of the total) than the OECD average (37%). Renting would be more attractive, especially for young households, if the minimum landlord-guaranteed duration of leases exceeded one year and the annual increase in rents were capped during the term of the lease, with owners free to adjust them at renewal to avoid the poor investment returns that would eventually limit rental supply. However, such a regulation, which would be similar to a mandatory insurance policy, might raise rents somewhat.

Moreover, the government’s legitimate goal of reducing investor demand in the current monetary and financial environment would be reinforced by removing the income tax exemption enjoyed by rental income, as mentioned above (Gruber, 2015). Municipalities should be provided with adequate resources for financing the local infrastructure services needed for new residential developments. Given the low level of taxes on residential properties and the political difficulty of raising them, Israeli cities have strong incentives to prefer business activities to residential neighbourhoods. The coordination under the Vatmal programme between developing large residential tracts in peripheral areas where public land is available and building public transport to the economic centres where jobs are located could be enhanced (see below and Chapter 2). This would be particularly beneficial to social cohesion and reduction of disparities due to the spatial segregation of disadvantaged communities.
Improving social cohesion would promote sustainable growth

Increasing labour-market integration and employment opportunities for disadvantaged groups

The Israeli labour market has improved markedly over the last decade, with the employment rate reaching historically high levels. While this partly reflects remarkable progress for older workers due to the retirement age increase (BoI, 2017e), more and more Haredim and Israeli-Arabs have also found jobs, though their employment rates remain low (MoF, 2017c); the problem is especially severe for Haredi men and Israeli-Arab women; indeed, progress has stalled for both groups (Figure 23). However, there is no guarantee that gains will continue much longer, since the stock of remaining inactive adults in these communities no doubt includes some of the most resistant to joining the labour market.

Figure 23. Participation rates have improved markedly, particularly for disadvantaged groups

Source: Ministry of Finance.

Moreover, the labour market is still characterised by severe duality. On the one hand, there are productive advanced industries, including high-tech sectors, which attract mostly high-skilled workers with high wages. On the other, low-productivity, often non-tradable, sectors employ many Israeli-Arabs and Haredim who are trapped in low-quality, low-wage jobs. Israel’s share of low-paid workers is one of the OECD’s highest (Figure 24). Moreover, job mobility towards high-productivity sectors is declining, which means that the probability that low-educated individuals will get jobs in high value-added, high-wage industries has decreased over time (Brand and Regev, 2015).

This is worrying, as such industries are facing increasing skilled-labour shortages (see Chapter 1), undermining their growth and competitiveness. More than half of their companies recently reported difficulty filling jobs, particularly for engineers (Manpower, 2017). A special visa exists for skilled workers where there is no local expertise. Despite strong demand, the employment share of the high-tech sectors has remained stable around 12% of employment in the business sector for a decade, and they are said to lack more than 10 000 engineers (MoF, 2016). Israeli-Arabs comprise only about 3% of the high-tech workforce, and Haredim are also under-represented. The situation is similar in many other sectors such as financial and professional services (Irac and Imrpj, 2016). This reflects...
a number of difficulties and barriers including education and transportation issues, but also other obstacles such as language barriers, cultural and social norms – as well as insufficient inclusiveness of policies and programmes (Yashiv and Kasir, 2014).

More needs to be done to improve the outcomes of these groups, not only in terms of employment, but also of wages and productivity. The remaining legal barriers to work should be lifted for those Haredi men who have been exempted from military service if they committed to study religion in order to allow them to join the labour market. Moreover, besides reforms in education (Chapter 1) and infrastructure (Chapter 2), active labour market policies need to be strengthened.

Israel’s spending on active labour market policies in 2014 amounted to just 0.16% of GDP, well below the OECD average of 0.55% of GDP (Figure 25). Spending on training, which is provided through a voucher system in particular, is meagre, while experience from other OECD countries shows that well-designed training measures are effective in keeping skills up to date and improving labour market matching (Card et al., 2015). Additional resources and better work incentives are needed, together with more careful programme assessment. While there are a plethora of Israeli training provisions, their effectiveness is often unclear due to a dearth of evaluations undertaken (OECD, 2015a), which may result in inefficient programmes continuing to operate.

More attention should be paid to overall job quality, the sustainability of job placements and levels of pay. Public employment services should offer basic-skills and literacy training before placing the unemployed directly into jobs. Increased training incentives for individuals already in work are also needed, particularly for the low skilled who are less likely to receive training (OECD, 2017e). In Germany workers without qualifications and those working in positions unrelated to their initial training for at least four years may receive grants to be retrained in areas with better prospects (OECD, 2015a). So-called “retention and

Figure 24. **There is a high share of low-paid jobs in the labour market**

Share of low-paid workers, $^1$ 2016$^2$

Per cent

0 4 8 12 16 20 24 28

0 4 8 12 16 20 24 28

BEL ITA DNK NLD JPN ESP AUS AUT GRC OECD MEX PER SVK GBR DEU CZE CAN KOR IRL USA ISR

1. Defined as workers earning less than two-thirds of median earnings. Conscripts with low pay are included as workers in this indicator. However, given the longer duration of military service in Israel (2 or 3 years) than in other countries, an OECD estimate of the population of working poor excluding conscripts (the black triangle) is provided.

2. Or latest available year.

Source: OECD, Labour – Earnings Database and OECD estimates.

http://dx.doi.org/10.1787/888933673180
advancement services” to increase training incentives for individuals exist in many OECD countries (OECD, 2017e). If the Israeli training voucher scheme proves to be effective after careful programme assessment (see above), it should be expanded and its eligibility widened towards low-skilled workers, especially from disadvantaged groups. Support programmes for Israeli-Arab and Haredi entrepreneurs should also be introduced (OECD, 2016c). These measures should be complemented by better enforcement of existing anti-discrimination regulation. It may also be worthwhile using public procurement to increase incentives for firms to hire more Israeli-Arab and Haredi workers (Sikkuy, 2016).

Gender equality also requires policy attention. The median gender wage gap, which is close to 22%, is higher than the OECD average (Figure 26). This gap can be partly explained by lower working hours for women, but also by their choice of education field and industry (Fuchs, 2016): women account for only about 25% of high-tech jobs (Mazuz-Harpaz and Krill, 2017). However, it is also related to the lack of childcare facilities, although corrective efforts are underway (Table 8) (Chapter 2). Although expenditure on child-care and pre-school education relative to GDP is slightly above the OECD average, it is comparatively lower when measured per child under four, given Israel’s large share of this population age group. Increasing the number of subsidised crèche places for these children would foster labour force participation and would help women to pursue better careers, with higher wages (BoI, 2016c). This would be beneficial particularly for Arab women with low labour force participation (Schlosser, 2011) and Haredi women with large share of part-time work, who currently end up doing much unpaid work for their families. On the other hand, the existing eligibility for subsidised childcare facilities for Haredi families whose father is studying in a yeshiva is likely to be counterproductive for labour-market integration and takes available spaces from two-earner working families.

Reforming the tax-transfer system to support more inclusive and sustainable growth

Inequality and poverty in Israel remain high, despite some improvement resulting from the rising employment rate and recent measures to address the problem, such as increases
in the minimum wage and in the earned income tax credit (EITC) (Table 9). In recent years both gross and net income inequality have come down, returning the net measure to the levels seen in the early 2000s, implying important savings on transfer payments. Inequality, as measured by the standard Gini coefficient, has decreased from 0.36 in 2011 to 0.34 in 2016. Nevertheless, the fact remains that average disposable income of the 10% richest households was 13.3 times that of the poorest, against a multiple of 9.4 for the average OECD country. Almost one-fifth of the population live in relative poverty (i.e. have a disposable income below 50% of the median), the highest rate in the OECD. All age groups are affected, with a particularly heavy prevalence among children, but also among the elderly. Around half of Arabs and Haredim are poor, against 13.5% of non-Haredi Jews.

One of the reasons for high poverty rates is the low level of social transfers (Bol, 2016c). While poverty measured before taxes and transfers is lower than in many other OECD countries, poverty after taxes and transfers is higher (Figure 27). As in other OECD countries, transfers do not include in-kind benefits such as free education and healthcare services. Israeli social policy follows a “welfare-to-work” approach to tackling poverty in order to avoid measures that may harm work incentives among the Haredi, who value the time dedicated to religious studies, and the Arabs, who have cultural barriers to female employment (Yashiv and Kasir, 2013). Policymakers are concerned that, although easing economic distress in the short term, higher transfers would perpetuate it in the long term by slowing the progress of their employment integration. The critical challenge they face is
that many of those subject to (relative) poverty (specifically: Haredi men) do not want to work and are satisfied with a very low material standard of living.

The Israeli government’s strategy of encouraging employment among previously non-working families has met with substantial success. Moreover, the average real income of poor households has risen by 2.7-2.9% in the last six years, while the average real income of wealthier households has increased by only 2.2% (OECD, 2017f). But with so many households with only one provider and a persistent and widespread problem of poor job-related skills, it is just a first step whose benefits have been limited so far by the increase in the working-poor phenomenon. Many disadvantaged workers have been able to find jobs, but their families remain poor, since in most cases these jobs are low-paid. Indeed, the share of the working poor has risen in recent years and is internationally high (Figure 28, Panel A). This is particularly true for the Haredim and Israeli-Arabs, for whom the increased number of breadwinners per family in the last decade (including part-time workers) has had only a limited impact on their poverty risks (Panel B). Therefore, the authorities should focus more on decreasing poverty among those in work.

Table 9. Past recommendations on social policies

<table>
<thead>
<tr>
<th>Recommendations in previous Surveys</th>
<th>Action taken since January 2016</th>
</tr>
</thead>
<tbody>
<tr>
<td>Expand further the earned income tax credit and active labour market policies.</td>
<td>The EITC was expanded for single mothers in 2016 and further expansion for men and working couples will take place in 2018.</td>
</tr>
<tr>
<td>Invest more in active social policies. Bring in new levels of benefit for those with more than two children. Avoid further increases in universal child allowances.</td>
<td>The new government increased family allowances, abolishing the cuts carried out by its predecessor. Since 2017 this took the form of monthly government deposits into a new savings account for every child, which can be accessed when the child turns 18. Subsidies for after-school education and the tax credit for working parents of children up to age 6 were also raised.</td>
</tr>
<tr>
<td>Reform disability benefits to further promote work incentives. Consider shifting the approach for medical assessment from general disability to capacity for work.</td>
<td>Discussions are ongoing to substantially increase disability benefits, without taking account of beneficiaries’ income conditions.</td>
</tr>
<tr>
<td>To reduce elderly poverty, as the second-pillar pension system matures, seek a way to increase first-pillar pensions without creating work disincentives.</td>
<td>Income supplement allowances were raised to NIS 1 billion during 2016-18 and elderly allowances to NIS 1.4 billion for 2017-20. Investments in public housing for the elderly were approved at a cost of NIS 500 million in 2017-18, and rent support was raised to NIS 150 million over four years.</td>
</tr>
</tbody>
</table>

Although increasing the employment rate among the Haredi and Israeli-Arabs is essential, it is unlikely that this will be enough to reduce poverty. Israeli-Arabs and Haredim earn on average only 70% and almost 90% of the median hourly wage, respectively, mostly due to the differences in skills (see Chapter 1) and typically Haredi households have many children and only one breadwinner. According to OECD analysis (see Annex A.1), even if two spouses in these families were working full-time, total family income would not be enough to escape from poverty, given the current tax-transfer system and these households’ large number of children (Figure 29). The earnings of an average Arab family with four children would need to reach around 160% of the median wage in order to have a net income exceeding the poverty line, and, in the case of a Haredi family with six children, it would need to reach around 230% of the median wage.

One way to address this poverty issue is to further expand in-work benefits. Israel’s “negative income tax” ( Earned Income Tax Credit, EITC) boosts take-home pay of the

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Figure 28. **The share of working poor is high and increasing**

A. Share of workers in poverty¹

B. Incidence of poverty in families with two breadwinners²

1. Those with income below the poverty line, living in households with a working-age head and at least one worker.


StatLink [link](http://dx.doi.org/10.1787/888933673256)
average eligible worker by around 16%. It is an effective redistribution measure that also strengthens work incentives of low-skilled workers, in particular those with children (BoI, 2015). But it could be more effective, since its overall budgetary cost is currently only 0.1% of GDP, a fraction of spending on similar programmes in the United States and the United Kingdom (0.4-0.5% of GDP). To encourage second-earner employment, notably for Israeli-Arab women and Haredi men, as is currently being discussed, Israel could provide a negative income tax “bonus” to families in poverty where both members of a couple are in (low-paid) work. For example, the UK negative income tax is conditioned upon the family's hours of paid employment (Brewer et al., 2006).
The authorities should also continue making special efforts to overcome child poverty. The incidence of child poverty remains particularly high among Israeli-Arabs and Haredi, above 60% (National Insurance Institute Israel, 2016). Israel’s overall child-related cash support is low by OECD standards, not only for workless households but also for children with working parents (Figure 30; Brender and Strawczynski, 2015). Government support since 2017 for all children in the form of monthly savings deposits accessible at age 18 will be useful for future young adults (see Table 9 above) but does not address acute poverty risks during childhood. To lower child poverty making support conditional on children taking up schooling supplementary to regular learning hours could be considered. This would improve educational outcomes of children from poorer families and reduce poverty (Abhijit et al., 2015). At the same time, working parents’ situation should be enhanced. To enable parents to work the school day should be extended, with hot, nutritious lunches served in adequately equipped school cafeterias (Ben-David and Kimhi, 2017).

Figure 30. Child poverty is high, while effort to overcome it is low

As suggested in the 2016 Survey, the authorities should also moderate the impact of the mandatory pension contributions for low-wage workers, which are higher than in most other OECD countries and tend to unbalance low-income households’ lifetime income flows. Thus, while the pension system offers a high replacement rate for workers earning less than the average wage, it undermines living standards of young families (OECD, 2016b) and may lead to higher informality. The existing tax deduction on this mandatory contribution provides relief for some but is very regressive: more than half its total value goes to the top decile of the income distribution, while around 45% of employees, including the most vulnerable, do not pay income tax and therefore do not benefit (Brender, 2011). To ensure that relief is provided also to low-income workers it should be converted into a non-wastable (refundable) tax credit.
Improving the education system to enhance equity

Extensive poverty and inequality in Israeli society are to a significant extent due to the wide dispersion of skills. Israel has one of the largest gaps between adults with outstanding competences and those with weak outcomes (Figure 31, Panel A). The share of adults with top-notch numeracy skills is comparable to the OECD average, but the proportion of low-skilled adults is exceptionally high: for example, almost one-third of Israelis lack basic maths skills. These differences are particularly pronounced between communities, which exacerbates already strong socio-economic divisions in Israeli society. Large wage gaps between Israeli-Arabs and Haredim and the rest of the population can for the most part be explained by differences in skills (BoI, 2016d): the relation between wages and skills proficiency is relatively strong in Israel (Panel B).

Figure 31. High inequalities are related to differences in skills

A. Variability in skills is very high

B. Change in wages associated with a change of one standard deviation in literacy proficiency

1. The measure of variability used is the interquartile range (difference between the third and first quartiles. Data indicated as Belgium correspond to Flanders; GBR1 = England and GBR2 = Northern Ireland.
2. For more details, see Figure 5.4 of OECD (2016).

Source: OECD (2016), Skills Matter: Further Results from the Survey of Adult Skills, Figures 2.15 and 5.4 and Table A5.4; OECD Survey of Adult Skills (PIAAC) Database (2012 and 2015).

Education plays a central role in the acquisition of skills at an early age and is a powerful lever to make society more inclusive. However, international assessments of Israeli students’ outcomes (including PISA) show significant differences among students. Hebrew-speaking students have similar or better scores than the average OECD student, while Arabs lag behind. The share of poorly performing Arabic-speaking students was 45%, against 12% for Hebrew speakers. Almost no Arabic speakers reached the top performing cut-off. Particularly poor performance is found in the Bedouin community, whose children (below the age of 14) currently comprise almost one fifth of all Israeli-Arab children.

This large dispersion in skills and students’ outcomes is related to the segregated education system, which comprises four streams: one for Arabic speakers and three for the Hebrew-speaking communities, including Haredi, state-religious and state schools. In the Arabic stream the instruction language is Arabic, and Hebrew is taught as an additional subject, while all teachers are Arabs. The situation in Haredi schools reflects an explicit choice of studying religious rather than secular subjects. Haredi boys aged 13 usually
continue only with religious studies without secular core subjects, while girls spend much more time on secular subjects. These systemic features weaken skills formation in the Haredi and Israeli-Arab communities and contribute to the considerable inequality in socio-economic outcomes. Since merging all the streams into a single system built around a common core curriculum is politically unrealistic, improving the education system requires building bridges between existing streams with the objective of raising the outcomes of low achievers, especially among Israeli-Arabs and Haredim.

This will require higher public education spending, particularly on disadvantaged schools (see below). Despite significant increases in recent years, expenditures per student remain low (Figure 32). Moreover, budget allocations do not provide enough support for disadvantaged groups. Schools receive a basic budget that is equally distributed according to student numbers and a grant (6% of the total budget) that reflects the school’s socio-economic profile. Additional financing comes from the municipalities. Better endowed local

**Figure 32. Education financing remains low, especially at secondary level**

Annual expenditure per student relative to per capita GDP, 2014

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**Source:** OECD (2017), Education Finance Indicators Database. [http://dx.doi.org/10.1787/888933673332](http://dx.doi.org/10.1787/888933673332)
governments can provide 10-20 times higher funding per student than their less affluent counterparts, though the amounts involved are small (OECD, 2016d). Consequently, schools in disadvantaged areas are comparatively underfunded, although the nature of this problem is different between Arab and Haredi schools (Chapter 1).

Disadvantaged schools need much greater funding. Adjustments are planned, and the five-year Economic and Development Plan for the Arab Sector, mentioned above, includes education measures, which if properly implemented, can help reduce these gaps (Table 10). However, much more is needed. For example, in Chile, a weighted voucher system allocates 50% higher resources for students from low socio-economic backgrounds (Elacqua, 2012) to provide extra teaching time or specialised learning materials. The authorities can also increase salaries for teachers working in disadvantaged schools. International experience suggests that much higher salaries are required to attract the best teachers to such institutions, but that financial incentives will be effective only if teachers are given the means to be successful, such as by complementing higher wages with other incentives like smaller classes. Korea offers multiple incentives to candidates working in high-needs schools, including higher pay, smaller classes and additional credits towards future promotion (OECD, 2012a). A cost-efficient option that has had some success abroad is to set up a system allowing teachers to share good teaching practises. Above all, there is a need to reduce the curricular differences between the education streams (see below), which contribute to wide dispersion of average skills and educational outcomes among students from different communities.

Table 10. **Past recommendations on education**

<table>
<thead>
<tr>
<th>Recommendations in previous Surveys</th>
<th>Action taken since January 2016</th>
</tr>
</thead>
<tbody>
<tr>
<td>Require Haredi schools to teach mathematics, science and foreign languages. Consider universal core curriculum requirements.</td>
<td>No action taken.</td>
</tr>
<tr>
<td>Increase education funding for disadvantaged groups.</td>
<td>Implementing differential budgeting in elementary and middle schools is expected to be finalised within the next two years. The Ministry of Education (in co-operation with the Ministry of Finance) is developing a new budgeting model for high schools. The Economic Development Plan for the Arab Sector worth NIS 15 billion over five years includes expenditures on education – increasing teaching hours, higher quality of teaching and informal training.</td>
</tr>
<tr>
<td>Develop work-based vocational education and training for young adults.</td>
<td>In 2016 an apprenticeship pilot programme was introduced involving 260 people. Expenditure on job training programmes increased, allowing a higher number of participants.</td>
</tr>
<tr>
<td>Introduce a mandatory community service programme for Israelis who are currently exempted from military service.</td>
<td>The government has been trying to integrate the Arab and Haredi communities through volunteering under the aegis of the 2014 Civil Service law.</td>
</tr>
</tbody>
</table>

In the Arab stream the government should keep trying to improve the teaching of Hebrew, as only 60% of Arabs have a good understanding of it. A better command of Hebrew would help Israeli-Arabs integrate into the job market (Marom, 2015). While the government recognises the problem and is expanding the number of hours dedicated to teaching Hebrew in Arab schools, more needs to be done. Ensuring substantial teaching of practical Hebrew and/or teaching some core subjects in Hebrew would be desirable. A complementary approach should include expanding pre-school education to children between 0 and 3 (see above) and increasing their exposure to Hebrew. To this end moving the responsibility for this sector to the Ministry of Education would be desirable.

Past efforts to increase the share of core subjects in the Haredi curriculum have failed several times, even though most parents are supportive (Gal, 2015). The latest attempt, which
provided budgetary sanctions against Haredi schools not devoting a certain minimum time for secular studies, was repealed in 2015 due to opposition by community leaders and insufficient numbers of Haredi teachers and textbooks for these subjects. The authorities should prepare the ground for a possible future situation where teaching core subjects in Haredi schools is politically accepted and provide additional funding for training Haredi teachers and developing core-subject textbooks to schools willing to teach secular subjects. However, this additional funding should also impose more conditionality on teaching core skills, monitoring and student testing. Better enforcing this monitoring and testing in those Haredi schools that are already committed to teach core subjects in exchange for public financing is also needed. This would also improve statistical information on Haredim results, which decision-makers lack. Complementary steps could include the aforementioned introduction of support for poor families conditional upon children taking up additional formal education and systematically subsidising the acquisition of formal knowledge by Haredi students after their religious studies.

Another problem that exacerbates skills differences is the low quality of the initial vocational education and training (VET) system. Firms regularly express concern about VET graduates’ lack of professional and technical skills (Musset et al., 2014). Particularly weak outcomes are found among students from the lower vocational track, which have much lower probabilities of qualifying for the Bagrut and higher dropout rates (Blank et al., 2015). Moreover, studying on the lower VET track worsens graduates’ labour market outcomes compared to those following the academic track (MoF, 2017d) and relative rates of return to VET prior to military service, may be low over the long run (Hanushek et al., 2015). As a consequence many young people who pursue lower vocational tracks are poorly equipped for entry to the labour market. In this regard substantial components of work-based learning can be beneficial as it not only helps students to acquire practical skills, but also to develop key soft skills, such as work discipline, teamwork and problem-solving skills, which can be more effectively learnt in workplaces than in classrooms (OECD, 2010). One way forward is to expand apprenticeship and workplace-based learning, co-ordinating with industry partners. In Spain making workplace training mandatory in VET programmes facilitated the transition of VET graduates to jobs (Homs, 2007).

Israel’s tertiary education is well developed, with impressive academic achievements, including high citation rates, unsurpassed Nobel laureates per capita and large numbers of high-tech start-ups. However, it also faces two serious challenges: i) making tertiary education more accessible for Haredim and Israeli-Arabs; and ii) improving the matching of students’ skills to changing labour-market needs.

The expansion of colleges and Haredi campuses has improved tertiary education access to students from peripheral regions, with lower socio-economic status and from disadvantaged groups. The enrolment rate of Arab and Haredi students in the relevant age cohorts has increased significantly. However, the disparities between social and community groups remain large. The share of young Haredim and Israeli-Arabs completing tertiary education is significantly lower than for the rest of the population (Figure 33). This results mainly from weaker secondary school outcomes (see above), but there are other barriers preventing wider tertiary access (Chapter 1). OECD research suggests that student financial-support systems that provide both loans with income-contingent repayments and means-tested grants improve access to higher education and outcomes for weaker students (OECD, 2012b). At the same time, pre-tertiary preparatory courses for disadvantaged students should be expanded to increase their access and reduce drop-out rates, although these preparatory courses have proved to be less effective for Haredi students.
Many Israeli tertiary graduates are employed in jobs not matching their field of studies, and this phenomenon is more pronounced than in other OECD countries (Said, 2015; OECD, 2016e). The government is rightly trying to increase the number of engineering graduates to meet labour market demands. At the secondary level it is increasing the number of students completing high-level mathematics and increasing their share from around 10% to 15%-30%. Empirical research confirms that relatively few pupils study math at higher levels, but those who do so access more prestigious study tracks in universities and enjoy higher pay in employment (Kimhi and Horovitz, 2015). At the tertiary level, the government is planning to increase the number of college and university students with technology-oriented majors by 40% within five years (Israel Innovation Authority, 2017). Complementary steps to reduce such mismatch should involve making publicly available high-quality data and analysis concerning graduate labour market outcomes. Better information on market returns of various career paths would help individuals to better adjust to labour market signals. Students’ choice of field of studies would also be better served through a strengthened and scaled-up career counselling system. For Israeli-Arabs and Haredim these steps should be complemented with measures widening their employment opportunities (see above) to ensure that greater attainment leads to better jobs.

**Pursuing product market reform to boost productivity and wages in traditional economic sectors**

Promoting competition to boost productivity is an important policy challenge in Israel and a key ingredient for fostering inclusive growth. As highlighted in the 2016 Survey, Israel is less open to foreign trade than most OECD countries and the business environment less favourable (Figure 34). These persistent difficulties contribute to low average productivity gains and large productivity and wage gaps between sectors exposed to international competition and their more traditional counterparts, often made up largely of SMEs (Figure 35), where workers from disadvantaged groups are usually employed.
Improving product-market functioning has been high on the policy agenda since the 2011 “tent protests”, and helpful reforms have progressed in recent years. Measures have been taken to stimulate competition in the banking sector (see Table 3 above) and to increase domestic market exposure to parallel imports via the Internet. Import tariffs have been reduced on several products, including foodstuffs, and some import procedures have been simplified (Table 11). Moreover, the government has committed to cutting the regulatory burden on businesses implied by the stock of existing regulations imposed by all
The Irish government has taken steps to bring its regulation for imports into line with that of most developed countries, i.e. introducing post-market surveillance. However, the switch from ex ante to ex post checking of compliance with required import standards is incomplete, and so is the implementation on the ground. At the end of 2016 a comprehensive reform of standards regulation was approved to open to competition the compliance tests that, up to now, have been carried out by only one entity – the Standards Institution of Israel. The target of the reform is also to move closer to international norms. Local import standards not aligned with international norms were abolished in 61 areas, and around 300 local specifications were removed.

The reform does not, however, cover other standard-setting entities such as the Ministry of Health, which gives rise to potential regulatory barriers to trade in some specific sectors, e.g. pharmaceuticals, medical devices and equipment. The application of EU standards on non-sensitive foodstuffs is no systematic, and considerable barriers persist regarding sensitive foodstuffs.

<table>
<thead>
<tr>
<th>Table 11. Past recommendations on improving product market regulation and lowering trade protection</th>
</tr>
</thead>
<tbody>
<tr>
<td>Recommendations in previous Surveys</td>
</tr>
<tr>
<td>Lower non-tariff barriers with simpler import procedures and alignment of import standards with those of other developed economies as recommended by the Lang Committee. Adopt the EU import procedures on non-sensitive foodstuffs as well as EU standards for sensitive agricultural goods.</td>
</tr>
<tr>
<td>Lift the barriers to foreign services providers: extend the maximum initial visa for workers on secondment from foreign firms; relax restrictions on foreigners buying property; and abolish the residency conditions widely applied to business leaders.</td>
</tr>
<tr>
<td>Replace quotas, guaranteed prices and customs tariffs with direct payments to farmers.</td>
</tr>
<tr>
<td>Further cut customs tariffs and non-tariff barriers.</td>
</tr>
<tr>
<td>Rigorously apply the law on the promotion of competition in the food sector at the local level, and assess it when sufficient time has passed.</td>
</tr>
<tr>
<td>Eliminate regulatory constraints on opening new shops, the protection enjoyed by existing firms and specific restrictions for opening new supermarkets.</td>
</tr>
<tr>
<td>Ensure that the planned cut in the regulatory burden relies on high-quality Regulatory Impact Assessments (RIAs).</td>
</tr>
<tr>
<td>Pursue state-owned enterprise reform and privatisation with a view to enhancing competition.</td>
</tr>
</tbody>
</table>

ministries by 25% by 2019 and now assesses the competition impact of all new laws. It is still early to evaluate the impact of these reforms. However, the recent persistence of price stability in the face of buoyant demand, which seems to have resulted from improved supply conditions, is an encouraging sign. Further progress in streamlining product market regulation could be expedited if co-operation between the multiple government bodies involved in this reform process (Prime Minister Office, Ministry of Economy, Accountant General and Chief Economist in the Ministry of Finance) were enhanced.

Nevertheless, much remains to be done to ease foreign trade and streamline regulation. Trade-facilitation reforms could, for instance, reduce trade costs by as much as 12% (OECD, 2015b). Further measures should focus on streamlining border procedures and border agency co-operation, with expanded use of “trusted traders” programmes and targeted controls (Figure 36). Import barriers could be further lowered by broadening post-market surveillance of imported goods to new domains, including communication products. Regulatory barriers for personal imports of goods over the Internet implying cumbersome administrative approvals could be also lowered for these products. As recommended in the 2016 Survey, the use of EU health rules for non-sensitive products should be extended to “sensitive” products, such as dairy, eggs and meat, which represent over half of all imported foodstuffs. The agricultural
reform process should continue, with the replacement of quotas, price guarantees and customs tariffs by direct payments to farmers to avoid distorting markets (OECD, 2017g).

Competition in key services, such as telecommunications, construction and postal/courier services, could be also enhanced by eliminating existing restrictions that impose the equivalent of a 10-25% tax on business users (Rouzet and Spinelli, 2016) (Figure 37). For instance, in the fixed high-speed Internet segment some operators hold substantial market power, and Israel maintains a cap of 80% on foreign equity in the sector and stringent nationality and residency conditions for business leaders. Entry conditions for foreign

Figure 36. **Israel could do more to facilitate trade**
Score from 0 (worst performance) to 2 (best performance), preliminary 2017 data

StatLink [http://dx.doi.org/10.1787/888933673408](http://dx.doi.org/10.1787/888933673408)

Figure 37. **There is room to further reduce barriers to trade in services**
Services trade restrictiveness index from 0 (open) to 1 (closed), 2016

1. The STRI records measures on a most-favoured-nation basis; preferential trade agreements are not taken into account. Air transport and road freight cover only commercial establishment (with accompanying movement of people). The cross-country average refers to the 35 OECD Members, plus Brazil, China, Colombia, Costa Rica, India, Indonesia, Lithuania, the Russian Federation and South Africa.

StatLink [http://dx.doi.org/10.1787/888933673427](http://dx.doi.org/10.1787/888933673427)
workers should also be relaxed, especially in high-tech sectors and, in this respect, recent provisions streamlining the application and allocation of work permits for foreign experts by high-tech firms through an online application is most welcome (Yefet, 2018). Moreover, competitive pressures in the banking sector would be reinforced if switching banks were simplified, as the authorities plan to do.

Certain aspects of business regulation, such as the business licensing and permit system administered by local municipalities, remain cumbersome, especially for SMEs. Approximately 40% of existing Israeli companies need a license according to national regulations; however, one-quarter of them operate without one, thus bordering on informality (OECD, 2016c). Key barriers include a lack of information on standardised procedures and long delays in municipal permit issuance. Heavy bureaucratic costs of environmental licensing could also be cut by as much as 30% if the currently fragmented approach were streamlined in an integrated procedure (OECD, 2016b; Eshet and Karni, 2016). More generally, Israel should introduce a “silence-is-consent” rule when appropriate, as Portugal has done. It should also promote the digitalisation of business licensing and permit systems, as Denmark, Estonia and Norway have done. Online procedures for registering property transfers, obtaining building permits and paying taxes (Figure 38) would also reduce unnecessary administrative burdens on firms and households (Lopez-Claros, 2016).

Figure 38. Tax procedures for businesses are onerous
Number of payments and time required to comply with taxes per year, 2017 data

Although Regulatory Impact Assessments (RIAs) have been part of the regulatory management process since 2016 (OECD, 2017h), further progress can be made (Figure 39). Mechanisms for co-ordinating the regulatory policy agenda have been established, but competencies are not yet clearly defined, and ministries and agencies continue working in silos, rather than adopting a whole-of-government approach. The mandatory consultation on draft legislation concerns only the final version and does not apply to the preliminary stages of the process, thereby leaving too little time for improvements. It is also unclear if these consultations with stakeholders are occurring systematically, with only 20 RIAs of draft laws published to date. To reduce administrative burdens it is first necessary to measure them and make more use of evidence in designing regulations. Moreover, the new
RIA requirement applies only to laws initiated by the government and not to those introduced by parliamentarians (MKs). While this is also the case in many other OECD countries, 42% of all primary laws are introduced by MKs in Israel, making this exception relatively important.

Improving infrastructure to boost productivity and well-being

Suitable and well-functioning infrastructure is crucial for growth, inclusiveness and well-being. It bolsters trade, competition and innovation and enhances access to public services. These benefits are important for Israel because of its relative remoteness from other markets and its high and rising population density, which increases the social returns on infrastructure investment in domains like transport and telecommunications (Chu, 1997; Deole, 2014; Glover and Simon, 1975) (Figure 40, Panel A). However, Israel has a sizeable infrastructure deficit due to its short history and public underinvestment since the early 2000s (Panel B). The biggest gap concerns public transport, which results in very heavy use of private vehicles (Figure 41, Panel A), causing costly road congestion (whose estimated cost was 1.5% of GDP in 2012) and local pollution problems. Moreover, renewable electricity production is low, and the electricity sector is still dominated by the state-owned incumbent whose inefficiency is shown by its high labour costs due to overstaffing and elevated wage levels (OECD, 2016b). The cost and quality of airport services are also substandard. Hospitals are overcrowded. And access to infrastructure services is unequal between regions and communities, with Arab towns often lacking adequate facilities (Panel B).

The government is aware of these problems and has taken corrective measures. Over 50% of recent transport investment concerned public transport following its strategy to shift ridership away from private vehicles to achieve a market share for public transport of 40%. A high-speed rail link between Jerusalem and Tel Aviv will open in the course of 2018. The government also aims to develop light rail systems in the country's three main cities between 2019 and 2023. There is also a plan to increase renewables’ share of electricity.
Israeli-Arab communities’ access to infrastructure services is being improved, with a five-year (2016-20) plan worth NIS 15 billion (1.2% of GDP) mentioned above to enhance transport, education, social services and housing in Arab towns. In addition, in mid-2017 an inter-ministerial committee was set up to improve infrastructure planning and to advance, monitor and coordinate these projects (Flug, 2017c).

These positive aspects must, however, not be offset by any weakening of public finances. To this end, the increased use of Private-Public Partnerships (PPPs) planned by the authorities, in particular in public transport, is welcome but must be carefully managed. Most importantly, PPPs should not be chosen just to avoid budget constraints, and the various risks must be carefully and clearly allocated. They can help government make the most of private-sector know-how but are difficult to use and bear a risk of management failure that can lead to additional contingent public debt (Araújo and Sutherland, 2010).
PPPs need to be cautiously implemented, with careful planning relying on adequate funding. Entrusting the management of these contracts to a single public agency, as recently decided by the government, will also help centralise public-sector PPP expertise (BoI, 2017b).

Efficient infrastructure pricing helps identify the needs and adjustments of service demand to available capacities. Charging users for the service also ensures more disciplined selection of investment projects (Glaeser, 2016). Promoting user-financed infrastructure is thus desirable, including for roads, which are currently funded by levies and taxes that are only weakly linked to road transport use. A recent Israeli pilot measure has shown that modest financial incentives can reduce private car use during rush-hour in congested areas, with positive impacts on environment (Bar-Eli, 2016). Road tolls can regulate demand effectively and should be used more widely. In the longer term a more ambitious overhaul of the management and funding of road transportation should also be considered. Technological advances now make it possible to price the use of road networks through metering systems, paving the way for user- rather than taxpayer-based financing (Cramton and Geddes, 2017). Australia plans to introduce such a system within the next decade (Infrastructure Australia, 2016), and toll systems for trucks already exist in Germany and Poland (Queiroz et al., 2016), although one failed to gain approval in France.

The infrastructure sector also needs a more rigorous and transparent process of project selection based on a clear long-term strategic planning. Israeli authorities use solid cost-benefit analyses, especially in transport (Shiftan et al., 2008). However, the detailed results of this work are not systematically published, and policymakers do not have to justify their choices, even if they approve projects with negative evaluations. The authorities should create an independent entity, like Infrastructure Australia, which would systematically publish technical analyses before the government decision, with policymakers obliged to formally justify their choices. This specialised entity could also usefully carry out regular ex post audits and monitor the country’s infrastructure needs. The management and implementation of

Figure 41. Inadequate public transport and infrastructure, especially in Arab areas, hinders well-being

A. Road traffic intensity per network length
1000 vehicle-km/km, 2014¹

B. Satisfaction² with areas of residence, by population group, 2015

1. Or latest available year.
2. Percentage share of respondents that were satisfied or very satisfied.
Source: OECD (2015), Environment at a Glance 2015: OECD Indicators, Figure 2.11; CBS, 2015 Social Survey Table Generator, http://surveys.cbs.gov.il/survey/surveyE.htm.
infrastructure projects would also benefit from closer inter-ministerial coordination with local governments and better public consultation, especially during the initial phases of projects. Such difficulties have often led to substantial cost overruns (Chapter 2).

Despite some reforms (Table 12), there remains much room for better infrastructure regulation:

- The electricity sector is still dominated by a cost-heavy vertically integrated public enterprise, the Israel Electric Company (IEC). It would benefit from the creation of a separate, regulated infrastructure operator and an efficient wholesale market. A reform proposal currently being discussed between the authorities, IEC and its unions is expected to address some of these issues, reduce IEC overstaffing and stimulate competition in electricity production (Gorodeisky, 2017).

- Reforming airport management, currently run by a public monopoly, the Israeli Airport Authority, could reduce the high wages and operating costs and long aircraft turnaround time at Ben Gurion airport (Figure 42). Competition should be introduced by opening up ground services to private firms and adopting best practices such as EU directives on access to these services at airports; creating an independent air traffic control operator; and building an additional privately managed international airport (State of Israel, 2017).

- Opening up the taxi market to ride-hailing firms would be desirable, as they are 30-50% more efficient than traditional taxis and can increase options for urban mobility and reduce congestion and urban pollution problems (Cramer and Kruger, 2016; Rayle et al., 2014; Li et al., 2016). However, it should be accompanied by measures helping traditional taxi companies and their employees to adjust to these structural changes.

<table>
<thead>
<tr>
<th>Recommendations in previous Surveys</th>
<th>Action taken since January 2016</th>
</tr>
</thead>
<tbody>
<tr>
<td>Create independent regulators in telecoms and postal services, with well-defined mandates.</td>
<td>No action taken.</td>
</tr>
<tr>
<td>Turn the IEC into a holding company with distinct subsidiaries for different activities, and create a separate infrastructure operator.</td>
<td>Discussions have been held over the past year with IEC’s management and union on reforms and a new business structure.</td>
</tr>
<tr>
<td>Create a wholesale electricity market with enough producers making sure that none has a dominant position. Sell or privatise IEC power plants if necessary.</td>
<td>New independent power producers now have 30% of the market. IEC intends to sell its Ramat Hovev facility. The regulator is working on a new electricity trade model.</td>
</tr>
<tr>
<td>Allow more competition in maintenance activities for railway rolling stock.</td>
<td>Some items are being tendered (motorised carriages procurement, the infrastructure for track electrification).</td>
</tr>
<tr>
<td>Pursue postal reforms to open these services more widely to private competitors, to enhance the management autonomy of the public operator (Israel Postal Company, IPC) and partially privatise it.</td>
<td>Discussions and preparatory works are underway to allow IPC’s competitors access to distribution centres. Actions have been taken to improve IPC’s financial situation before partial privatisation, including a retirement plan, additional distribution centres, less waiting time and upgrading mail delivery performance.</td>
</tr>
<tr>
<td>Implement the compromise agreement negotiated between the government and Noble-Delek to ensure the development of the Leviathan gas field and of the infrastructure needed to introduce competition in this market in the future.</td>
<td>In November 2016 the documents of the first competitive procedure for allowing licenses for exploration and production of oil and gas in the marine territory of Israel were released. As part of the procedure, 24 blocks were offered for licensing. In December 2016 leases on Karish and Tanin were transferred to Energean (a company based in Greece), and by July 2017 12.75% of Noble leases on Tamar were transferred to other companies. Noble Energy’s investment decision regarding the Leviathan project was finalised in February 2017.</td>
</tr>
<tr>
<td>Speed up the development of regional gas distribution networks to promote domestic demand by clarifying the standards applicable and improving co-ordination among the responsible agencies. Create an independent sectoral regulator. Consider relaxing export restrictions.</td>
<td>In 2016 the authorities adopted several measures improving the framework for developing the distribution infrastructure and removing the obstacles and simplifying the administrative procedures (regulatory uncertainties, problems with obtaining building permits, etc.) that had previously hindered the conversion of industrial facilities to natural gas. The 2017-18 budget offered support for industrial and transportation firms converting to natural gas, as well as for regional gas distribution firms.</td>
</tr>
</tbody>
</table>
Better access to infrastructure in disadvantaged areas, especially Arab cities, would ensure more equitable opportunities for all citizens and promote more inclusive growth. The poorest municipalities cannot develop adequate services because of deficiencies in the property tax system (Arnona) (Fitoussi et al., 2016). In 2017 the authorities created an equalisation fund, the Arnona fund, to redistribute resources across municipalities more equally. Moreover, the above-mentioned five-year NIS 15 billion plan will increase the resources of local Arab communities through special budgetary allocations in many sectors. This plan, monitored by a steering committee including central government representatives and the mayors of Arab municipalities, also aims to enhance the skills and management capacity of Arab municipal personnel. These changes are welcome. However, the additional resources transferred to the weakest municipalities from this new equalisation fund may be insufficient. Moreover, the five-year plan’s success depends on its implementation and trust between the Arab municipalities and the central government and between the Arab citizenry and their elected officials. A rigorous evaluation of the results of the reform, in terms of improving the efficiency, professionalism and transparency of municipal administrative management, will thus have a key role in enhancing this trust (Brender, 2007).

Improving Arab municipalities’ public services also requires addressing the lack of public land available for infrastructure. This in turn means solving the problems of urban planning, the lack of accuracy of the cadastre and illegal housing construction in these towns where most of the land is private. As suggested in 2014 by the so-called “120-day” task force, the authorities should limit financial penalties when illegal construction is put in order with a means-testing mechanism to incentivise low-income households to register their property and adopt measures to decentralise and strengthen the transparency of land planning. Arab families have traditionally been unwilling to sell their land, preferring to bequeath it to their children. Because of this longstanding practise, land needed for public use (notably roads) is extremely difficult to acquire. Given local authorities’ reluctance to resort to land expropriation even in areas with high concentrations of illegal construction, experimental
land-planning frameworks relying on consultations and agreements of residents could be developed. Moreover, public incentives, including state provision of additional land in areas where this is possible, would be useful, as in the city of Umm al-Fahm (OECD, 2017d).

**Greening the economy**

Following the 2015 United Nations Climate Change conference in Paris, the Israeli government approved a plan for reducing greenhouse gas emissions per capita by 26% by 2030 compared to 2015 (Table 13). To this end, public funding has been allocated to energy efficiency programmes, including reduction of coal use for electricity generation. The production share of renewables is planned to rise from 2.6% in 2016 to 17% in 2030. These welcome measures, which should not increase electricity prices much, given the declining production costs of solar power generation, need to be well implemented, although they are likely to require additional investment in the electricity grid (BoI, 2017f).

**Table 13. Past recommendations on environmental policies**

<table>
<thead>
<tr>
<th>Recommendations in previous Surveys</th>
<th>Action taken since January 2016</th>
</tr>
</thead>
<tbody>
<tr>
<td>Introduce GHG monitoring and a system of rolling targets extending beyond 2020.</td>
<td>A system for measurement, reporting and verification is being established to measure the effectiveness of government policy in implementing the measures defined in the National Plan for Reducing GHG Emissions. Israel submitted a 2030 target to the UNFCCC of reducing GHG emissions per capita by 26% by 2030 compared to 2015 to 7.7 tonnes (CO₂ equivalent). Implementation is well underway, and methodologies for follow-up are currently being formulated.</td>
</tr>
<tr>
<td>Consider basing an economy-wide carbon tax on the existing excise tax on primary fuels, and aim for greater participation in international emissions trading.</td>
<td>No action taken.</td>
</tr>
<tr>
<td>Improve energy efficiency in buildings. Introduce energy-efficiency standards and certification.</td>
<td>In June 2016 a government report was published with recommendations for an action plan to promote compliance with the Green Building Standard. The Ministry of Energy will publish energy efficiency standards and undertake certification.</td>
</tr>
<tr>
<td>Further raise taxes to curb vehicle use rather than ownership, and prune tax breaks for company cars.</td>
<td>A successful experiment involving 1 000 drivers with rental payments based on time and location of vehicles was conducted, and its expansion is being considered.</td>
</tr>
</tbody>
</table>

Air quality in Israel is poor, well below the OECD average (Figure 43). As discussed in Chapter 2, more developed mass transport, including a better rail network, would benefit the environment and curb air pollution. Israel already adopted a unique Green Tax scheme in 2009, which adjusted the vehicle purchase tax according to each model’s emissions of five key pollutants. This led to significant reduction of market shares of heavily polluting cars (OECD, 2016f). A complementary approach would be to diversify car taxation by transferring at least part of the burden to vehicle use rather than ownership.

Despite a substantial reduction in the use of water from natural sources thanks to Israel’s unique and innovative approach to water management based on a heavy recourse to desalination and water recycling, problems of overexploitation persist. This results from a decline in their natural replenishment following recent droughts, which has led to pollution problems. To guarantee a sustainable management of these natural resources, it would be advisable to set clear objectives for the minimum acceptable water quality in these reserves and to set appropriate upper limits on their exploitation by increasing the production of desalinated water if necessary. To ensure compliance, they could be written into law, as was done for Lake Kinneret.
Figure 43. Environmental indicators

A. CO2 intensity

- CO2 per GDP kg/USD (2010 PPP prices)
- CO2 tonnes per capita kg/capita, thousands

B. Energy intensity

- Total primary energy supply per GDP (ktoe/USD 2010 PPP)
- % of renewables in total primary energy supply

C. Population exposure to air pollution

- Mean annual concentration of PM2.5 (μg/m³)
- % of population exposed to PM2.5, 2015

D. Municipal waste generation and recycling

- Municipal waste management, by type of treatment, %
- Waste generated per capita, kg/person

E. Greening taxation

- Environment-related taxes, % of GDP
- Tax rate on motor fuels USD/litre, 2015

F. Environment-related inventions

- Inventions per capita patents/million persons 2011-13
- % of all technologies 1990-92, 2011-13

1. Includes taxes at both central and lower levels of government.
2. 2014 for the United States.


StatLink: http://dx.doi.org/10.1787/888933673541
Bibliography


ANNEX A.1

The simulated impact of increasing employment rates on poverty in typical families of the main Israeli communities

This Annex provides additional information regarding the results of a simulation exercise evaluating the potential benefits of an employment increase for lowering the poverty rate for different family types belonging to the Israeli-Arab, Haredi and Jewish non-Haredi communities. In its first part, it describes the main characteristics of the OECD Tax Benefit model that was used for this exercise. The second part presents the main assumptions retained to perform these simulations, and the last part provides a short discussion of the main results.
**OECD Tax-Benefit model**

The OECD Tax-Benefit model, versions of which are available for each OECD Member country, are tools designed to assess the redistribution policies, income adequacy and benefit generosity for working people and their families. To this end, these models consist of a set of equations allowing the calculation of disposable income of households taking into account the specific characteristics of the family (for example, the number of people in the household), their labour income, social transfers and income taxes provided by the relevant legislation.

These models, which are presented in detail in OECD (2016), incorporate detailed tax rules and benefit entitlements covering a broad set of social and fiscal policy levers: personal income tax, social security contributions, unemployment benefits, social assistance, guaranteed minimum-income schemes, family benefits, housing benefits for rented accommodation, in-work benefits, childcare support and parental leave benefits. The latest update of the indicators covers the year 2015. Benefits included in the calculations exclude those benefits that are “in-kind”. Hence free school meals, subsidised transport, free health care, etc. are not included. In general, occasional or irregular payments are also not included, as are benefits strictly related to the purchase of particular goods and services (other than housing or childcare as described below), such as transport, domestic fuel, medical insurance and prescription medicines.

Net incomes are defined as gross earnings plus cash benefits minus income taxes and social security contributions. Any taxes or contributions not paid directly by the wage earner or benefit recipient are not included in gross incomes. Housing costs and any other forms of “committed expenditure” are not deducted when computing net incomes.

For each country the Tax-Benefit model allows the calculation of net household incomes for a wide range of policy-relevant family situations. Computing tax and benefit amounts using existing policy rules illustrates the features of these redistributive instruments. And by repeating these calculations for a number of different household situations, they permit an assessment of the circumstances (e.g. family situation or income level) for which each of these features becomes relevant.

**Family size and income level assumptions**

For the specific simulations carried out for the draft Economic Survey, the tax-benefit model has been used to evaluate the impact of the tax-benefit system for representative households of the three main Israeli communities (Israeli-Arabs, Haredim and non-Haredi Jews) given their characteristics (their number of children) and differences in income levels. The model has also been used to estimate the impact of higher employment on family income for each of these three different groups. To perform these simulations it was therefore necessary to specify their average wage level and their average number of children for each standardised family type.
As shown in the Table A.1.1, the earnings difference between communities is substantial. Non-Haredi Jews earn around 110% of the median hourly wage and around 110% of the median monthly wage. On the other hand, Israeli-Arabs and Haredim work in low-productivity, often non-tradable sectors with low wages. Israeli-Arabs earn only around 70% of the median hourly wage and 74% of the median monthly wage. The Haredim earn around 87% of the median hourly wage, but only 68% of the median monthly wage. This difference stems from high share of part-time workers among this group. In the simulations, for the standardised families we have thus assumed that workers earn 110% of the median hourly wage in non-Haredi families, 70% in Israeli-Arab families and 90% in the Haredi families.

<table>
<thead>
<tr>
<th>Share of median (%)</th>
<th>Share of average (%)</th>
</tr>
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<tbody>
<tr>
<td>Hourly earnings</td>
<td>Monthly earnings</td>
</tr>
<tr>
<td>All those in this age group</td>
<td>100.0</td>
</tr>
<tr>
<td>Men</td>
<td>104.3</td>
</tr>
<tr>
<td>Women</td>
<td>95.7</td>
</tr>
<tr>
<td>Haredim</td>
<td>87.2</td>
</tr>
<tr>
<td>Haredi men</td>
<td>85.1</td>
</tr>
<tr>
<td>Haredi women</td>
<td>91.5</td>
</tr>
<tr>
<td>Israeli Arabs</td>
<td>70.2</td>
</tr>
<tr>
<td>Arab men</td>
<td>70.2</td>
</tr>
<tr>
<td>Arab women</td>
<td>70.2</td>
</tr>
<tr>
<td>Non-Hared Jewish men</td>
<td>108.5</td>
</tr>
<tr>
<td>Non-Hared Jewish men</td>
<td>119.1</td>
</tr>
<tr>
<td>Non-Hared Jewish women</td>
<td>97.9</td>
</tr>
</tbody>
</table>

Source: Ministry of Finance based on Labour Force Survey data.

Disadvantaged groups have much larger families. The fertility rate in Israel is 3.1 children per mother, the highest in the OECD (OECD, 2017). The fertility rate of non-Haredi Jews is somewhat above 2. The Israeli-Arab fertility has decreased substantially from around 4.5 children in 2000-04 to above 3 (CBS, 2017a). The average rate among Haredi families is estimated to be around 6-7 (CBS, 2017b). For the simulations, it was assumed that average non-Haredi families have two children and Haredi families six. As fertility rate of Israeli-Arabs came down to 3 only in recent years, we assume the average number of children in Israeli-Arab families is still four.

Results of simulating the Tax-Benefit model for Israel

The results of the simulations suggest that with the current Israeli tax-transfer system, it is difficult to escape poverty for families with only one breadwinner and children. In a family with two children, the wage of the breadwinner must exceed at least 150% of the national median wage for household income to exceed the national poverty line (Figure A.1.1, Panel A). While the direct taxation system makes a contribution to a reduction of inequality similar to the OECD country average (Bank of Israel, 2016), the overall redistributive effect of the country’s tax-transfer system is low because of the low level of social assistance and benefits (Figure A.1.1, Panel A).

For larger families with one breadwinner it is even more difficult to escape poverty. The family poverty line increases with the number of children, but the level of transfers does not sufficiently adjust for these increases, mainly because of a low generosity of child...
ANNEX A.1.  THE SIMULATED IMPACT OF INCREASING EMPLOYMENT RATES ON POVERTY IN TYPICAL FAMILIES...

Figure A.1.1. Families with one breadwinner\(^1\) are less likely to escape poverty

A. Family with one breadwinner and two children

<table>
<thead>
<tr>
<th>Thousand NIS/year</th>
<th>Thousand NIS/year</th>
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</thead>
<tbody>
<tr>
<td>160</td>
<td>160</td>
</tr>
<tr>
<td>140</td>
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<tr>
<td>120</td>
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<td>0</td>
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<td>-20</td>
<td>-20</td>
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<td>-40</td>
<td>-40</td>
</tr>
</tbody>
</table>

National poverty line

Earnings level, % of median earnings

- Taxes
- Gross earnings after taxes
- Family benefits
- Housing benefits
- Social assistance
- In-work benefits
- Net income
- Decile points

B. Family with one breadwinner and four children

<table>
<thead>
<tr>
<th>Thousand NIS/year</th>
<th>Thousand NIS/year</th>
</tr>
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<tr>
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<tr>
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<td>0</td>
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<tr>
<td>-30</td>
<td>-30</td>
</tr>
</tbody>
</table>

National poverty line

Earnings level, % of median earnings

- Taxes
- Gross earnings after taxes
- Family benefits
- Housing benefits
- Social assistance
- In-work benefits
- Net income
- Decile points

C. Family with one breadwinner and six children

<table>
<thead>
<tr>
<th>Thousand NIS/year</th>
<th>Thousand NIS/year</th>
</tr>
</thead>
<tbody>
<tr>
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<tr>
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<td>0</td>
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<tr>
<td>-30</td>
<td>-30</td>
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</tbody>
</table>

National poverty line

Earnings level, % of median earnings

- Taxes
- Gross earnings after taxes
- Family benefits
- Housing benefits
- Social assistance
- In-work benefits
- Net income
- Decile points

1. One-earner couple where the breadwinner works 40 hours per week. Source: OECD calculations using the OECD Tax-Benefit model.
allowances. Therefore, the gap between family income and the poverty line increases with the number of children. In families with four or more children, even if the breadwinner earns double the median wage, it would not be sufficient for the family to escape poverty (Panels B and C).

The main route out of poverty in Israel is by increasing the number of breadwinners in the family. However, even increasing employment would not necessarily help to escape poverty in a case of disadvantaged groups. For example, the household income of the Haredi family with six children and a wage of around 90% of the median wage would be approximately 180% of the median earnings, but this would still not be enough for the family to escape poverty (Figure A.1.2).

In non-Haredi Jewish families with expected income of 110% of the median wage and two children, even part-time work for the second spouse would be enough to help family income exceed the poverty threshold (Figure A.1.3, Panel A). However, for the typical Israeli-Arab family with income of around 70% and four children, even two earners in the family would not be enough to escape poverty (Panel B). Also in the case of Haredi with almost 90% of the median hourly wage and six children additional income coming from the salary of the second earner would not be enough to exit poverty (Panel C). The earnings of workers in an average Arab family with four children would need to reach around 160% of the median wage for net family income to exceed the poverty line, and, in the case of a Haredi family with six children, it would need to reach around 230% of the median wage. In sum, the results suggest that the effect of increasing employment on poverty rate reduction can be limited for these disadvantaged groups.
Figure A.1.3. Higher employment of Haredim and Israeli-Arabs may not be enough to lift them out of poverty

Estimates of family income according to the numbers of earners and the community group¹

1. One earner corresponds to a family with one earner, one and a half earners corresponds to two-earner family where one works full-time and the second half-time, and two earners corresponds to two-earner family where both work full-time.

2. Workers are assumed to earn 110% of the average wage.

3. Workers are assumed to earn 70% of the average wage.

4. Workers are assumed to earn 90% of the average wage.

Source: OECD calculations using the OECD Tax-Benefit Model.

Bibliography


ANNEX A.2

Progress in structural reform

This table reviews action taken on recommendations from previous Surveys, which are not mentioned in the main text of the Issues for Discussion document. Recommendations that are new in this Survey are listed at the end of the relevant chapter.
### 1. Pensions

<table>
<thead>
<tr>
<th>Recommendations in previous Surveys</th>
<th>Action taken since January 2016</th>
</tr>
</thead>
<tbody>
<tr>
<td>Moderate the impact on net current income of relatively high mandatory contributions to pension savings for low-wage workers.</td>
<td>The Earned Income Tax Credit was increased for certain populations as a response to the high mandatory contributions to pension savings for low-wage workers.</td>
</tr>
<tr>
<td>Increase employee pension contributions for public employees recruited before 2002-04.</td>
<td>No action taken.</td>
</tr>
<tr>
<td>Gradually raise women’s eligibility age for the first-pillar pension to equal men’s (67 years). Index the retirement age to life expectancy at 65, so as to hold constant the share of adult lifetime spent in retirement.</td>
<td>A public committee, appointed by the Minister of Finance, has published its report recommending an increase in women’s retirement age to 64 over eight years, and then indexing retirement age to life expectancy. The issue is being discussed in the Knesset.</td>
</tr>
<tr>
<td>Require pension providers to offer low-cost pension funds as their default option, for example, by proposing passively managed (indexed) assets or streamlining distribution channels. Encourage the growth of mutually managed pension funds.</td>
<td>No action taken.</td>
</tr>
<tr>
<td>Significantly reduce the implicit tax rate on continuing to work beyond the pension eligibility age by lowering the reduction of first-pillar basic pension entitlements in the presence of work-related income.</td>
<td>No action taken.</td>
</tr>
<tr>
<td>Increase transparency of the pension system for defence, police and prison personnel, and transfer its management from the Ministries of Defence (MoD) and Internal Security to the Ministry of Finance (MoF). Increase the transparency of the State’s contingent liabilities for those public entities having independent budgets.</td>
<td>New mechanisms for transparency were introduced as part of the agreement between the MoF and MoD.</td>
</tr>
<tr>
<td>Phase out tax breaks on savings in the “advanced training funds”.</td>
<td>No action taken.</td>
</tr>
</tbody>
</table>

### 2. Health-care policy

#### Governance of the health insurance system

<table>
<thead>
<tr>
<th>Recommendations in previous Surveys</th>
<th>Action taken since January 2016</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ensure universal National Health Insurance (NHI) services remain at the core of the system. Provide adequate public funds for it.</td>
<td>NHI remains at the core of the system. In recent years funding has risen by an average annual rate of 7%, one of the highest rates of any public spending area.</td>
</tr>
<tr>
<td>Widen the scope of reductions in co-payments to low income households.</td>
<td>The share of co-payments funding public health expenditure fell substantially in recent years from 8% in 2012 to 5.4% in 2015. This trend is ongoing in 2016-17 as well. Moreover, actions were taken to decrease co-payments of certain low-income households such as holocaust survivors and other elderly populations at a cost of over NIS 250 million per year.</td>
</tr>
<tr>
<td>Put an end to direct management of government-run hospitals by the Ministry of Health through conversion to independent hospital trusts or by putting them in the hands of the health funds.</td>
<td>A new hospital owned by a firm controlled by a health fund was opened on June 2017 in the city of Ashdod. Furthermore, another similar type of hospital will open in Beersheba. As to the governmental hospitals, no action has been taken.</td>
</tr>
</tbody>
</table>

#### Policy towards health-care professionals

<table>
<thead>
<tr>
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</thead>
<tbody>
<tr>
<td>Further expand medical schools and nurse training. Strive to shorten the time taken to acquire qualifications and specialisations.</td>
<td>Several actions were taken to expand medical and nurse training. A new medical school was opened in the city of Zfat, and a multi-year plan was developed to increase the number of medical and nursing students by another 15%. In total, the number of new medical students is planned to grow from 440 in 2009 to over 900 in 2022 and nursing students from 850 to over 3 100.</td>
</tr>
<tr>
<td>Further exploit the potential for shifting tasks between professions, e.g. from doctors to nurses.</td>
<td>A new profession (“Doctor Assistant”) was introduced. These are paramedics employed at hospitals with tasks and responsibilities aimed at reducing doctors’ workload.</td>
</tr>
<tr>
<td>Encourage older professionals to continue working, and provide childcare facilities for staff.</td>
<td>No action taken.</td>
</tr>
<tr>
<td>Consider extending requirements to work in the NHI system for those that have benefitted from subsidised medical training.</td>
<td>No action taken.</td>
</tr>
</tbody>
</table>

#### Funding mechanisms

<table>
<thead>
<tr>
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</tr>
</thead>
<tbody>
<tr>
<td>Consider adding further socio-economic variables to the capitation formula that determines government transfers to the health funds.</td>
<td>No action taken.</td>
</tr>
<tr>
<td>Further shift payment mechanisms away from input-based measures (such as per diem charging for hospital care) and towards output-based formulae such as Diagnosis Related Group (DRG) mechanisms.</td>
<td>In the past five years over 500 new DRG-based prices were published. This is a work in progress, but already today over 70% of billings between hospitals and HMOs are done on a DRG basis or at ambulatory-care prices.</td>
</tr>
</tbody>
</table>
### Quality of care, health promotion and data

<table>
<thead>
<tr>
<th>Action</th>
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</tr>
</thead>
<tbody>
<tr>
<td>Further increase health spending, especially within the hospital sector to reduce hospital overcrowding.</td>
<td>Public health-care spending has increased substantially over the past few years – a 60% increase between 2010 and 2017 – worth over NIS 22 billion. Hospitals have benefited from much of this increase, alongside other public providers. Unfortunately, much of the increase went for wage increases and not better service or care. Currently, Israeli physicians and nurses’ wages are among the OECD’s highest, and health-care wages have risen at a far faster rate than other wages and prices.</td>
</tr>
<tr>
<td>Further develop the collection and dissemination of information on the quality of hospital care.</td>
<td>In recent years the Ministry of Health started a programme of measuring hospital quality, indicators of which are published annually.</td>
</tr>
</tbody>
</table>

### Long-term care

<table>
<thead>
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</thead>
<tbody>
<tr>
<td>Simplify access to public support for long-term care (LTC) services. Create a one-stop shop for assessing LTC needs.</td>
<td>Thanks to additional funding and changes to community LTC, the queues for LTC services both in the community and in nursing homes have been eliminated.</td>
</tr>
</tbody>
</table>