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ISRAEL

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This Survey is published on the responsibility of the Economic and Development Review Committee (EDRC) of the OECD, which is charged with the examination of the economic situation of member countries.

The economic situation and policies of Israel were reviewed by the Committee on 26 October 2015. The draft report was then revised in the light of the discussions and given final approval as the agreed report of the whole Committee on 8 December 2015.

The Secretariat's draft report was prepared for the Committee by Claude Giorno under the supervision of Peter Jarrett. The Survey also benefitted from excellent consultancy work by Jacques Adda. Secretarial assistance was provided by Dacil Kurzweg and Krystel Rakotoarisoa and statistical assistance by Isabelle Duong.

The previous Survey of Israel was issued in December 2013.

Information about the latest as well as previous Surveys and more information about how Surveys are prepared is available at www.oecd.org/eco/surveys.

BASIC STATISTICS OF ISRAEL, 2014

(Numbers in parentheses refer to the OECD average)*

LAND, PEOPLE AND ELECTORAL CYCLE

Population (million)	8.2		Population density per km²	370.9	(34.9)
Under 15 (%)	28.1	(18.1)	Life expectancy (years, 2013)	82.1	(80.5)
Over 65 (%)	10.9	(16.0)	Men	80.3	(77.8)
Foreign-born (%, 2013)	22.6		Women	83.9	(83.1)
Latest 5-year average growth (%)	1.8	(0.6)	Latest general election	March	2015

ECONOMY

Gross domestic product (GDP)			Value added shares (%)		
In current prices (billion USD)	306.2		Primary sector	1.3	(2.6)
In current prices (billion NIS)	1 093.7		Industry including construction	22.1	(26.6)
Latest 5-year average real growth (%)	3.8	(1.9)	Services	76.6	(70.8)
Per capita (000 USD PPP)	33.3	(39.0)			

GENERAL GOVERNMENT

Per cent of GDP

Expenditure [a]	41.2	(41.9)	Gross financial debt[a]	67.1	(115.2)
Revenue	37.7	(38.8)	Net financial debt (2013)	62.5	(73.6)

EXTERNAL ACCOUNTS

Exchange rate (NIS per USD)	3.571		Main exports (% of total merchandise exports)		
PPP exchange rate (USA = 1)	4.006		Manufactured goods	34.9	
In per cent of GDP			Chemicals and related products, n.e.s.	26.2	
Exports of goods and services	32.3	(53.8)	Machinery and transport equipment	24.0	
Imports of goods and services	30.6	(49.8)	Main imports (% of total merchandise imports)		
Current account balance	3.7	(0.02)	Machinery and transport equipment	29.2	
Net international investment position	21.3		Manufactured goods	22.8	
			Mineral fuels, lubricants and related materials	17.6	

LABOUR MARKET, SKILLS AND INNOVATION

Employment rate for 15-64 year-olds (%)	67.9	(65.7)	Unemployment rate, Labour Force Survey (age 15 and over) (%)	5.9	(7.3)
Men	71.5	(73.6)	Youth (age 15-24, %)	10.5	(15.1)
Women	64.2	(57.9)	Long-term unemployed (1 year and over, %)	0.5	(2.5)
Participation rate for 15-64 year-olds (%)	72.2	(71.2)	Tertiary educational attainment 25-64 year-olds (%, 2013)	48.5	(33.5)
Average hours worked per year	1 853	(1 770)	Gross domestic expenditure on R&D (% of GDP, 2012)	4.2	(2.4)

ENVIRONMENT

Total primary energy supply per capita (toe)	2.9	(4.1)	CO_2 emissions from fuel combustion per capita (tonnes, 2013)	8.5	(9.6)
Renewables (%)	5.1	(9.1)	Water abstractions per capita (1 000 m^3, 2010)	0.2	
Fine particulate matter concentration (PM2.5, µg/m3, 2013)	25.8	(13.8)	Municipal waste per capita (tonnes, 2013)	0.6	(0.5)

SOCIETY

Income inequality (Gini coefficient, 2013 [b])	0.360	(0.308)	Education outcomes (PISA score, 2012)		
Relative poverty rate (%,2013 [b])	18.6	(10.9)	Reading	486	(496)
Median equivalised household income (000 USD PPP, 2013 [b])	18.0	(22.1)	Mathematics	466	(494)
Public and private spending (% of GDP)			Science	470	(501)
Health care (2013)	7.5	(8.9)	Share of women in parliament (%,November 2015)	25.8	(27.8)
Pensions (2013 [c])	4.9	(8.7)	Net official development assistance (% of GNI)	0.07	(0.36)
Education (primary, secondary, post sec. non tertiary, 2012)	4.4	(3.7)			

Better life index: *www.oecdbetterlifeindex.org*

* Where the OECD aggregate is not provided in the source database, a simple OECD average of latest available data is calculated where data exist for at least 29 member countries.

a) 2013 for the OECD aggregate.

b) 2012 for the OECD aggregate.

c) 2011 for the OECD aggregate.

Source: Calculations based on data extracted from the databases of the following organisations: OECD, International Energy Agency, World Bank, International Monetary Fund and Inter-Parliamentary Union.

Glossary

CIT	Corporate Income Tax
VAT	Value added Tax
BOI	Bank of Israel
GDP	Gross Domestic Product
IAA	Israeli Antitrust Authority
CPI	Consumer Price Index
PPP	Purchasing Power Parity
IEC	Israeli Electricity Corporation
VET	Vocational Education and Training
EITC	Earned Income Tax Credit
GHG	Greenhouse Gas
WTO	World Trade Organisation
RTP	Restrictive Trade Practices
JDC	Jerusalem District Court
CLP	Competition Las and Policy
SOE	State Own Enterprise
GCA	Government Companies Authority
IPO	Initial Public Offering
RIA	Regulatory Impact Assessment
IPPC	Integrated Pollution Prevention and Control
FDI	Foreign Direct Investment
CEO	Chief Executive Officer
PUA	Public Utilities Authority
IPP	Independent Private Producers
IPC	Israel Postal Company
CBS	Central Bureau of Statistics
NII	National Insurance Institute
CMISD	Capital Markets, Insurance and Savings Division

Executive summary

- *The economy has strong fundamentals, but productivity performance has been weak*
- *Income inequality and poverty are high*
- *The fiscal framework is not conducive to inclusive growth*

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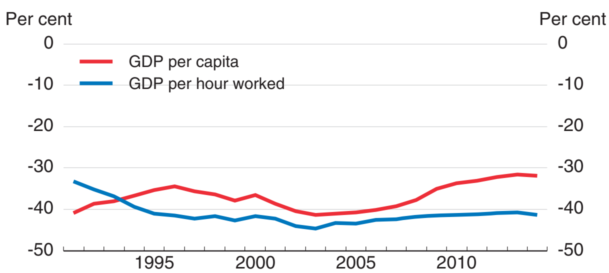
The economy has strong fundamentals, but productivity performance has been weak

Per capita GDP and productivity

Gap relative to the upper half of OECD countries[1]



1. Percentage gap with respect to the simple average of the highest 17 OECD countries (in constant 2010 PPPs).

Source: OECD, *National Accounts and Productivity Databases.*

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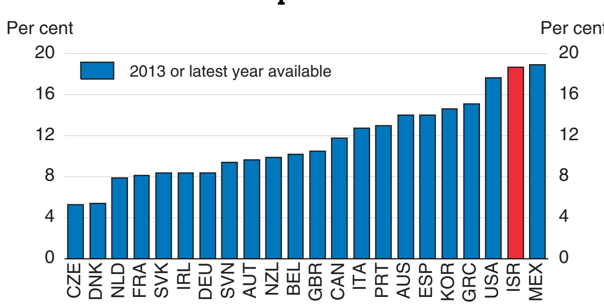
Thanks to prudent monetary, financial and fiscal policies, growth has exceeded most other OECD countries' rates for more than a decade. Employment is rising, inflation is low, the external surplus is comfortable, and the public finances are in relatively good shape. However, although income per capita has gradually been catching up with the most advanced countries, this has not been matched by similar convergence in productivity. Indeed, highly dynamic tradable goods industries coexist with an inefficient sheltered sector to an unusual extent, dragging down overall economic performance. Substantial deficiencies in product market regulation and competition, especially in the entire food chain, banking and electricity, are weakening productivity and reducing incomes.

Income inequality and poverty are high

Poverty rate relative to threshold of 50% of median disposable income



Source: OECD Income Distribution Database.

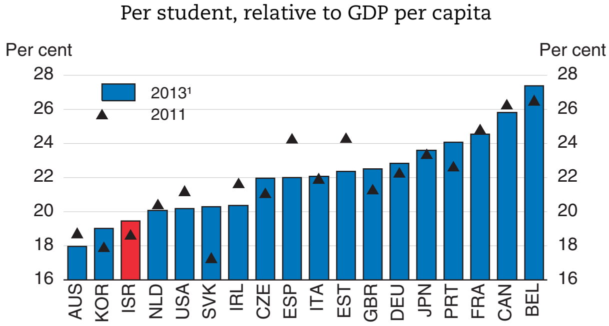
StatLink http://dx.doi.org/10.1787/888933317567

Israel is also characterised by high poverty and large gaps along many material and non-material dimensions of well-being. Poverty is especially high among the elderly, in part because of low basic pensions. Employment rates for Ultra-Orthodox (Haredi) men and Arab-Israeli women remain low. Rising housing prices impose an additional affordability burden, increasingly even on the middle class. Relatively high price levels due to weak competition, in particular in the food sector, impose a greater cost, in terms of living standards, to socioeconomically disadvantaged groups.

The fiscal framework is not conducive to inclusive growth

Expenditure on educational institutions

Per student, relative to GDP per capita



1. Or latest year available. For more details, see Figure 9, panel E.

Source: OECD (2015), Education at a Glance 2015; OECD, National Accounts Database

StatLink http://dx.doi.org/10.1787/888933317574

The tax burden and public civil spending are low and income redistribution is limited. Despite substantial increases in recent years, education spending per student remains low relative to per capita income compared to most other OECD countries. Insufficient infrastructure, especially in transport, hampers private-sector efficiency. The cap on spending growth in the public debt-reduction strategy implies the share in GDP of civil spending will shrink further over time, restricting the room to finance useful public spending initiatives.

MAIN FINDINGS	KEY RECOMMENDATIONS
Monetary policy and the fiscal framework and policy	
Inflation is below the official price stability objective.	Maintain the current expansionary monetary policy stance. Implement further macro-prudential measures if risks to the financial system (from housing prices) rise.
The cap on government spending implies further declines as a share of GDP, even as civil spending is very compressed.	Reduce the structural deficit and pursue the gradual debt-reduction strategy by raising fiscal revenues, preferably by removing inefficient tax expenditures, such as the VAT exemption on fresh fruit and vegetables, and raising environmental taxes including by, for example, establishing a carbon tax. 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. Implement effectively the envisaged plan to ensure consistency of commitments for future expenditure and tax reduction with the spending ceiling and deficit target rules.
Product market reform	
Product market regulations are far from best practice.	Ensure that the planned reduction of the regulatory burden relies on high-quality regulatory impact assessments.
Food prices are high.	Further cut tariffs and non-tariff barriers, in particular by adopting the EU import procedures on food and agricultural goods. Replace quotas, guaranteed prices and customs tariffs with direct payments to farmers. Consider screening the anti-competitive provisions in the food sector using the OECD competition assessment toolkit.
The banking sector is concentrated and inefficient.	Follow through on plans to allow the entry of new competitors in retail banking, in particular by non-banking credit entities, with appropriate prudential and consumer protection regulation.
The electricity market is still dominated by a heavily indebted publicly owned, vertically integrated company.	Turn the Israel Electricity Corporation into a holding company, and create a separate infrastructure operator.
Competition law enforcement is not fully effective.	Expand the leniency programme, and increase financial penalties for competition law violations. Create independent regulators with well-defined mandates in the telecoms, postal services and gas sectors.
Inclusive growth and pension system	
The quality of education, especially for Haredim and Israeli Arabs, is poor, and these groups are not well integrated into the labour market, resulting in widespread poverty.	Increase education funding for disadvantaged groups. Develop vocational education and training more fully for young adults. Require Haredi schools to teach mathematics, science and foreign languages. Expand the earned income tax credit and active labour market policies. Introduce a mandatory community service programme for Israelis who are currently exempted from military service.
Restricted supply is raising house prices, reducing well-being, especially for young families	Complete the streamlining of the administrative requirements for planning and building a home. 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.
The pension system has solid foundations, but the poverty rate among the elderly is high.	To reduce elderly poverty, as the second pillar matures, seek a way to increase first-pillar pensions without creating work disincentives. Moderate the impact on net current income of relatively high mandatory contributions to pension savings for low-wage workers. Gradually raise women's statutory retirement age to equal men's. Index the retirement age to life expectancy at age 65. 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.

Assessment and recommendations

- *The economy is resilient and has sound fundamentals*
- *Maintaining an expansionary monetary stance and public debt reduction remains appropriate*
- *Productivity-enhancing reforms to boost growth and make it more inclusive*
- *Well-designed reforms to promote social cohesion and share the fruits of growth*
- *Strengthening climate change policy*

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The economy is resilient and has sound fundamentals

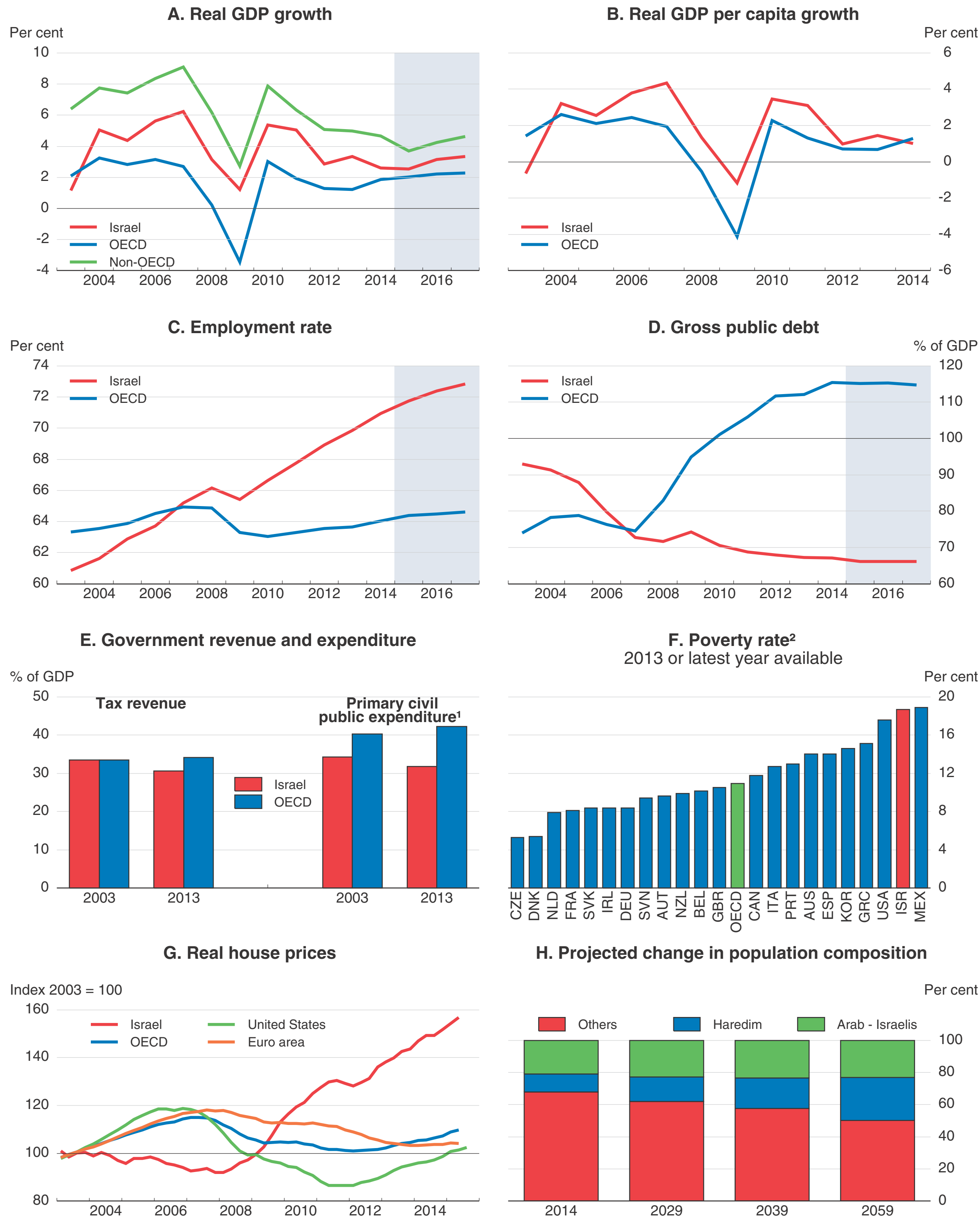
The Israeli economy is enjoying its 13th consecutive year of growth, demonstrating remarkable resilience. Increases in output, averaging nearly 4% annually since 2003, have exceeded those of most other OECD countries. The country experienced only a mild slowdown in activity in 2014, despite the Gaza conflict, and growth continued in 2015, even if at a relatively moderate pace (Figure 1, Panel A). Weaker exports and investment, partly resulting from the appreciation of the currency since 2012, have led to a slowdown in per capita GDP growth (Panel B). However, the employment rate has continued to rise steadily (Panel C), the unemployment rate has fallen to around 5¼ per cent, and the external balance is in surplus.

These favourable economic outcomes are based on prudent macroeconomic policy pursued over the last decade. The authorities have maintained monetary and financial stability in a volatile and uncertain external environment. The fiscal strategy adopted in 2003 has kept public debt on a downward trend and brought the tax burden well below the OECD average (Figure 1, Panels D and E). Reforms to the welfare and pension systems have, in particular, helped to contain government spending. The banking system is profitable and well capitalised, although its heavy exposure to housing credit and the real estate industry is a risk factor that the Bank of Israel (BoI) is striving to reduce. Indebtedness of households and firms is low. Israel also has a vibrant high-tech sector, and the large reserves of natural gas discovered in 2009-10 are additional economic and environmental assets.

However, the country faces two important challenges:

- Productivity growth has been weak and remains well below that in advanced countries in level terms. This reflects several structural shortcomings, in particular the marked disparity between highly dynamic exposed industries and a large, low-productivity sheltered sector that lacks competitive pressures. As seen below, this disparity is more pronounced than in the OECD average. Insufficiently developed infrastructure, especially in transportation, also hampers private-sector efficiency.
- Income inequalities and, above all, poverty are high (Figure 1, Panel F). The employment rates for Ultra-Orthodox (Haredi) men and Arab-Israeli women remain low, although they have risen. Moreover, workers from these communities are likely to hold insecure, low-paid jobs in the sheltered sector, because of their inadequate skills. The cost of living is high, in particular for housing, where rising prices lead to affordability problems for young families (Panel G). Given Israel's low public civil expenditure (Panel E), the government has played only a limited role in redistributing incomes towards the poor, including among the elderly. Current demographic trends are likely to exacerbate some of these difficulties, because of population ageing and of the growing share of Haredi and Arab-Israelis in the population (Panel H).

Figure 1. **Macroeconomic performance has been solid**



1. OECD is the average of 24 countries for which data are available.
2. Relative to 50% of median disposable income.

Source: OECD, *Economic Outlook 98 Database*, *Housing Prices Database*, *Revenue Statistics Database* and *Annual National Accounts Database*; OECD (2015), *In It Together – Why Less Inequality Benefits All*; Central Bureau of Statistics, Demographic projections.

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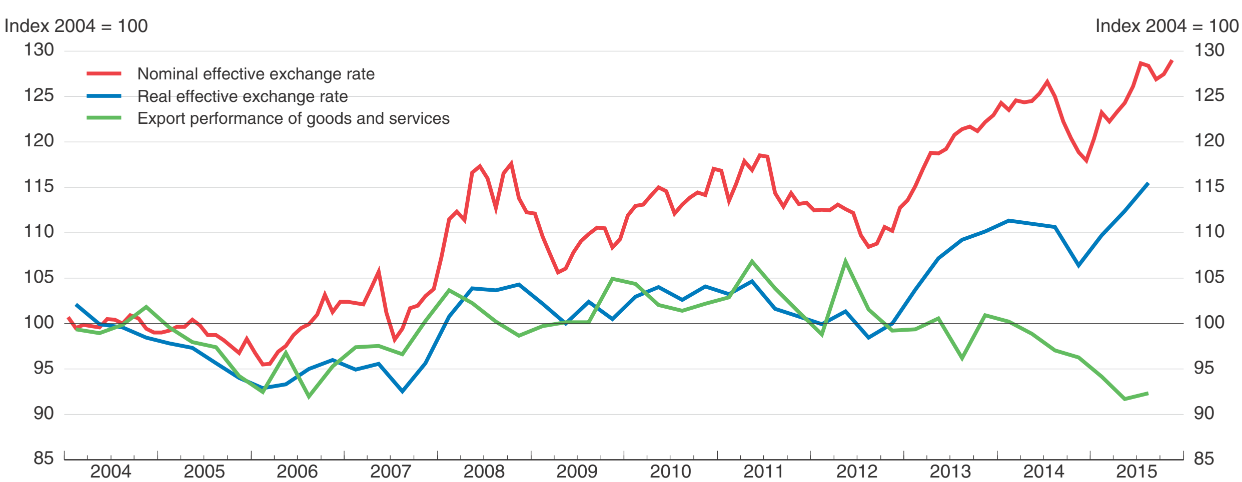
With this background, the main messages from this *Survey* are:

- Improving productivity and raising living standards will require strengthening competition and efficiency in the sheltered sector.
- Enhancing social cohesion would raise sustainable long-term growth. Efforts to promote employment among groups that have only tenuous links to the labour market must be accompanied by further steps to improve their education and training. Additional actions are needed to reduce the cost of housing.
- Israel has to make fiscal room for fostering more inclusive growth and preparing for the future. Boosting investment in infrastructure, promoting skills, especially of disadvantaged groups, developing adult vocational education and training and enhancing the redistribution system, including for the elderly, are achievable without sacrificing prudent fiscal policy.

The short-term outlook is expected to improve

The subdued growth of the Israeli economy in 2014 has continued in 2015 due to persistent weakness in exports and investment. Poor results on the external front have reflected the combination of low foreign demand from the United States and Europe, which together account for about two-thirds of Israeli exports, and significant losses of external competitiveness caused by the real appreciation of the shekel since 2012. In the first half of 2015, the erosion of export markets was further reinforced by a strike in the chemicals sector (Figure 2). Given this environment, business investment has fallen, inducing a moderate fall in capital stock growth, whose trend progression is being buffered by an ongoing shift of the economy towards services activity (BoI, 2015a). The completion of infrastructure projects in the electricity and railway sectors and the decline in housing purchases caused by the uncertainties surrounding the evolution of real estate taxation in 2014 also weakened capital spending. In this context, private consumption has been the main driver of activity, thanks to the impact of extremely low interest rates on demand for durables and rising household incomes and real wages, which have benefited from favourable labour market conditions and minimum wage hikes.

Figure 2. **Effective exchange rates and export performance**



Source: OECD, *Economic Outlook Database*.

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Growth, which reached around 2½ per cent in 2015, is projected to pick up to 3% in 2016 and 3¼ per cent 2017 (Table 1). Ongoing accommodative monetary policy, some fiscal easing in 2016, lower oil prices, a further 14% cumulated increase in the minimum wage in 2016-17, and the expected recovery in foreign markets will all boost demand. Investment should gradually strengthen, helped by the fading of previous uncertainties on property taxation, the government's plan to stimulate residential construction and the launch of new large-scale projects in the high-tech sector. Unemployment will remain low without sparking inflationary pressures, thanks to the well-functioning labour market (see below). Inflation is projected to edge up to within the official 1-3% target range, once the temporary effects of recent cuts in oil, electricity and water prices have dissipated.

Table 1. **Macroeconomic indicators and projections**

	2012	2013	2014	2015	2016	2017
	Current prices NIS billion	Percentage changes, volume (2010 prices)				
GDP	1.001.0	3.4	2.6	2.4	3.1	3.3
Private consumption	555.2	4.1	3.6	4.8	3.6	3.9
Government consumption	222.8	4.1	3.3	1.7	3.0	2.6
Gross fixed capital formation	206.1	3.7	-2.1	-1.7	2.4	4.5
Of which: Housing	61.9	6.3	-0.5	1.7	4.0	4.9
Non-residential and government	144.3	2.5	-2.7	-3.2	1.7	4.3
Final domestic demand	984.2	4.0	2.4	2.8	3.2	3.7
Stockbuilding[1]	4.1	-0.4	0.5	0.9	-0.1	0.0
Total domestic demand	988.3	3.6	2.9	3.7	3.2	3.7
Exports of goods and services	369.0	0.1	1.7	-3.1	3.2	4.3
Imports of goods and services	356.2	0.5	3.0	0.9	3.9	5.5
Net exports[1]	12.8	-0.2	-0.3	-1.3	-0.1	-0.4
Other indicators (% change, unless otherwise specified):						
Potential GDP	-	3.7	3.5	3.3	3.2	3.1
Output gap[2]	-	0.8	0.0	-0.9	-1.0	-0.8
Employment	-	2.8	3.0	2.6	2.3	2.2
Unemployment rate[3]	-	6.3	6.0	5.2	5.3	5.3
GDP deflator	-	2.1	1.0	2.6	1.0	1.6
Consumer price index	-	1.6	0.5	-0.5	0.6	1.5
Core consumer prices	-	0.9	0.9	0.5	0.7	1.5
Export performance	-	-2.3	-1.2	-5.4	-1.2	-1.0
Current account balance[4]	-	3.2	3.7	3.8	3.8	3.5
General government fiscal balance[4]	-	-4.2	-3.5	-3.3	-3.6	-3.5
Underlying government fiscal balance[2]	-	-4.6	-3.6	-3.0	-3.3	-3.3
Underlying government primary fiscal balance[2]	-	-1.3	-0.5	0.0	-0.4	-0.5
General government gross debt[4]	-	67.2	67.1	66.1	66.2	66.1
General government net debt[4]	-	62.5	63.0	62.5	62.9	62.8
Three-month money market rate, average	-	1.3	0.5	0.1	0.6	1.4
Ten-year government bond yield, average	-	3.8	2.9	2.1	2.9	3.4

1. Contributions to changes in real GDP, actual amount in the first column.
2. As a percentage of potential GDP.
3. As a percentage of the labour force.
4. As a percentage of GDP.

Source: OECD, *Updated Economic Outlook 98.*

This outlook is subject to significant upside and downside risks. The policy initiative taken in autumn of 2015 to overcome the regulatory obstacles that hampered the development of the gas sector since end-2014 might lead to stronger pick-up of activity. As a small open economy, Israel is dependent on exports, and a more vigorous recovery of the world economy would boost growth and allow the BoI to speed the return of monetary policy to a neutral stance. This process would also be helped by a rise in US interest rates, which would alleviate the upward pressure on the shekel, although the Israeli economy could also be indirectly harmed by possible subsequent turmoil in emerging markets. A deterioration in the external environment – in China and/or Europe, for example – would rein in activity and exacerbate deflationary pressures. For instance, further monetary easing by the European Central Bank responding to renewed euro area weakening would induce a euro depreciation vis-à-vis the shekel, harming Israel's external competitiveness and in effect tightening monetary conditions. In these circumstances, a new monetary stimulus would have to take account of the effects on the property market. Continued house price rises are indeed adding risks and strains in the economy. In addition, the projected pick-up in growth could be undermined if the tensions with the Palestinians persist or worsen. Potential growth might also slow more than assumed in case of weaker job creation induced by higher minimum wages. Moreover, economic prospects are subject to other significant potential shocks whose effects would be difficult to quantify (Table 2).

Table 2. **Possible shocks to the Israeli economy**

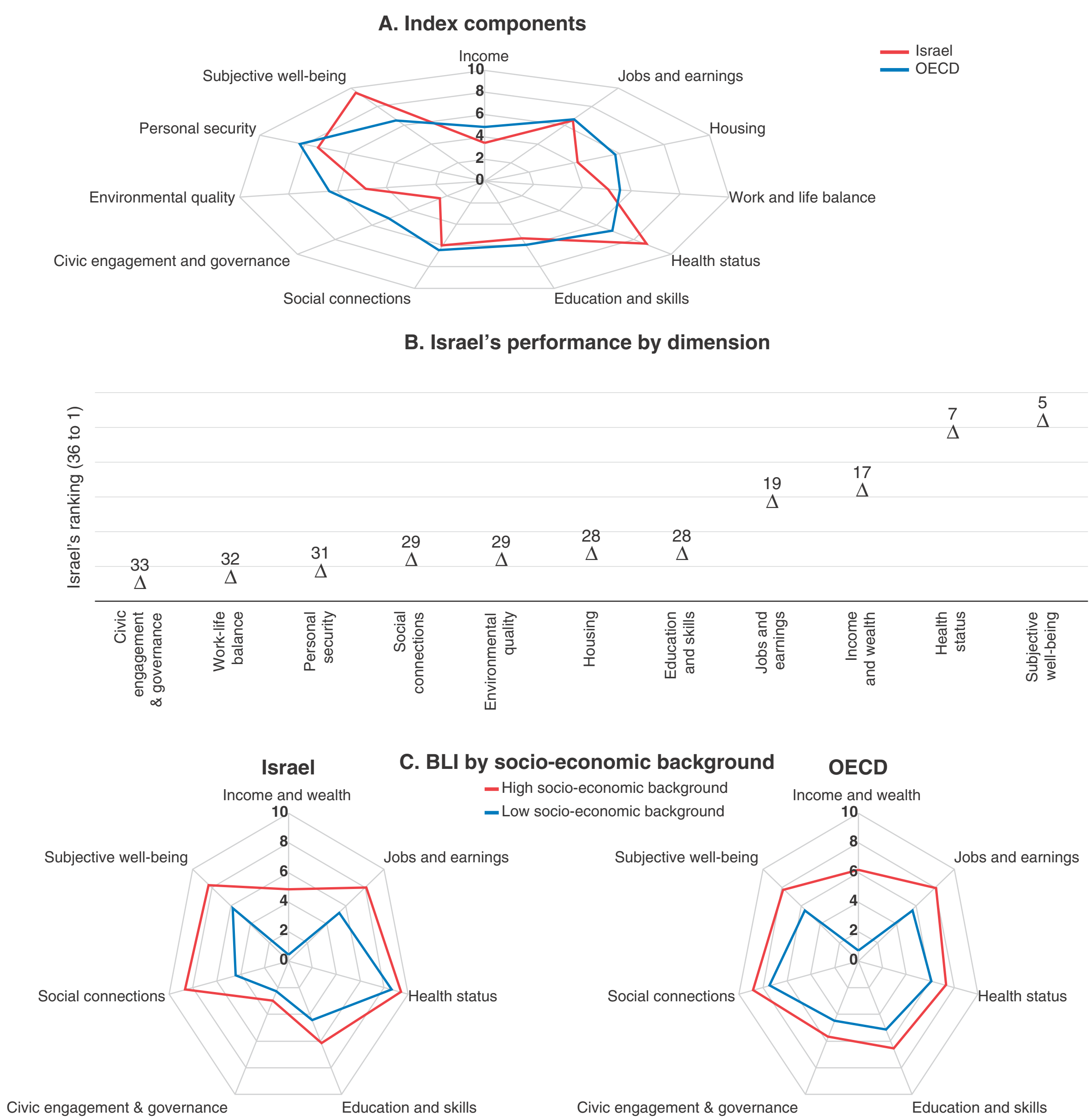
Shock	Possible impact
Geopolitical tensions	Intensified geopolitical instability in the region could undermine both domestic and external demand, especially if the current boycott campaign against Israel gains more traction. It could also lead to an increase in military spending, sharpening problems of adequately financing needed civilian spending. By contrast, a durable rapprochement between Israel and some of its neighbours would enhance the business climate. For example, according to RAND (2015), a solution to the conflict with the Palestinians could increase Israeli per capita GDP by up to 5% over a 10-year period, mainly by stimulating tourism and deepening regional trade and investment relations.
New energy discoveries	New significant gas or oil discoveries would generate additional foreign investment, diversify Israel's energy supply and boost tax revenues (a significant part of which would go into the sovereign fund), exports and growth. However, the recent discovery of the large Zorh gas field in Egyptian waters could reduce Israeli export options and increase regional competition in this sector. On the other hand it could facilitate the joint financing of needed export infrastructure.
Sharp increase in immigration	A rise in perceived insecurity by the European Jewish Diaspora, which was estimated at 1.4 million people in 2014 (DellaPergolla, 2014), could trigger a new wave of emigration to Israel. A substantial inflow of highly educated, skilled and wealthy immigrants would boost growth, although it would also pose absorption challenges in an already tight housing market.
Renewed social tensions	A renewal of the social protests that broke out in 2011 could prompt large rises in wage demands and welfare spending, increasing fiscal pressures.

Narrowing divides between communities

Israelis are generally more satisfied with their quality of life than residents of almost all other OECD countries; their health outcomes are particularly remarkable (Figure 3, Panels A and B). The country occupies a middling position with respect to employment and income, which together contribute to a good quality of life: Israelis' relatively low level of income compared to the OECD average is offset by fairly good employment performance, resulting from a high average employment rate and low risk of long-term unemployment. However, well-being related to housing is not very satisfactory. High property prices, together with the large size of the average family, mean that living space per person is limited. There is also significant room for improvement in education, the environment, work-life balance, social cohesion and civic engagement (due to a comparatively underdeveloped culture of public consultation and input for the preparation of laws). Security is lowered by the country's particular geopolitical situation and the threat of terrorist acts, but other forms of homicide are comparatively rare.

Figure 3. **Better Life Index[1] (BLI) reflects the great diversity of the Israeli population**

2015 edition



1. Each index dimension is measured by one to four indicators from the OECD Better Life Index (BLI) set. Normalised indicators are averaged with equal weights. Indicators are normalised to range between 10 (best) and 0 according to the following formula: (indicator value – minimum value) / (maximum value – minimum value) x 10. The OECD aggregate is weighted by population. Please note that the OECD does not officially rank countries in terms of their BLI performance.

Source: OECD (2015), OECD Better Life Index, *www.oecdbetterlifeindex.org*.

StatLink http://dx.doi.org/10.1787/888933317605

With the exception of health outcomes, the gap between the well-off and the disadvantaged in most dimensions of well-being is at least as large as the OECD average (Figure 3, Panel C). Inequalities in education and investment in human capital not only reduce opportunities for disadvantaged groups and weaken social mobility but also dampen growth (OECD, 2015a). In addition, there are particularly pronounced gaps when it comes to social connections. This seems symptomatic of the limited linkages between both the Haredim and Arab-Israeli communities and the remaining population, as manifest in spatial segregation and separate schooling, as discussed in previous *Economic Surveys*. Solid social connections are crucial for many dimensions of well-being and especially for avoiding the risks of poverty.

This risk of poverty is especially pronounced among Haredim and Arab Israelis because of their lower educational attainment and the particularly weak labour market participation of Haredi men and Arab-Israeli women (Chamlou et al., 2011). Among Arab-Israelis, these factors depress several dimensions of well-being (OECD, 2015b). The government's approval of a NIS 15 billion (1.3% of GDP) five-year plan at end-December to assist the Arab community by improving housing, increasing investment in education, and providing subsidies for public transport is thus extremely welcome. By contrast, Haredim enjoy an unusually high average level of well-being, given their choice to study spiritual matters. Both Haredi and Arab-Israeli labour force participation has been rising, with the support of a number of government policy initiatives, including in the education and labour market areas. The pressures exerted by global economic developments and the growing importance of formal education in guaranteeing a minimum level of economic security are likely to result in further changes in these communities.

The Haredi and Arab-Israeli communities are together projected to account for half the population by 2060 (Figure 1, Panel H), and their integration into society and the workplace will therefore take on increasing importance. For example, Israel's military service helps to create close social bonds between those who participate, with substantial benefits in terms of integration, employment and incomes (Asali, 2015). But Haredi and Arab-Israelis tend not to serve. A 2014 law requires Haredi men to do military service from 2017, but its enforcement has been weakened by recent amendments to this legislation that postpones its implementation until 2020 and abolishes penalties for those who refuse to do so.

However, the Haredi and Arab-Israeli communities are relatively disconnected from the rest of the population, and many voters are therefore reluctant to accept higher taxes needed to extend welfare programmes and to increase income redistribution (Dahan and Hazan, 2014; Alesina et al., 2001). To promote social cohesion and inclusion the authorities should therefore consider alternatives. One possibility is compulsory civilian service for those who do not perform military service. Currently voluntary national service (*Sherut Leumi*) allows young people to work in schools, government offices, hospitals, geriatric services, and with teens at risk, disadvantaged communities and many other non-profit organisations. This system provides its participants with similar benefit entitlements as military service (stipends, apartments in cities where they are serving, free bus and train transport, access to social programmes, etc.) and expose participants to different aspects of Israeli society. Making this civilian service mandatory for those who do not serve in the military would help to strengthen social cohesion and could also be used to further improve participants' education and skills, as is the case for those serving in the army.

Maintaining an expansionary monetary stance and public debt reduction remains appropriate

Monetary policy in a challenging context

The primary objective of Israeli monetary policy is to maintain price stability, defined as consumer price inflation within a range of 1-3% through an inflation-targeting regime, which is an important nominal anchor for wage and price formation. Meeting this objective has been difficult for the BoI over the last two years. Inflation has been declining steadily since the end of 2013, and the overall price level fell by some 0.5% year-over-year in mid-2015 (Figure 4, Panel A). This is only in part due to the falling prices of imports and oil and to temporary factors (one-off reductions in tariffs for water and electricity at end-2014 and early 2015 lowered headline inflation by 0.4 percentage point). Core inflation has also declined, but it seems to have stabilised at around 0.5% year-on-year. Inflation expectations remain reasonably well anchored, although they have been drifting down on some measures.

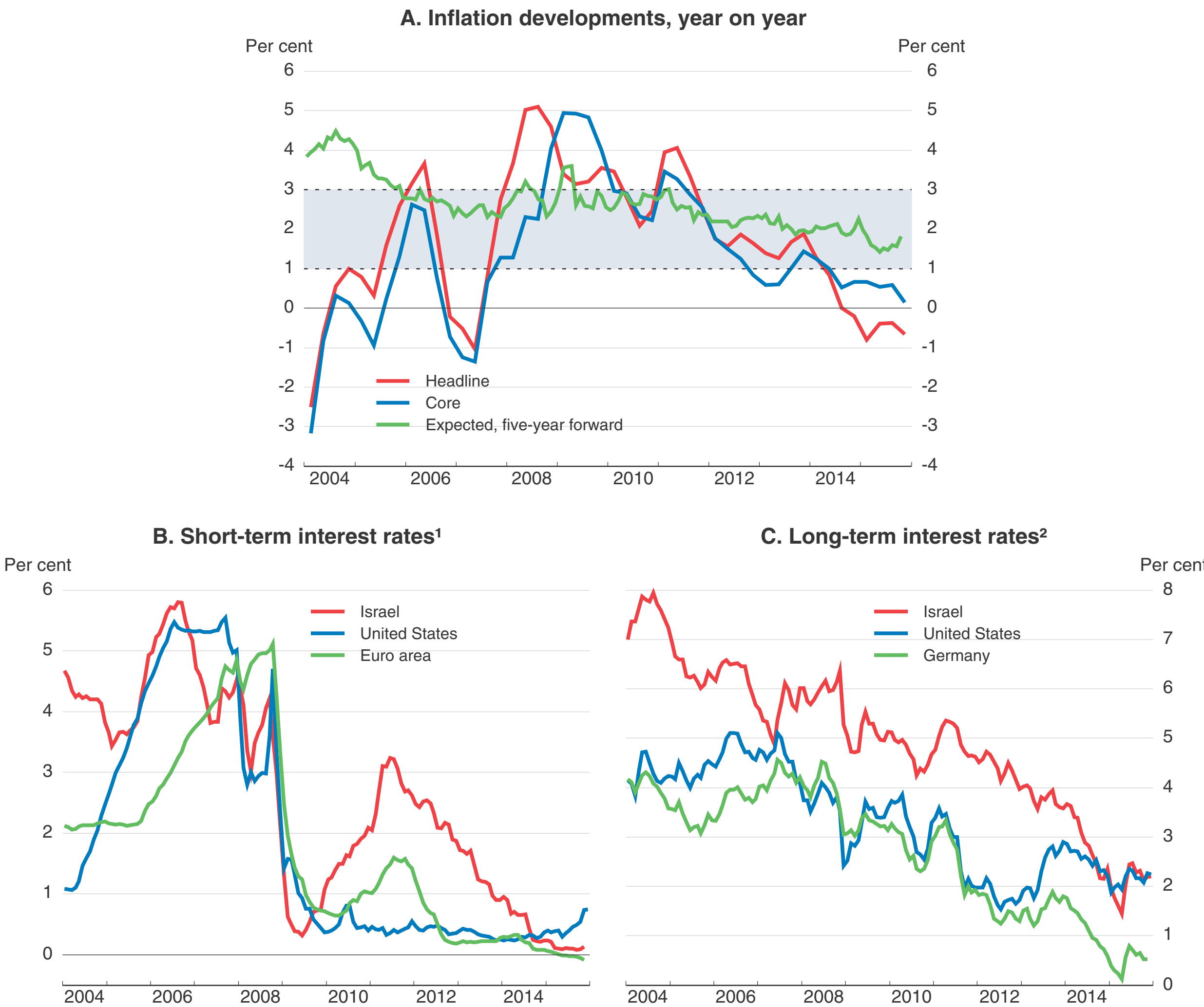
The BoI has been cutting its policy rate since end-2011, bringing it to a historical low of 0.10% in March 2015 (Figure 4, Panel B), and it has resumed its interventions to limit the upward pressure on the shekel on the foreign exchange market. This came in addition to its currency purchase programme intended to limit appreciation resulting from the "Dutch disease" related to the impact of natural gas production (which began in March 2013) on the balance of payments. Given the very expansionary monetary policies of the major OECD central banks and the uncertain financial developments in the euro area, the BoI needed to act to avoid an undesirable currency appreciation and to dampen excessive fluctuations. This expansionary monetary policy remains appropriate to support activity and exports until inflation moves into the target range and the external environment allows interest rates to increase. In late 2015 the US authorities began to raise their official rates, while the European Central Bank may in contrast move to an even more expansionary position. It is difficult to predict the impact of such a combination on the Israeli economy. In "normal" circumstances this could be expected to impact the exchange rate according to the weights contained in the nominal effective exchange rate (26½ per cent both on the dollar and on the euro). However, in the last "taper tantrum" episode Israel actually experienced capital inflows. If further stimulus should become necessary, the potential side effects on the booming housing market as well as the problems posed by unconventional measures will have to be kept in mind (Rawdanowicz et al, 2013; BoI, 2015b; White 2015).

Preserving financial stability

Banks' capitalisation ratios and profitability have remained healthy, and non-performing loans have stayed low (Figure 5, Panels A, B and C). However, the prolonged period of low policy rates has fuelled increases in the prices of financial assets and real estate (BoI, 2015c). Combined with a limited supply response, low interest rates have helped push up real housing prices by some 65% since 2007. Moreover, banks' exposure to the housing sector increased steadily from 34% to 44% of total loans between 2007 and 2014 (Panel D).

To reduce the risks to financial stability, since 2009 the BoI has adopted macro-prudential measures in terms of both quantitative limitations (e.g. on loan-to-value and debt service-to-income ratios) and restrictions affecting the cost of mortgages for the

Figure 4. **Monetary policy indicators**



1. Three-month interbank rate.
2. Ten-year government bond rate.

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

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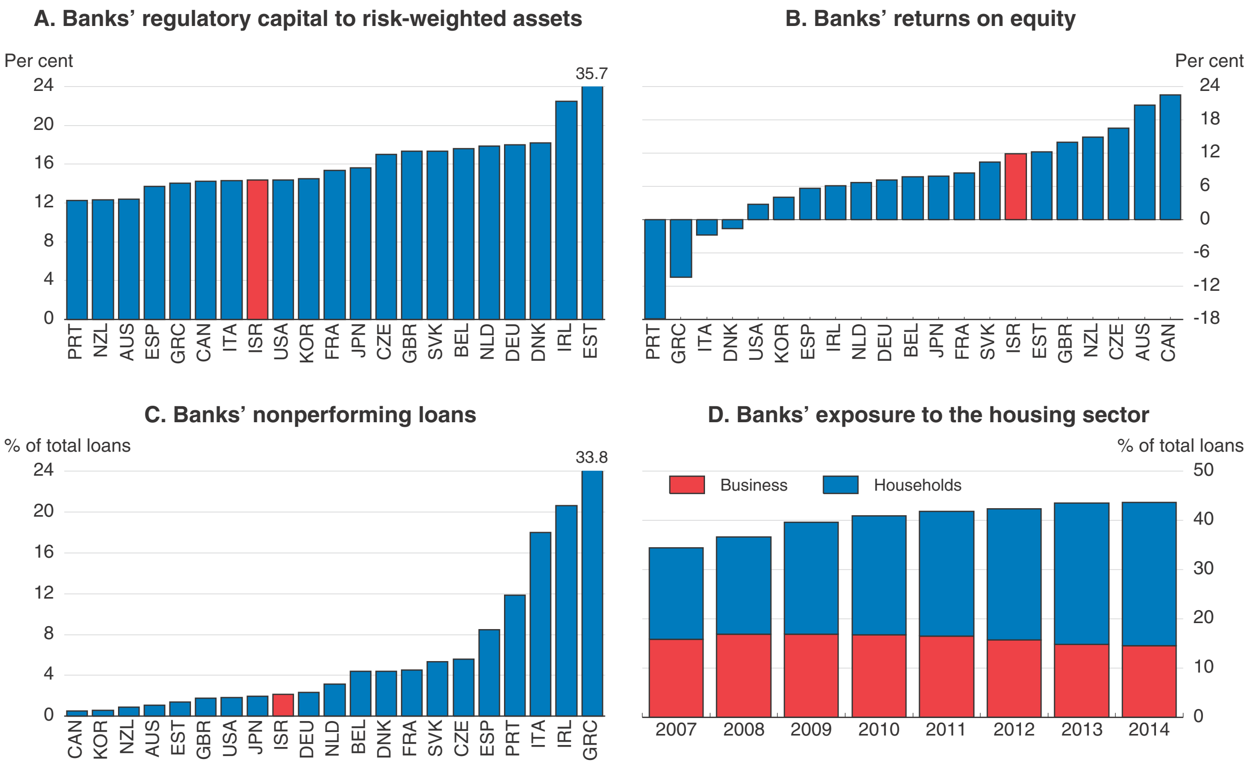
banks (e.g. supplemental reserve and higher capital requirements). This has reduced the risk characteristics of new housing loans (Figure 6). Recent BoI stress tests, based on a sharp deterioration in the housing sector and severe recession, have emphasised the importance of these macro-prudential measures to ensure banks have the buffers to absorb the large losses that such a shock would entail (BoI, 2015c). The BoI has appropriately indicated that it remains prepared to take further macro-prudential measures in the housing market, if risks to the financial system rise.

Risks extend beyond the housing sector. Corporate bonds accounted for 28% of Israeli business-sector financing at the end of 2013 and may be under-pricing risks because of persistently low interest rates and investors' search for higher yields: corporate bond spreads over comparable government securities have been fairly low for the past two years (BoI, 2015d). Were the spreads to widen, corporates might face possible shortages of credit

Figure 5. **Financial indicators, 2014**[1]



1. 2013 for France and Korea.

Source: IMF, *Financial Soundness Indicators Database*; Bank of Israel, Information on the Banking Corporations – Credit, Table IV-4.1.

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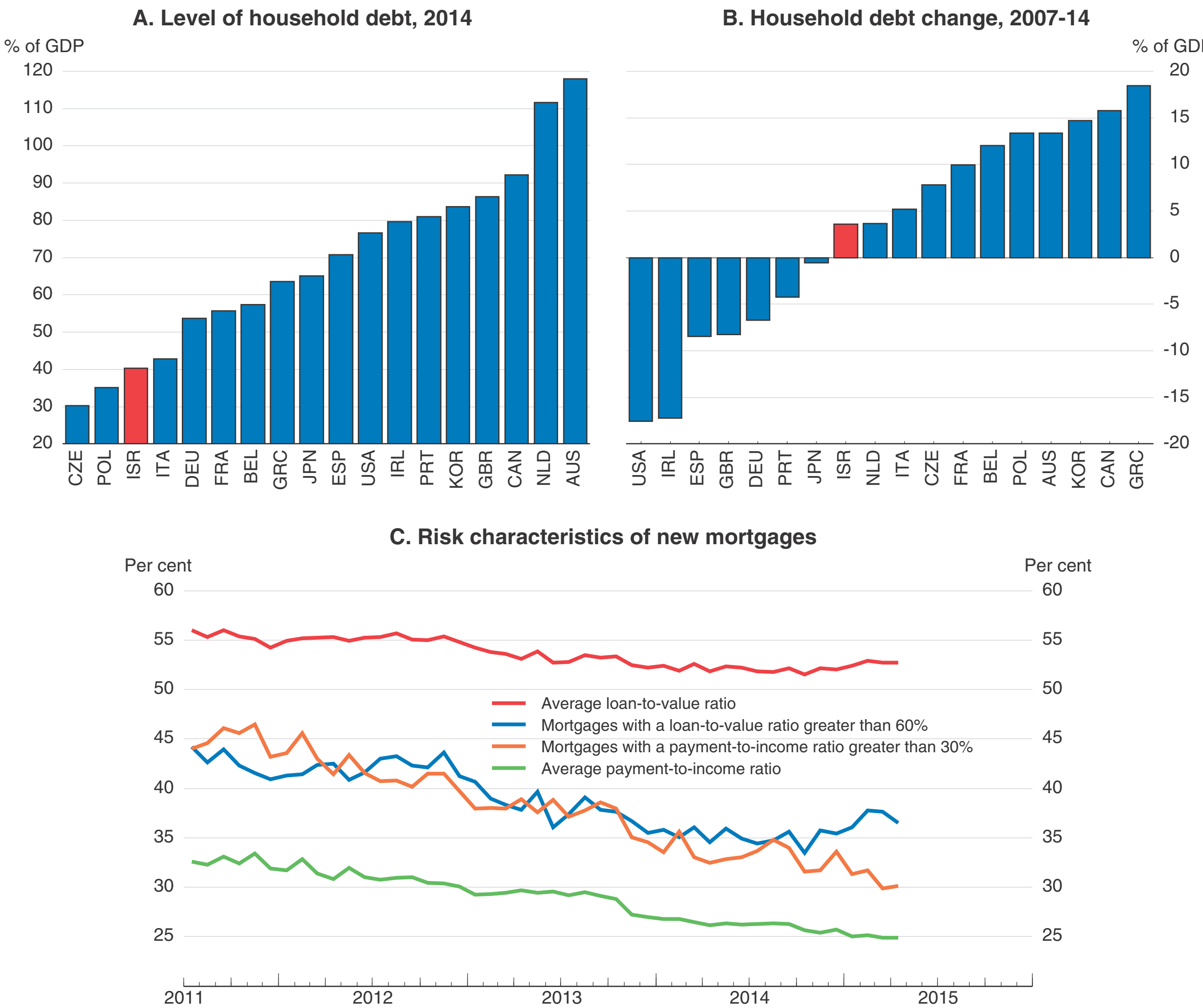
and debt-refinancing difficulties. In addition, the emergence of a grey market offering non-institutional financing bringing lenders and borrowers into direct peer-to-peer contact thanks to technological developments may pose new vulnerabilities (BoI, 2015e), although so far this unregulated and unsupervised market is estimated at only 1-2% of GDP.

The authorities have taken several steps to address these issues. They tightened the rules on corporate bonds (discussed in the 2011 *Survey*). The BoI has also recently requested that banks report more extensively on their non-mortgage credit risks to the household sector, given its rapid increase. In November 2014, an expert committee (the Andorn Committee) recommended improved debt settlement procedures, including early dialogue between a company facing financing difficulties and its bondholders, and reduced uncertainty regarding the legal consequences for firms failing to pay their financial debts on time. Another committee (the Goldschmidt Committee) investigated the direct-loan channel of insurance companies. In April 2014 it recommended establishing criteria for credit review and control, improving information about borrowers and strengthening reporting to the insurance regulator. Parliamentary action on both Committees' recommendations would be helpful. This should be complemented by an investigation of the peer-to-peer market to assess how it can be regulated and supervised, while finding ways to satisfy the needs that have driven its emergence. To address these issues, coordination among the financial regulators at the BoI, the Ministry of Finance and the

Figure 6. **Household debt is low, and the risk profile of new mortgages has been reduced**



Source: Bank for International Settlements, Credits to Non-Financial Private Sector Statistics; OECD, *Economic Outlook Database*; Bank of Israel.

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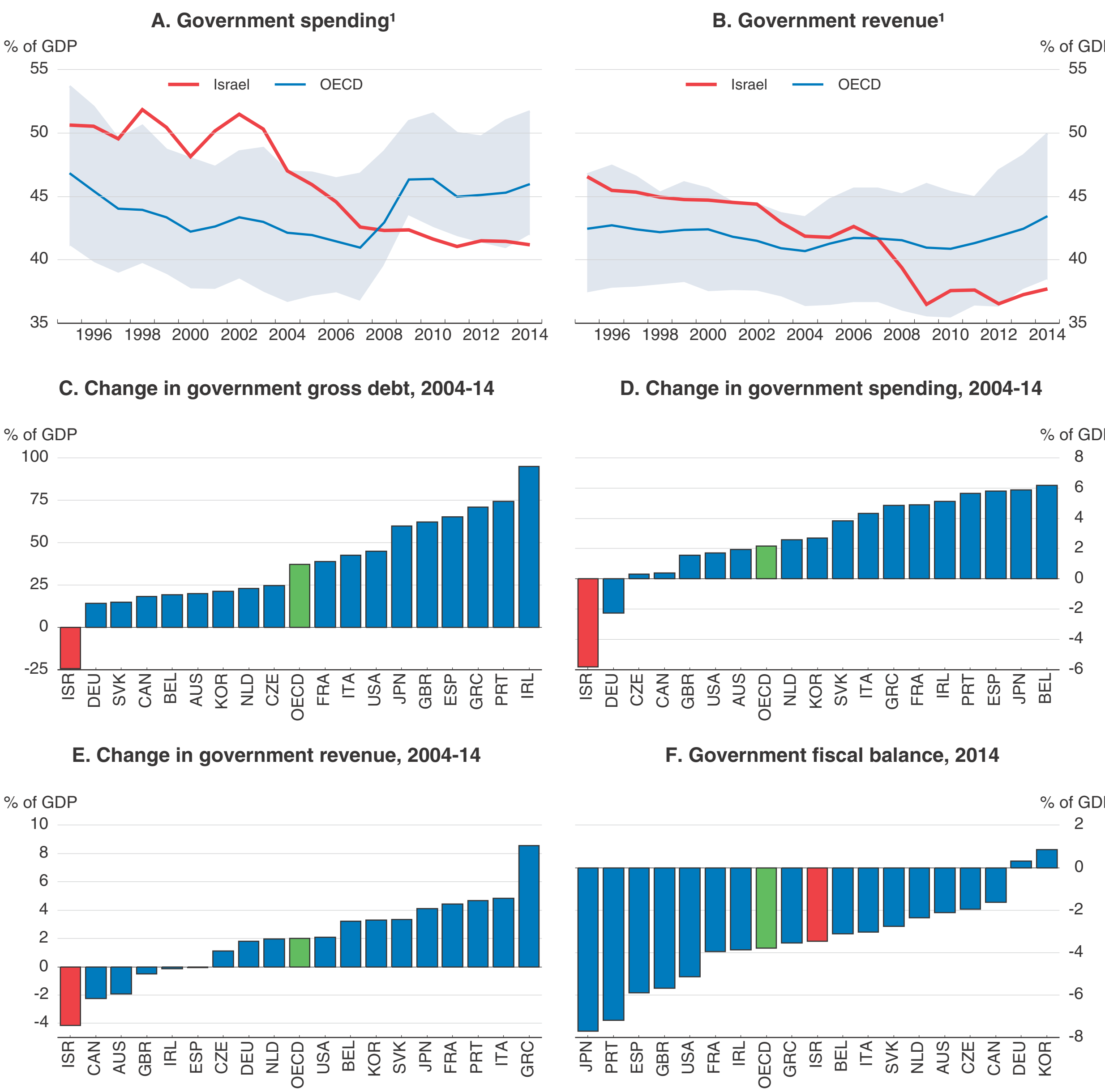
Israeli Securities Authority should be strengthened, as recommended in previous *Surveys* (OECD, 2011 and 2013a).

Adjusting the fiscal framework to better address the nation's economic and social needs

Fiscal policy in Israel is based on a debt-reduction strategy that has been guided since 2004 by deficit rules and a spending growth ceiling. The spending ceiling has been amended several times (IMF, 2014) and now limits annual spending growth to 2.6% in real terms. The central government deficit target, which complements this expenditure rule, is a multi-annual objective, generally revised by every government. The implicit objective is to lower the debt to 60% of GDP by 2020 and to 50% over the longer term, a level that is consistent with the OECD analysis on prudent debt-level targets estimated for Israel (Fall et al., 2015). This fiscal strategy has led to a remarkable consolidation of the fiscal accounts. Public spending, revenues and debt have fallen by more than in other OECD countries in the last 10 years (Figure 7). Moreover, while up to 2007 government revenues and spending as a share of GDP had been close to or above the OECD average, they are now substantially below it.

It is, however, increasingly difficult for the authorities to pursue their deficit and debt-reduction objectives on the basis of further spending compression. Following the March 2015 election, spending and deficits for 2015-16 were revised up in the draft budget (Figure 8). Real spending growth in 2015 and 2016 was raised well above the 2.6% ceiling

Figure 7. **The general government accounts have strengthened**



1. The shaded areas in Panels A and B are the 25th to 75th percentile range of available data for OECD countries.
Source: OECD, *Economic Outlook Database*.

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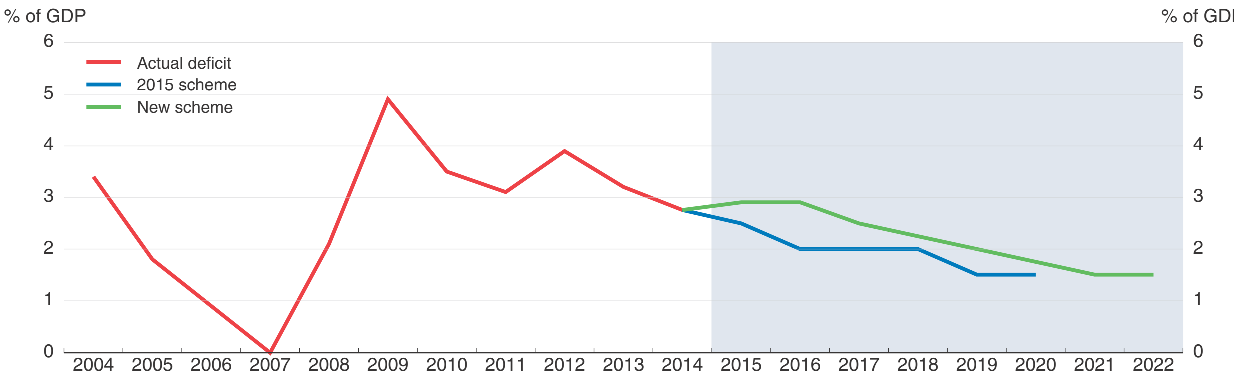
Figure 8. **Revised medium-term fiscal targets**



Source: Ministry of Finance.

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due to increases in education and social expenditure for families, low pensions, housing support, and the pay given to young people doing their military service. In response to stronger-than-expected tax revenue collected since the beginning of 2015, the government also reduced the VAT rate from 18% to 17% in October 2015 (at a cost of 0.4% of GDP) and lowered the corporate income tax (CIT) from 26.5% to 25% (costing 0.1% of GDP) as from January 2016. The resulting higher deficit means that the debt-GDP ratio will probably not fall in the next couple of years. In general, prudence would suggest avoiding using positive revenue surprises to implement discretionary tax cuts and instead to reduce the deficit and the debt. However, should the negative risks surrounding this projection materialise, there would be a strong case for letting the automatic stabilisers operate.

Better developed medium-term budgetary planning would support the debt-reduction strategy. Given the low level of government receipts, ongoing upward public spending pressures have increased the risk of creative accounting and incentives to overestimate revenues, which would eventually weaken the usefulness of the existing budget rules (BoI, 2015f; Flug, 2015). To limit political interference, in 2012 reporting lines in the Ministry of Finance were adjusted to insulate the forecast from ministerial judgement, with apparently satisfactory results so far. The situation should be monitored, and, should these new procedures securing the independence of the forecast process be put at risk, then the authorities should consider assigning that function to an independent fiscal council, as in some other OECD countries (United Kingdom or Netherlands).

More recently, a draft law accompanying the 2015-16 budget would introduce limits on changes to government financial commitments over a rolling four-year horizon. The government would not be able to make new spending commitments or cut taxes if doing so breached the multi-year expenditure rule or the deficit ceiling. Adoption of such a multi-year mechanism would enhance the transparency of budgetary decisions and thereby strengthen the sustainability of medium-term fiscal objectives and deserves strong support.

The current structural budget deficit is too high to allow a substantial reduction in public indebtedness and thus needs to be better controlled. Given the low level of civil expenditure, deficit reduction should focus on raising additional revenues. Increasing taxes has proved politically difficult. Nevertheless, as suggested in the 2013 *Survey*

(OECD, 2013a), the authorities should favour measures that offer dual benefits, for instance, by prioritising green taxes to combat carbon emissions and congestion. Israel's commendable efforts to reduce tax evasion must also continue. Removing inefficient tax expenditures is another good way to raise revenues, such as the VAT exemption on fruit and vegetables, which has some positive redistributive effects but should be replaced by instruments, such as the negative income tax, that more efficiently target the poor (OECD, 2014a). Eliminating the tax breaks for company car purchases is another way of boosting revenues that will also have environmental benefits.

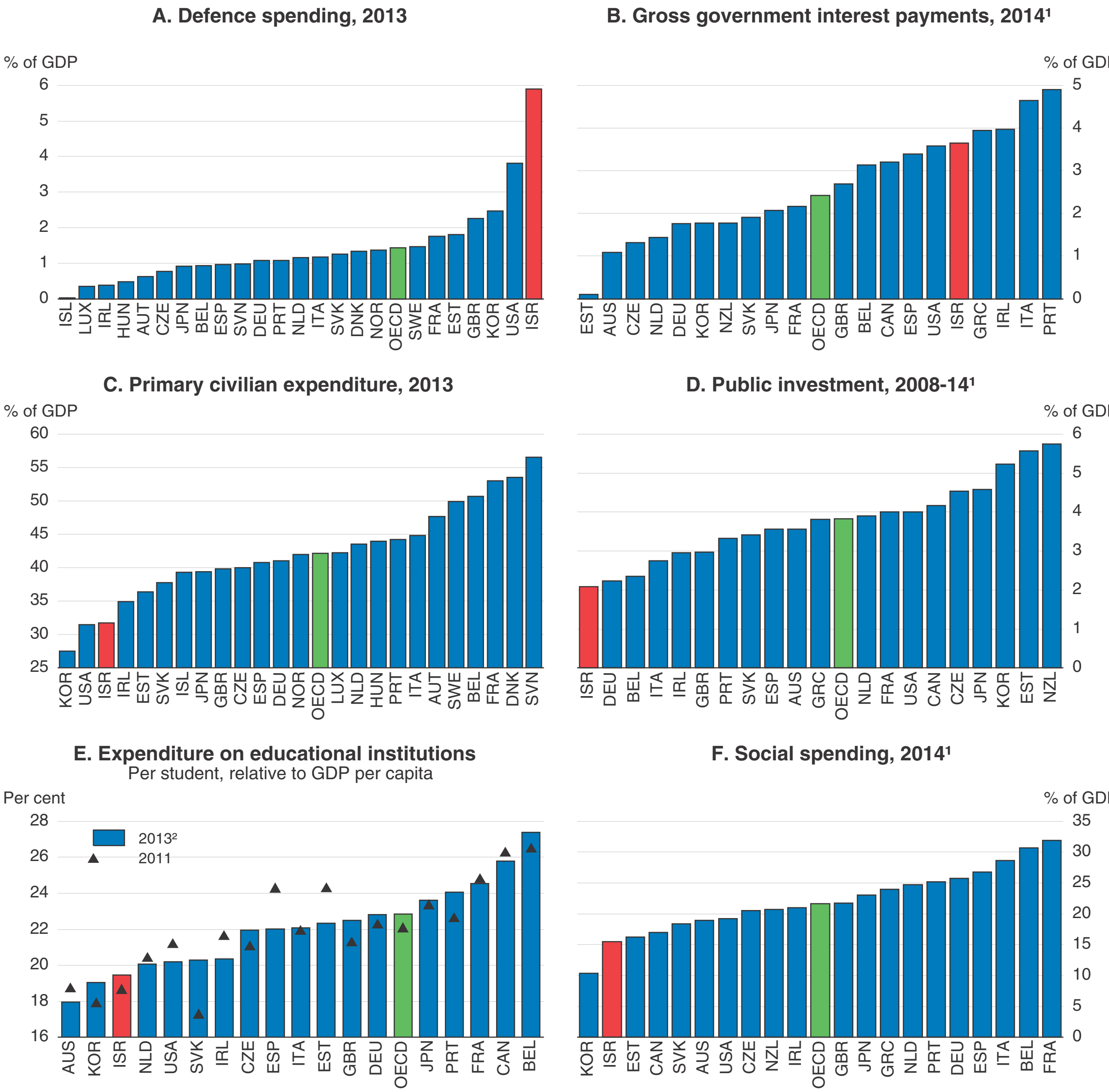
Limiting the real growth of government spending to 2.6% per annum, which is below the economy's estimated trend growth rate of 3-3½ per cent, would continue to shrink public spending's share in GDP. Spending restraint has improved public finances and macroeconomic results, partly by helping to reduce the government's long-term borrowing spreads (Brender and Ribon, 2015). But it has also severely constrained civil spending because of the difficulty of compressing military outlays and interest payments on the public debt (Figure 9, Panels A, B and C). This has been particularly damaging to public investment (Panel D) and infrastructure (BoI, 2015a). Public education spending is also lower than in most other OECD countries when measured per student (Panel E), as is welfare spending (Panel F). Given the tight fiscal restraint, renewed efforts are needed to strengthen public spending efficiency. Following the recent review of defence spending by a specialised committee (the Locker Committee), discussions have, for instance, started on possible ways to enhance the effectiveness of such spending. There is also room for efficiency gains in public procurement (see below). To the extent that savings can be made on military outlays and debt service and sufficient revenues raised, civil spending on education, infrastructure and reducing poverty could be increased, and yet still leave a relatively lean public sector.

The positive effect for growth and, more broadly, well-being of well-targeted public spending should not be underestimated, as for instance in the case of urban rail transport. Improved infrastructure in this domain would bring benefits in multiple dimensions, starting with a reduction of urban congestion costs, which are estimated at 1.5% of GDP every year (State of Israel, 2012), thanks to lower waste of time and productivity gains (Ben-David, 2013). Faster development in urban public rail transport would also be beneficial for the environment, reducing greenhouse gas emissions and local pollution. Moreover, good and reliable public transport infrastructure would help reduce the housing supply shortage, make it easier to live in lower-price house zones and promote labour market participation for those living in remote regions.

Productivity-enhancing reforms to boost growth and make it more inclusive

Israel's income gap with leading OECD countries has narrowed over the last decade, mainly reflecting rising employment. However, productivity convergence with the most advanced countries remains slow (Figure 10, Panel A), which is paradoxical, given Israel's justifiably strong reputation in the domain of innovation. As the one-off benefits of higher employment rates will gradually fade, improving productivity performance is a key policy challenge on which the authorities need to maintain a continuous focus. To address this issue, action is needed on a number of fronts, among which human capital plays a prominent role, especially for disadvantaged groups, as discussed in the 2011 *Survey* (OECD, 2011). Israel also needs to enhance its transportation infrastructure and product market competition, especially in the domestic-oriented sectors where productivity

Figure 9. **Cutting public expenditures has led to inadequate spending in some key sectors**



1. Or latest year available.
2. 2012 data for Australia, Canada and Chile and 2014 data for Israel. Data for 2013/2014 for public expenditure on educational institutions are estimated based on the 2013 growth rate of government expenditure on education. The number of students for 2013 is estimated on the basis of the 2010-12 average growth rate of full-time-equivalent students.

Source: OECD (2015), *Education at a Glance 2015*; OECD, *National Accounts Database*; *Economic Outlook Database;* and *Social Expenditure Database*.

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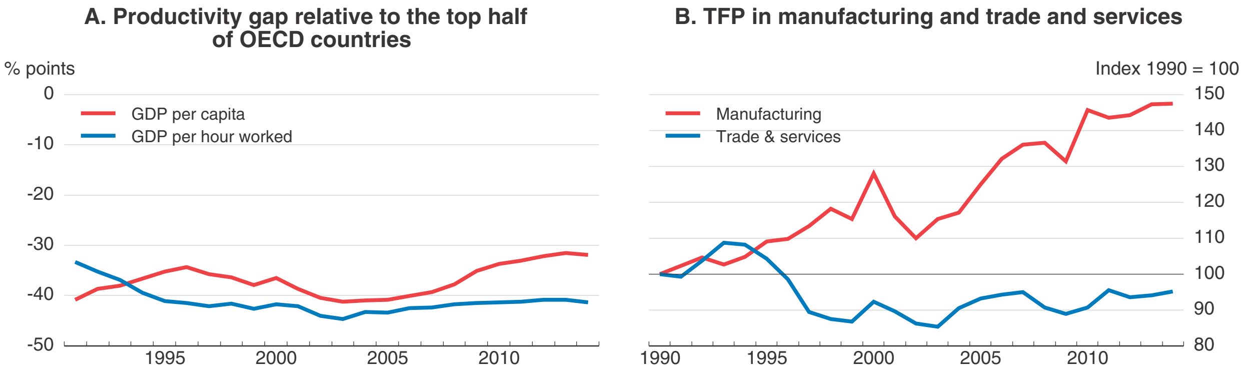
performance has been lagging over the last 20 years (Panel B). Moreover, lowering barriers protecting markets and promoting best-practice regulation is essential for creating the pressure to invest, innovate and promote the diffusion of knowledge across firms to develop better products and services at lower cost (OECD, 2015c). This requires meticulous and systematic assessment of microeconomic policy settings and regulation through

Figure 10. **Productivity gap and TFP**



Source: OECD, *National Accounts and Productivity Databases*; G. Brand (2015), "The Evolvement of the College Wage Premium in the Israeli Labor Market Supply and Demand Factors" (in Hebrew), Milken Institute.

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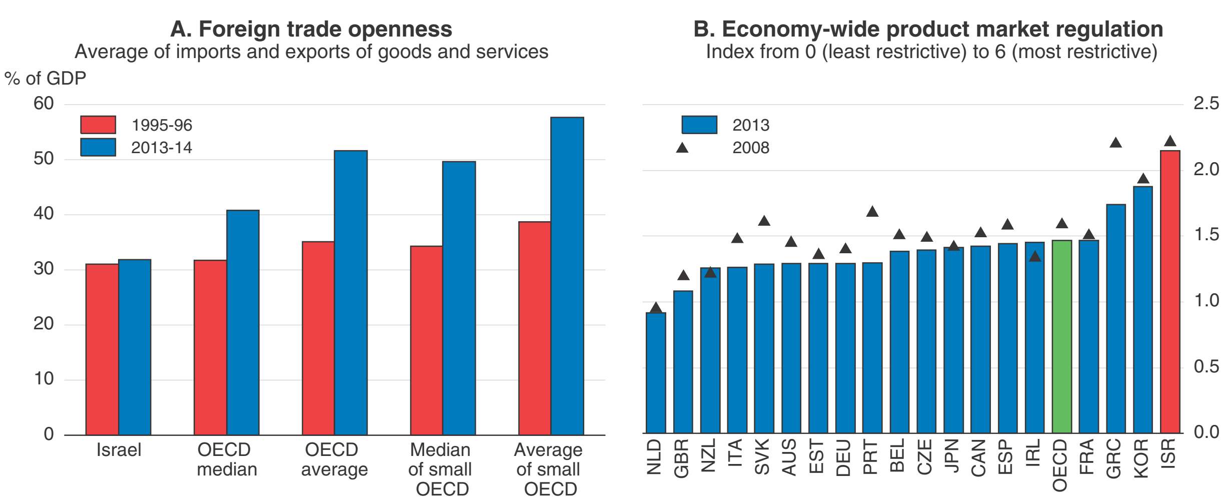
independent, published analysis. In that perspective, the Ministry of Finance's initiative taken in December 2015 to create a Commission headed by its Director General to recommend measures to increase productivity by 1 April 2016 is very welcome.

Strengthening competition in the sheltered sectors of the economy

Israeli product markets are characterised by: (i) relatively low foreign trade exposure (Figure 11, Panel A); (ii) oligopolies and monopolies in several markets; and (iii) regulations that are far from best practice (Panel B) – Israel's indicators of services trade restrictiveness and product market regulation are the most restrictive in the OECD (see below). Progress in absolute terms seems to have been limited until 2013 and, indeed, even most recently, as shown by its decline from 30th to 40th place in the World Bank's *Doing Business* ranking between 2008 and 2015.

Figure 11. **Trade openness is relatively low and product market regulation stringent**



Source: OECD, *Economic Outlook* and *Product Market Regulation Databases*.

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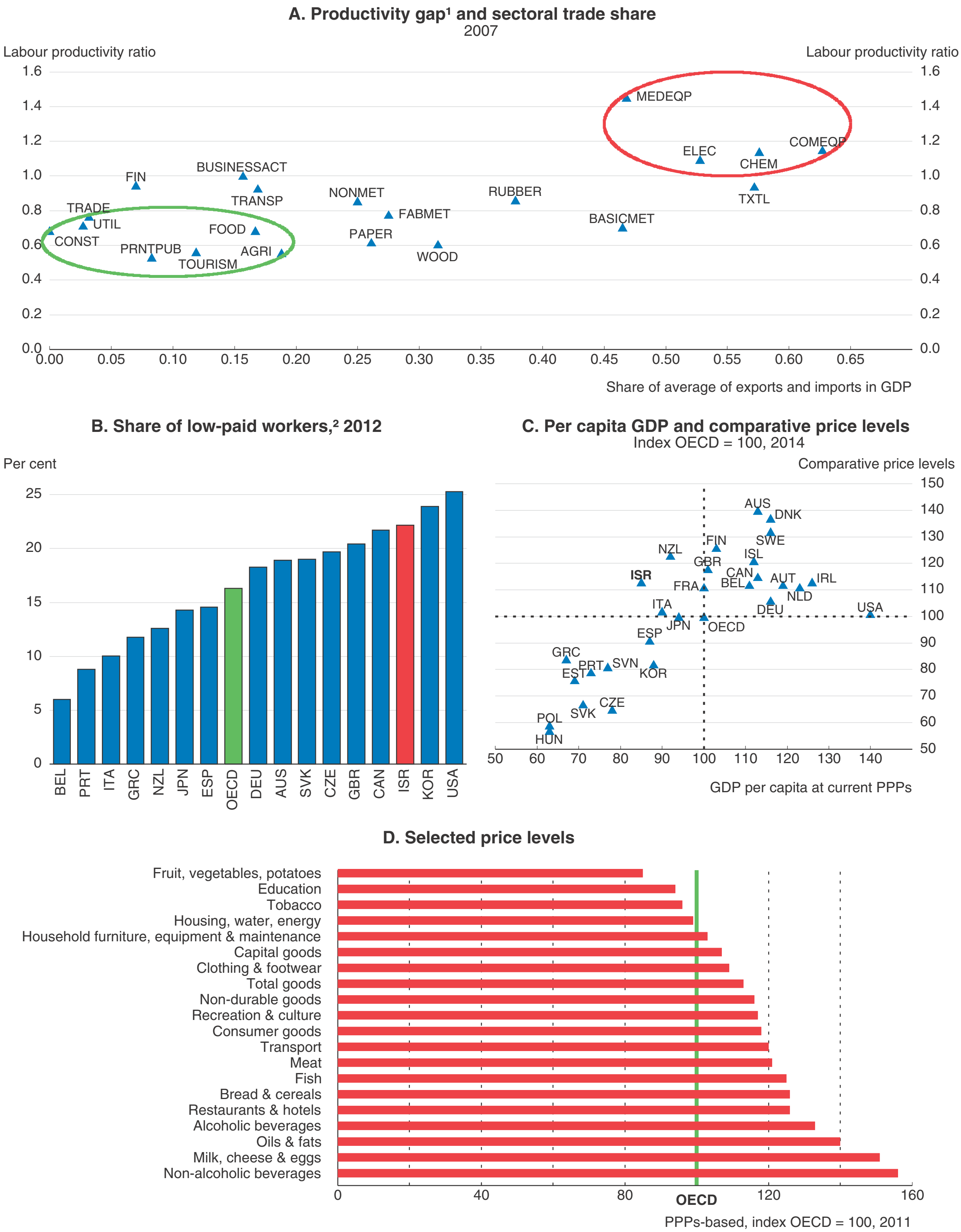
One of the main challenges of structural reform in Israel is to increase competition and efficiency in the economy's sheltered sectors: their efficiency relative to exposed sectors is lower than the OECD average (Figure 12, Panel A). The result is low pay for a large proportion of the workforce (Panel B) and, often, high prices, although here factors other than weak competition are also at play (BoI, 2015a). The cost of living is 20% higher than in Spain and 30% higher than in Korea, both of which have similar per capita GDP to Israel (Panel C); price gaps are high compared to the OECD average in some sectors, particularly for food (Panel D). The authorities have launched a series of product-market reforms in recent years, and these efforts need to be maintained and intensified. Moving towards a more business-friendly regulatory environment, as represented by the OECD average, would increase GDP by about 3¾ per cent after 5 years and 5¾ per cent after 10 years, i.e. a growth gain of between ½ and ¾ percentage point per year over the period, according to OECD estimates (see Annex A.2 below), reflecting productivity gains and more well-paid jobs. These estimated effects, which only provide an order of magnitude of the potential benefits of product market reforms, would reflect for the most part (60%) the direct gains generated in each sector by the more business-friendly regulation of the sector itself, while the remainder (40%) would come from induced indirect gains in downstream sectors. While the size of these benefits seems reasonable when compared with those estimated for other OECD countries (Bourlès et al., 2010, Bouis and Duval, 2011; Anderson et al., 2014), they could however be somewhat overestimated because of the likely staggered nature of product market reforms, which are often spread over time even in the case of ambitious reform agendas and thus take time to fully materialise.

Stronger foreign competition is crucial for raising efficiency in sheltered sectors. Customs tariffs are relatively low but could fall further (Figure 13, Panel A). More important would be to reduce non-tariff barriers, which are higher than the OECD average (Panels B-D). In December 2014 the government accepted the recommendations of the Lang Committee to streamline complex and costly import procedures, such as those requiring prior authorisation and compliance with Israeli technical standards, which often differ from international standards. A wide-ranging plan was launched to remove regulatory barriers for importing products concerning all relevant ministries. The authorities should also review the many provisions that constrain the activity of foreign services providers in Israel, such as the 12-month limit on initial entry visas for people working for foreign firms.

High food prices were a key factor in the 2011 social protests, and enhanced competition would lower costs along the entire agri-food chain:

- Agricultural support has been brought below the OECD average, but distortive interventions – quotas, price guarantees and customs tariffs – still account for over 80% of total agricultural support in Israel, compared to around 20% in the United States and the European Union (OECD, 2014b). Consequently, in 2011-13 domestic production prices were higher than international prices for milk and beef, for example, by 37% and 73%, respectively. Current plans to replace quotas, guaranteed prices and customs tariffs with direct payments to farmers should be implemented, as planned, in goat dairy farming and then extended throughout the sector, even if this would have budgetary consequences.
- Non-tariff barriers linked to health regulations and difficulties in kosher certification for imports are significant and contribute to higher prices for a number of imported food

Figure 12. **The productivity gap between the exposed and sheltered sectors is large and price levels high**



1. Gap between Israel and OECD average. For more details, see Figure 1.5.
2. Defined as workers earning less than two-thirds of median earnings.

Source: OECD (2014), *OECD Employment Outlook 2014*; OECD, *Price and Main Economic Indicators Databases*; Central Bureau of Statistics.

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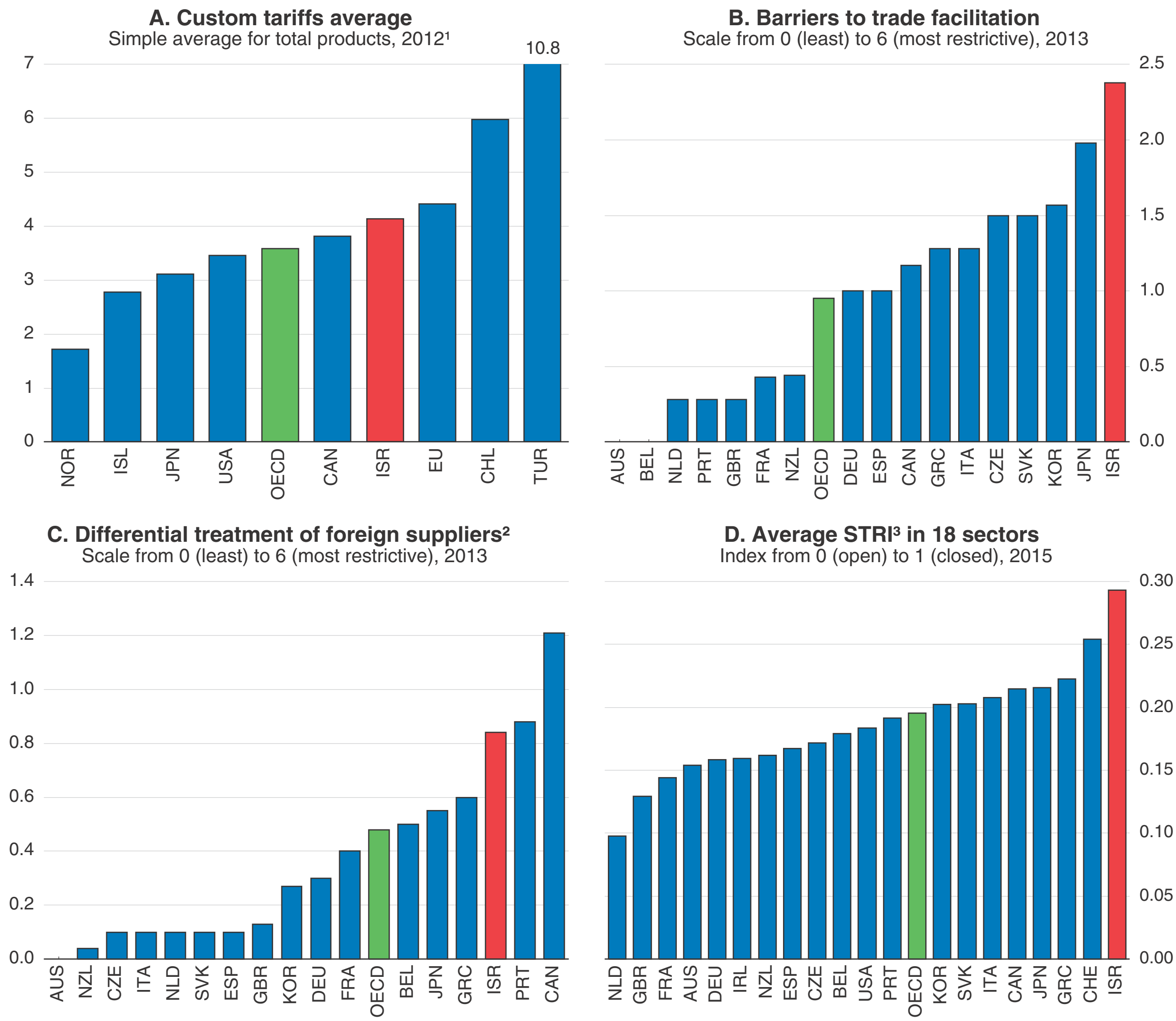
Figure 13. **Tariff and non-tariff trade barriers are high**



1. 2013 for Turkey.
2. Discrimination against foreign firms in taxes and subsidies, public procurement, entry regulation and appeal procedures.
3. Services trade restrictiveness index.

Source: UNCTAD, *Trade Analysis and Information System (TRAINS) Database*; OECD, *Product Market Regulation Database* and *Services Trade Restrictiveness Index Database*.

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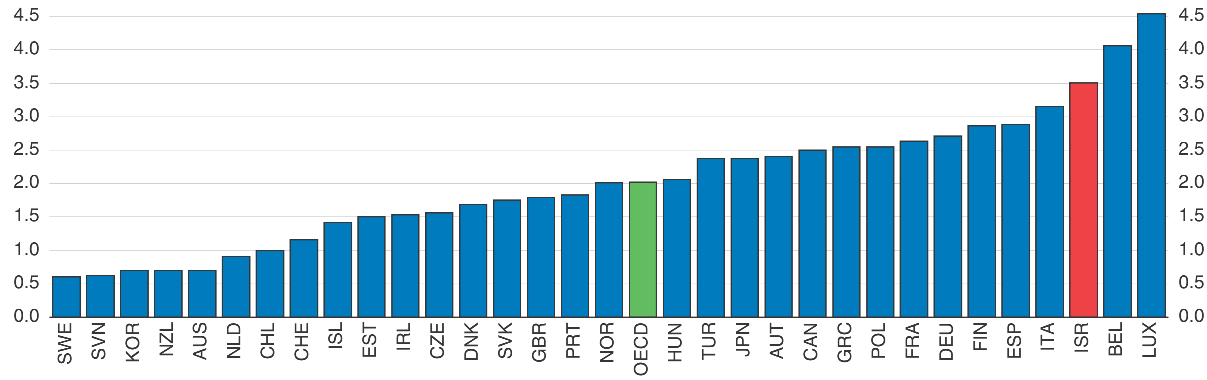
products (Figure 12, Panel D). The authorities intend to adopt the rules of EU countries for products that present a low health risk. This approach should be extended to "sensitive" products – such as dairy, eggs and meat – which represent over half of all imported foodstuffs, by applying the import procedures in force between EU countries.

- Concentration is high throughout the whole agri-food value chain. Processing is dominated by two companies that the Israeli Antitrust Authority (IAA) declared to be monopolies in many market segments (Chapter 1). Food retailing, including openings of new stores, is more strictly regulated than in most other OECD countries (Figure 14), and price controls and supervision concern almost 20% of food products in the CPI basket. The authorities should proceed with their recent decision to end the exemption of the

Figure 14. **Regulation in retail trade is restrictive**

Index scale from 0 (least restrictive) to 6 (most restrictive), 2013



Source: OECD, *Product Market Regulation Database*.

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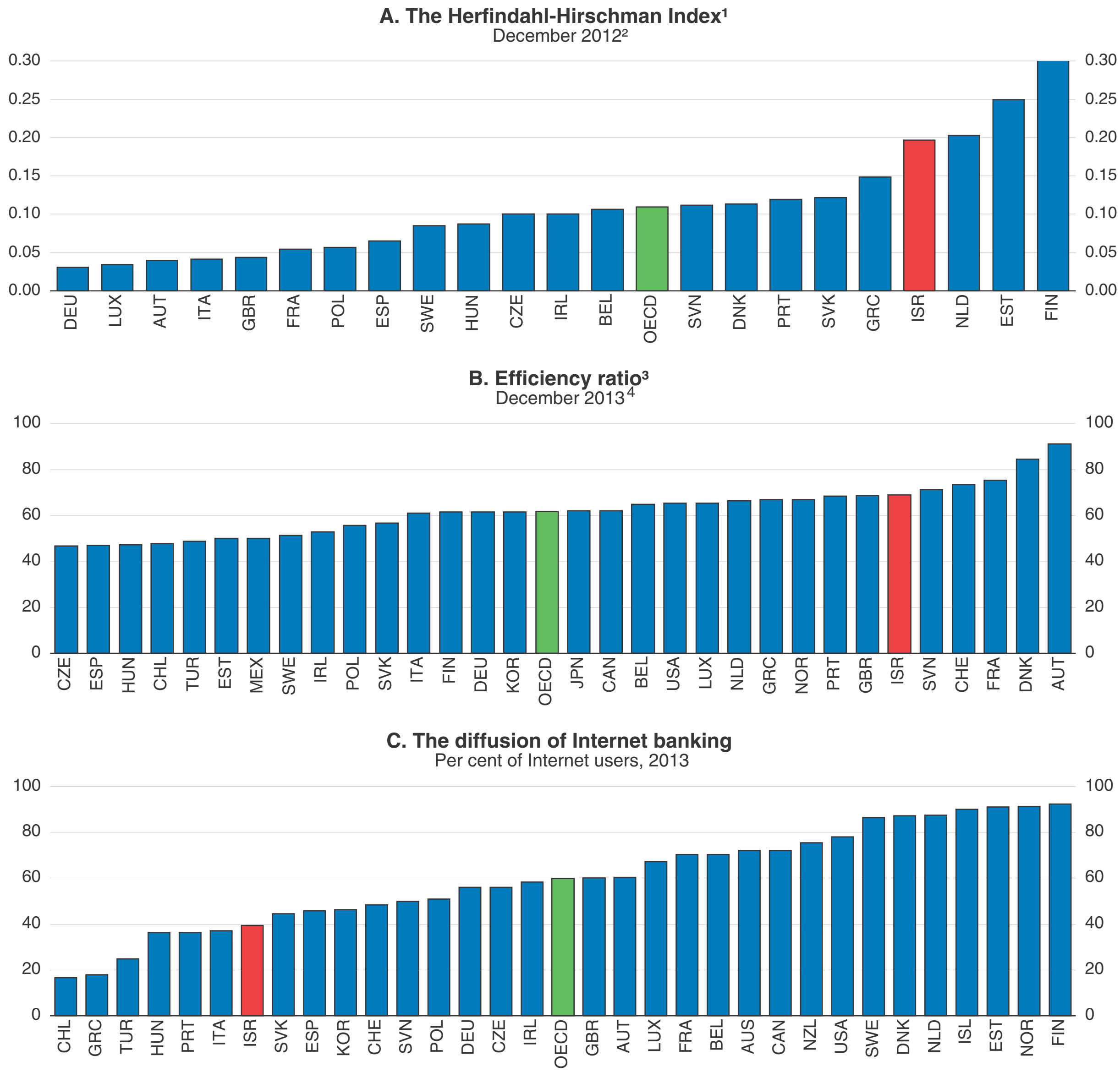
poultry sector from anti-monopoly legislation and systematically screen the regulation of other sectors; the OECD Competition Assessment Toolkit provides a methodology for doing so. Existing constraints for opening new shops and the specific restrictions applied to supermarkets should also be eased, and recent provisions adopted to foster local competition in the retail sector should be strictly enforced.

The effectiveness of government intervention could be improved in a number of domains. For example, the authorities should accelerate the ongoing public procurement reforms that rationalise and standardise procedures, centralise ordering and promote e-procurement. Expanding the use of these new procedures could generate savings of 12-40% (Chapter 1). These reforms should also be extended to local governments. Another target for simplification is environmental authorisation procedures. The government's commitment to reduce the existing regulatory burden by 25% between 2015 and 2019 and to systematically screen all new laws likely to affect competition as from early 2016 is welcome. High-quality regulatory impact assessments and strong enforcement will be critical to guarantee that the government's objectives are met at minimum cost.

The banking sector has proved strong and stable despite the volatile and uncertain global environment, but it has an oligopolistic market structure, with the two largest banks controlling 57% of the market. Israeli banks are less efficient than the OECD average, have high operating costs and seem relatively slow to adopt innovation such as online banking (Figure 15). To strengthen competition, in 2013 the authorities embarked on a reform programme based on the recommendations of the Zaken Committee (BoI, 2012).

Its implementation (by, for example, simplifying the process of changing banks and increasing fee transparency) has yielded initial positive results, such as a large drop in banking fees paid by households (Avissar, 2015). The implementation of other Zaken Committee recommendations, such as encouraging the entry of new competitors, should be speeded up. For example, barriers to entry would be lowered by the creation of a broader, open credit-rating system for households and SMEs to reduce the information handicap faced by new nonbank credit institutions and smaller banks compared to their well-established banking rivals. Additional measures being considered by a another new committee (Strum Committee), set up after the March 2015 elections, include the creation

Figure 15. **The banking sector has an oligopolistic market structure**



1. The Herfindahl-Hirschman Index (HHI) is a measure of the size of firms in relation to the industry and an indicator of the amount of competition among them. It is defined as the sum of squares of the market shares of the largest firms within the industry, where market shares are expressed as fractions. It can range from 0 to 1. For this chart, the HHI calculation is based on total assets of the commercial banks. For Israel, it is based on the total assets of the commercial banks and does not include activity of foreign banks, while for the other countries data include activity of foreign banks.
2. For Israel, data is for December 2013.
3. Ratio of total operating expenses to total net interest and non-interest income.
4. Or latest available data.

Source: Published financial statements for Israel and European Central Bank for all other countries for the HHI; IMF, *Financial Soundness Indicators Database*; OECD (2014), *Measuring the Digital Economy: A New Perspective and ICT Database*; Eurostat, Information Society Statistics and national sources.

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of a deposit insurance system, which would help strengthen the smaller banks, and the entry of institutional and non-banking entities into the retail and SME credit markets. These new lending entities will need to be supervised for prudential and consumer protection reasons. A third committee (Baris Committee) recently defined the regulatory framework for non-banking credit institutions, and the needed legal changes had already been subjected to public consultation prior to the cabinet approval before submission to the Knesset. Another option to boost competition would be to utilise the post office's current capabilities. Nonbank financial institutions could be allowed to access its extensive network of agencies to distribute credit. Over a longer-term horizon the capacity of the postal bank should be further enhanced in order to allow it to play a more effective role in ensuring effective competition in a wider range of financial services (again, subject to appropriate prudential supervision).

Years of reforms in Israel's network industries have led to significant price declines in air transport and mobile telephony. The decision to stimulate competition in broadband Internet by unbundling the local loop of the incumbent operators in early 2015 has led to promising results. Measures taken to restructure the public postal services operator, enhance its regulatory framework, widen its management leeway, partially privatise it and open to competition new segments of the market will improve customer services. However, the benefits will be reaped only if an independent regulator can guarantee the neutral and transparent application of this new regulatory framework; the same applies to telecommunications and other network industries (OECD, 2014c). Two new ports are being built at Ashdod and Haifa and will be managed by separate private operators, which should boost competition and efficiency in maritime shipping. It will also be important to modernise the infrastructure of the old ports to enable them to compete with the new players. Moreover, there is room to increase competition in the rail sector, which is still run by a public monopoly.

Necessary changes to the electricity sector were identified as early as in 1996 by the Electricity Sector Law and involved separating generation, transmission and distribution of electricity. But they were not implemented, and the market's main player remains the Israel Electricity Corporation (IEC), a vertically integrated public company. Renewed reform efforts in 2013-14 were successfully opposed by IEC workers. However, IEC is financially weak (with a debt amounting to more than 2.5 times its annual revenues, or 7% of GDP, at end-2013) and faces the gradual but inevitable emergence of independent power producers and the growth of renewables. IEC reforms, which could be rolled out sequentially, should seek to increase management transparency and to create a holding company structure and then separate electricity generation from the grid (PUA, 2014). Preserving the independence of the regulator in this sector, possibly with a clearer mandate and set of objectives, is also important.

An efficient Israeli Antitrust Authority (IAA) is also crucial for guaranteeing and improving competitive conditions in product markets. In the past few years several reforms have enhanced its effectiveness (GCR, 2014). Since 2011, IAA funding and staff have increased substantially. Since 2012 its director has been able to impose monetary penalties for non-cartel violations, which were rarely punished before, and its competition advocacy role was institutionalised and broadened in 2013. In addition, its enforcement mechanisms, based on its investigators who have far-reaching powers, have demonstrated their effectiveness. Nevertheless, there is still room for further progress, for example, by increasing the maximum fines that can be imposed for competition violations and reforming the leniency programme, which cannot be used, for instance, once an investigation has been opened, even if it might speed up and improve results. Above all, it is essential to avoid a weakening of the IAA following the recent resignation of its director because of the conflict with the government regarding the natural gas sector.

The improvement of the functioning of the gas market, which is dominated by a private monopoly, has raised serious difficulties, which the measures taken by the government are expected to overcome. These difficulties led the Minister of Economy to overrule the IAA director, given the geopolitical importance of developing the existing gas reserves, including for securing export contracts with neighbouring countries, but also because there was limited room in the short term for promoting effective competition due to existing barriers partly related to inadequate infrastructure (such as pipelines and storage facilities). Given these constraints, the measures planned by the authorities aim at avoiding undesirable delays in the development of the largest Israeli gas field. They will regulate and lower the gas price in the local market and facilitate the access of firms to this cheaper and less polluting source of energy. They are also intended to gradually increase competition by attracting new competitors through forced divestment of some gas fields. These measures are welcome. However, to guarantee the emergence of competition, the authorities should ensure that the price controls do not become permanent and that the infrastructure required for an efficient market is properly developed.

Raising the education level of disadvantaged groups

Improving educational outcomes will be central to raising productivity and reducing poverty (Figure 16, Panels A-C). According to the Bank of Israel, increasing the proportion of students with higher education from 48 to 58% would raise per capita GDP by 3% (BoI, 2015g). Making progress in this domain requires raising the educational attainment of Arab and Haredi students who have low levels of formal education. Arab students' low PISA scores (Panel D) (very few Haredim participated) provide an indication of the substantial challenges involved.

To address this issue the authorities have increased the resources of the education system since 2008 (Figure 17, Panel A) and engaged in a serious reform process, as discussed in the 2013 *Survey* (OECD, 2013a). Additional resources were targeted at the underprivileged; for example, class sizes in Arab schools were reduced (Panel B). PISA results improved between 2006 and 2012, and national tests show Arab-speaking students are progressing faster than their Hebrew-speaking counterparts (Panels C and D). By contrast, the level of formal education of young Haredim has not increased and is lower than their elders' (Regev, 2013). The introduction of public funding for Haredi schools conditional on the number of hours of mathematics and English lessons in the curriculum was met with hostility by community leaders, a problem compounded by a lack of textbooks and insufficient numbers of Haredi teachers in these subjects. Notwithstanding these setbacks, the teaching of mathematics, science and foreign languages in Haredi schools is critical to give students the basic skills needed to find jobs**.**

Despite the increase in the education budget, average public spending per student remains lower than in most other OECD countries (Figure 9, Panel E), and there seems to be insufficient non-teaching resources, such as computers (Figure 17, Panel F). Indeed, with instruction in several languages, multiple curricula and a high number of immigrant children requiring special support, higher spending per student than the OECD average is clearly called for (Dahan and Hazan, 2014). Additional resources seem to be most in need in compulsory education to help more pupils to reach the level necessary to pursue higher education (BoI, 2015g).

Figure 16. **The economic benefits of boosting average education are potentially large**

1. Average of men's and women's earnings for 25-64 year-olds.
Source: E. Regev (2013), "Education and Employment in the Haredi Sector", *Policy Paper Series*, No. 2013.06, Taub Center for Social Policy Studies in Israel; OECD (2015), *Education at a Glance 2015*; Ministry of Education.

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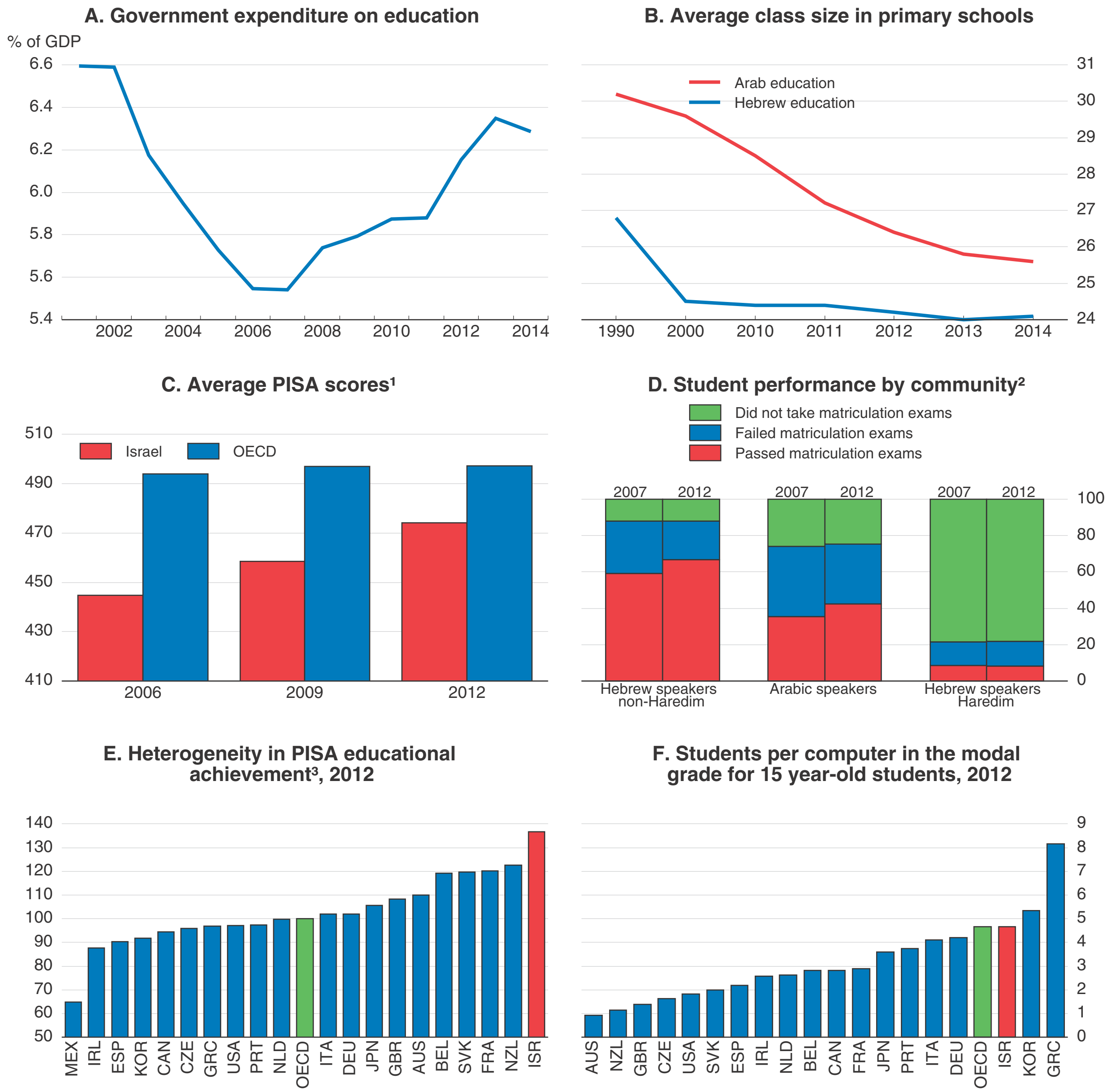
These budget increases should be backed up by structural adjustments to maximise their returns. Comparisons of efficiency in the use of existing resources between secondary schools across and within 30 countries suggest that there is much room for efficiency gains in Israel (Agasisti and Zoido, 2015). Ongoing steps to increase schools' autonomy are welcome, as they should help them adapt to the specific needs of their pupils. But, above all, the government must ensure that all students, including those in the Haredi community, are provided with the basic skills needed to find a job.

To that end vocational education and training (VET) should also be expanded. The 1990s immigration from the former Soviet Union provided a supply of workers well trained in technical fields. But these immigrants are now reaching retirement age and many sectors face an increasing shortage of such workers. There is less vocational provision than in many other OECD countries, funding seems inadequate and declining,

Figure 17. **Resources and outcomes in education have increased, but further progress is needed**



1. Combined scores of mathematics, reading and science assessments.
2. Distribution of 12th-grade age cohort by population group and matriculation status.
3. The heterogeneity is measured by the total variance of students' results relative to the average PISA scores in mathematics, reading and science.

Source: Central Bureau of Statistics; OECD, *National Accounts Database*; OECD (2014), *PISA 2012 Results: What Students Know and Can Do*; OECD (2015), *Economic Policy Reforms 2015: Going for Growth*; OECD (2015), *Students and Computers, Thematic Report, based on PISA 2012* (forthcoming); N. Blass (2014), "Trends in the Development of the Education System", in State of the Nation Report 2014, Taub Center for Social Policy Studies in Israel.

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and the number of students in the technology stream has fallen since the early 2000s (Musset et al., 2014). The authorities should therefore expand high-quality VET programmes for young adults following their military (or alternative) service, supported by close partnership with industry, and put greater emphasis on work-study programmes.

VET could be made more attractive if students' possible fear of being side-lined were reduced by developing more pathways between vocational and general education, including access to universities, and credit recognition for graduates of practical engineering programmes enhanced (Musset et al., 2014).

Well-designed reforms to promote social cohesion and share the fruits of growth

Better integrating the disadvantaged groups into the labour market

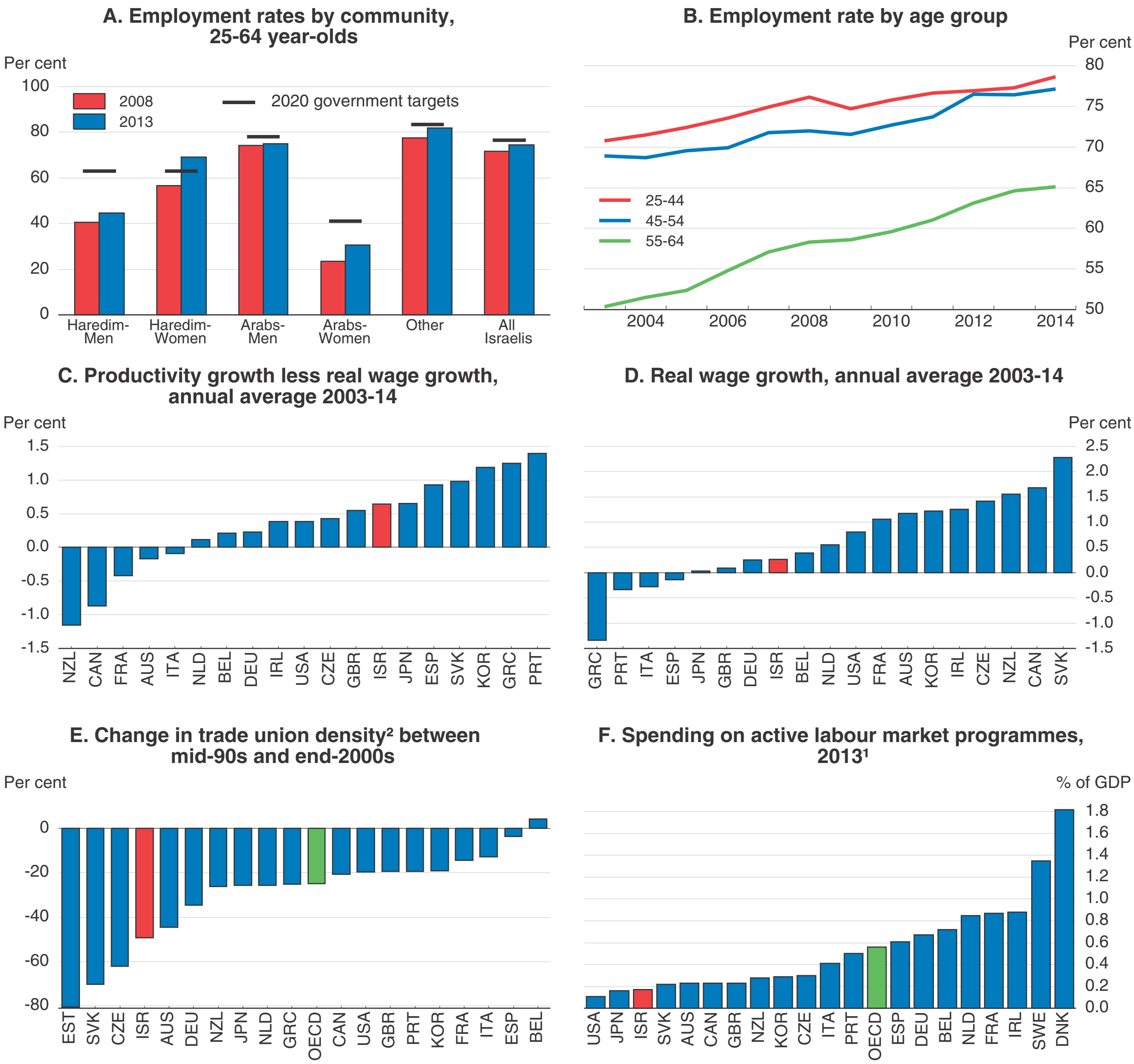
The labour market has continued to perform well in recent years: unemployment is down, including in structural terms (Elkayam and Ilek, 2013), and the employment rate has risen significantly (Figure 18, Panels A and B), generating significant increases in household incomes. Israel has a greater proportion (22%) of low-paid workers (those earning less than two-thirds of median earnings) than the OECD average (16%) (Figure 12, Panel B); they tend to be insufficiently skilled and take menial jobs in the sheltered sector. The supply of qualified and well-paid jobs in the sheltered sector, even for well-trained people, is modest (Brand, 2015). In addition, average real wages have advanced even more modestly than slow-growing productivity since 2003 (Figure 18, Panels C and D), possibly partly because of the rapid increases in labour supply; however, in after-tax terms gains have been larger.

The rising employment rate has not had much of an impact on poverty so far. This may partly reflect the arrival on the market of increasing numbers of low-skilled workers from various backgrounds, including Palestinians and foreign workers, with weak bargaining power at a time when union membership has been in decline (Panel 18, Panel E) and deregulated contractual jobs have expanded (Neuman, 2014). Since 2010 the authorities have increased the number of labour inspectors, investigations and penalties to improve compliance with labour law. The so-called "negative income tax" (or earned income tax credit, EITC), which adds an average 16% to the annual wages of eligible workers – those in the first quintile of the pay distribution – has demonstrated its effectiveness (BoI, 2015h), and the authorities should consider expanding it further. Budgetary resources dedicated to it have risen to 0.1% of GDP in 2015 but are still less than similar programmes in the United States and the United Kingdom (where spending reaches 0.4-0.5% of GDP).

In early 2015, the government endorsed the social partners' agreement of a 16% increase in the minimum wage, spread over three years from April 2015 and, in November 2015, it agreed to a further 6% hike in the minimum wage for December 2017. This rise could sustain aggregate demand by bolstering the finances of the least paid workers who have a high propensity to spend. It also plays a complementary role to the EITC, which should not become a public subsidy for employers paying sub-standard wages (BoI, 2015a). However, minimum wage increases are not as effective in reducing poverty as the EITC. Such a large rise could reduce profitability and competitiveness, harming business investment and net exports and therefore could threaten employment opportunities for low-skilled workers and youths.

Active labour market policy merits greater public financial support (Figure 18, Panel F). Because of a lack of resources, the public employment service has a very limited set of tools to promote the reintegration of jobseekers on the labour market. Caseloads are very high, and case workers can offer vocational training opportunities to only a small number of jobseekers (OECD, 2013b). The authorities should step up their efforts following pilot projects, such as Employment Circles, which have shown promising results.

Figure 18. **The employment rate has increased, but wage growth has been quite sluggish**



1. Or latest year available.
2. Trade union density corresponds to the ratio of wage and salary earners who are trade union members to the total number of wage and salary earners.

Source: Central Bureau of Statistics, Labour Force Survey; OECD (2014), *OECD Employment Outlook 2014*; OECD, *Economic Outlook and Trade Union Databases*.

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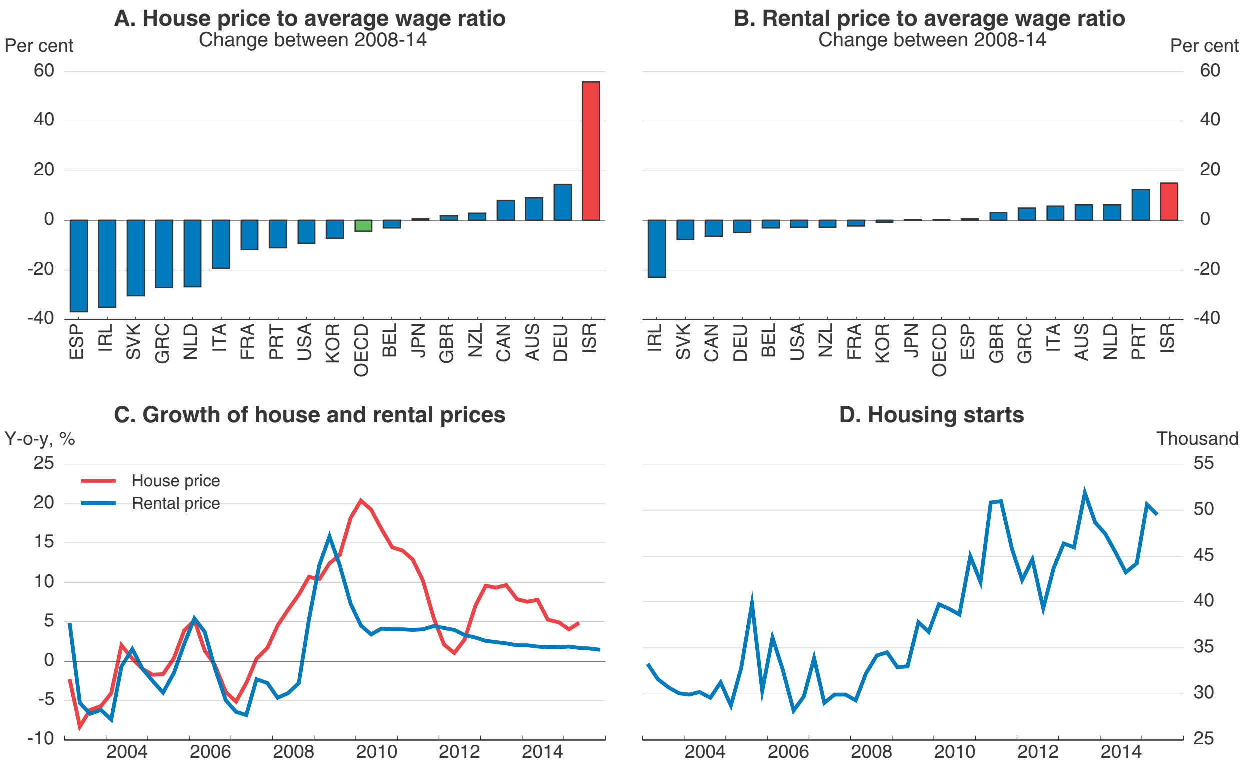
Improving supply conditions on the housing market

Improving the functioning of the housing market is important for social and well-being reasons, especially for young families. Since 2008, the rise in house prices and rents, measured relative to wages, has been much sharper than in other OECD countries (Figure 19, Panels A and B). This has created an affordability problem, which is more severe for house purchases than rentals (BoI, 2014). The cost of a standard home at end-2013 came to more than 11 years of average pay, three years more than in early 2008 (State

Figure 19. **Supply conditions in the housing market have improved somewhat**



Source: OECD, *Economic Outlook Database*; Central Bureau of Statistics, Construction Statistics.

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Comptroller, 2015). Although international comparisons should be treated with caution, median house prices ranged between 3.5 and 8 times median household income in the United States, Japan, the United Kingdom, Canada, Australia and New Zealand in mid-2013 (Demographia, 2014). Israel has a fairly small stock of social housing, having sold off substantial numbers of units starting in the mid-1980s (BoI, 2015a). Rather, it has chosen what is perceived as a more cost-effective solution in the form of rent subsidies for those on income support.

Surging prices in Israel have been caused by stagnant supply and growing demand fuelled by the rising number of households and falling interest rates. As mentioned in the 2011 *Survey*, there is a lack of land in central areas where demand is high, underdeveloped infrastructure in peripheral areas and an urban planning system involving a great many public entities with divergent interests (Hemmings, 2011). Fulfilling the requirements for planning and building a home in Israel takes an average of 13 years (BoI, 2015a), more than twice as long as in other OECD countries like Germany or Sweden (World Bank, 2014; Evans and Hartwitch, 2005).

While the shortfall of the housing stock is difficult to quantify precisely, various analysts put it at over 100 000 units, over two years' worth of construction, because of the paucity of dwellings built between 2002 and 2010. Since then, the number of new homes constructed has been around 45 000 per year, similar to new household formation (Figure 19, Panels C and D). A number of measures have recently been taken to raise supply. In 2013, a specialised body, the ministerial "housing cabinet", was created to co-ordinate government policy and eliminate supply bottlenecks. Agreements were signed between central and local governments to reduce barriers to the funding of the infrastructure required for new housing zones. Other pro-development measures include the army's release of sites in central Israel and an agreed plan to develop intercity road infrastructure.

Building on these initiatives, in 2015 the government decided to bring all public planning entities together under the umbrella of the Ministry of Finance, which is now responsible for the whole supply process. The authorities expect this to shorten the average time required for house planning and building by more than half, to 5.5-6 years. Office space conversion into residential buildings and reclassifying public areas as building land will be facilitated. On the other hand, the tax on property investment was raised from 5-7% to 8-10% in mid-2015, reducing both rental supply and overall demand with an uncertain impact on prices. State subsidies will be granted to develop cheaper forms of housing for young couples purchasing their first apartment, and in 2015-17 the government will sell public land at discounted prices, using a mechanism meant to ensure the lower cost is passed on to home buyers (developers will compete for the lowest bid for the purchase price of apartments). On the other hand, lower house prices will raise demand, monitoring the quality of dwellings may prove challenging, and the revenue lost in the land sales is significant (0.2% of GDP per year). Housing shortages in cities could be relieved by improving urban public transport and the quality of suburban schools to encourage people to live in such zones.

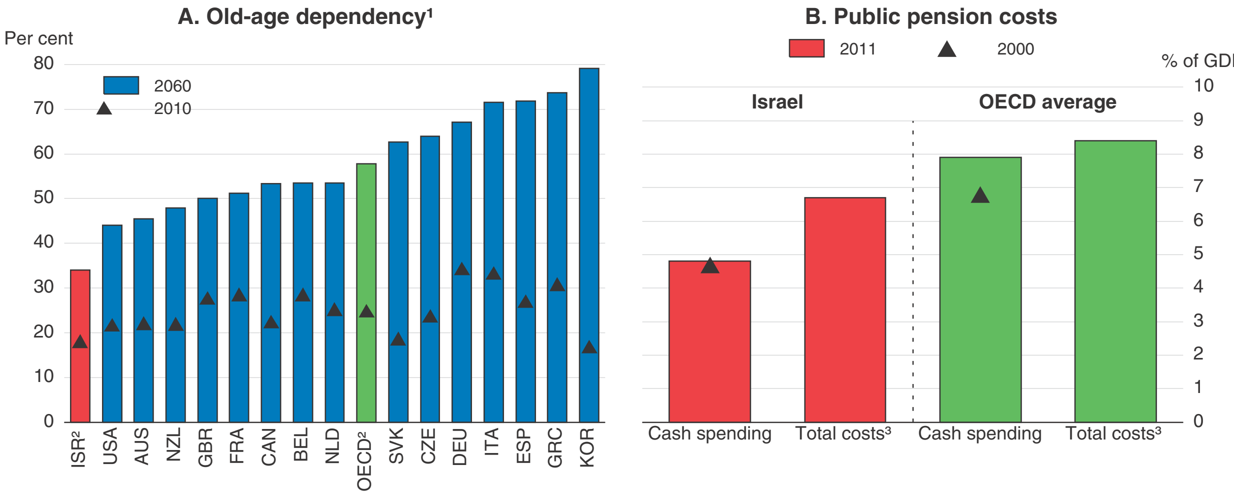
Improving the pension system and the welfare of retirees

Israel has a young population but is entering a period of moderate demographic ageing (Figure 20, Panel A). It is relatively well prepared for this, thanks to the reforms implemented since the mid-1990s, which closed financially unsustainable defined-benefit pension schemes for private and public employees and established a two-pillar pension system, with limited public financing:

- The first pillar is a modest, publicly funded, defined-benefit pension with quasi-universal coverage, comprising a basic old-age allowance for all beneficiaries and an income supplement subject to strict means testing and other conditions.
- The second pillar is a system of defined-contribution schemes in which beneficiaries can choose their provider. Since 2008, this second pillar has been a mandatory savings scheme for all workers (up to the level of the average wage), whose contribution rate has risen gradually. This system still benefits from tax incentives, including a non-refundable income tax credit for employees. By contrast, private pensions based on personal savings offer no tax advantages.

Total public spending on pensions, mainly public-sector pensions and first-pillar pensions, is relatively low and has been contained over the last decade (Figure 20, Panel B). Under current law, spending is set to rise by about ½ % of GDP by 2030, but this increase will be almost fully reversed by 2060 as lower public spending on civil servants' pensions is projected to offset the rising cost of first-pillar pensions (Chapter 2). One option to pay for the pre-2030 increase within this spending domain (it could of course be financed elsewhere on the budget) is to raise the contribution rate of public employees hired before 2002-04, who benefit from a generous scheme and a much lower contribution rate (2% after tax) than for those in the current scheme (5.5%, but tax deductible). Raising this

Figure 20. **The ageing process and public pension costs are quite moderate**



1. Elderly persons (65 and over) as a share of the working-age population (20-64).
2. Medium-term projections for Israel; simple average of member countries for the OECD aggregate.
3. Including tax deductions on contributions for the second-pillar pension funds.

Source: Central Bureau of Statistics (2012); United Nations (2015), *World Population Prospects: The 2015 Revision*; OECD, *Social Expenditure Database* and OECD estimates based on data provided by the Ministry of Finance.

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contribution rate would also enhance equity between older and younger public employees. Implementing the recommendations of a recent committee regarding military pensions would also reduce spending.

The replacement rate of first-pillar old-age pensions – the main source of income for around half the elderly who have mostly made only modest contributions to the second pillar before it became mandatory in 2008 – is low (Table 3), even though old-age poverty is more severe than in many other OECD countries (Figure 21, Panel A). Average first-pillar pensions have fallen relative to GDP per capita since the early 2000s, partly as the result of their indexation only to consumer prices since 2005. Catching up for this past erosion of generosity by raising the average basic pension as a proportion of GDP per capita to

Table 3. **Gross and net pension replacement rates**[1]

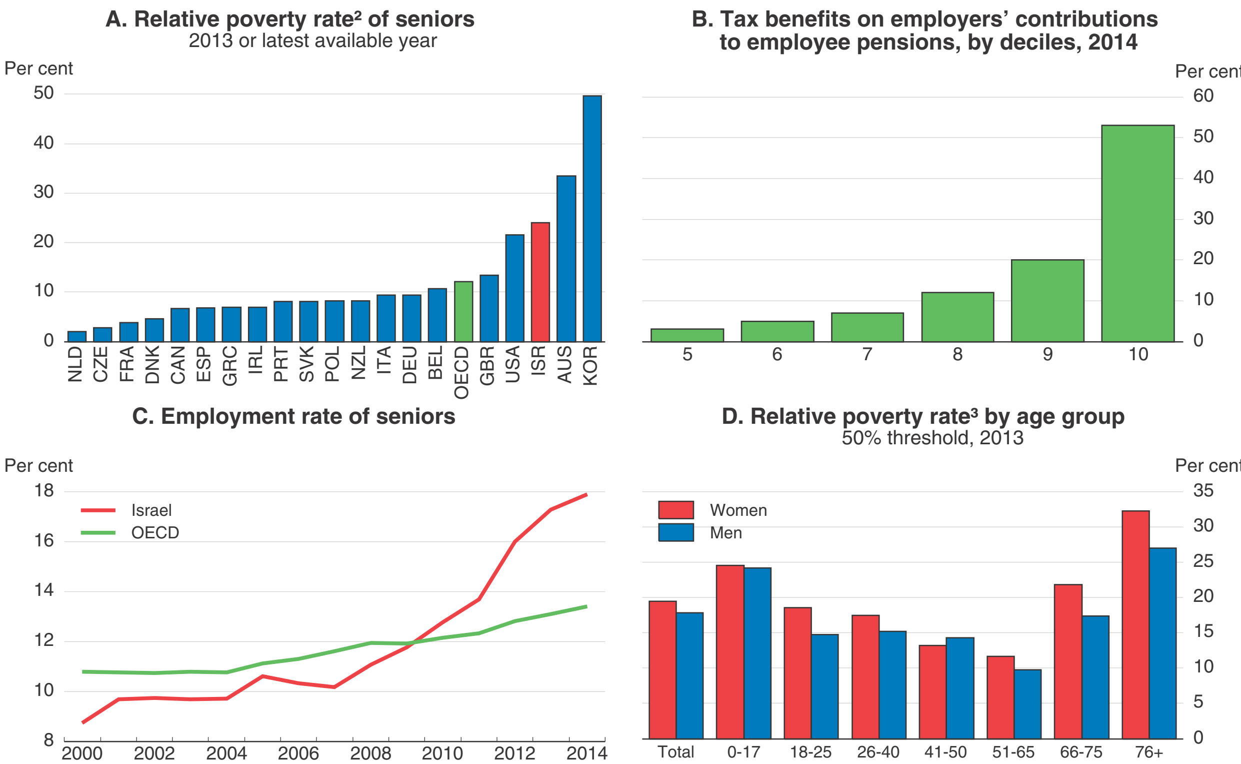
Percentage of individual earnings estimated for 0.5, 1 and 1.5 times average wage, 2014

	Gross public			Gross mandatory private			Total gross mandatory			Total gross with voluntary			Total net with voluntary		
	0.5	1	1.5	0.5	1	1.5	0.5	1	1.5	0.5	1	1.5	0.5	1	1.5
Israel	23.5	11.8	7.8	59.2	49.3	32.8	82.7	61.0	40.7	82.7	61.0	40.7	85.7	68.8	50.3
OECD country average with:															
A public pension system only	63.9	59.1	56.7				63.9	59.1	56.7	63.9	59.1	56.7	76.2	72.4	70.6
A public and mandatory private pension system	36.0	20.0	13.2	33.6	34.2	34.8	69.6	54.2	48.0	69.6	54.2	48.0	75.9	60.2	57.4
A public and voluntary private pension system	58.9	38.2	29.1				58.9	38.2	29.1	80.1	58.7	48.4	89.8	70.5	61.8

1. The gross (net) replacement rate is defined as the individual gross (net) pension entitlement divided by gross (net) pre-retirement earnings. The net replacement rate takes account of personal income taxes and social security contributions paid by workers and pensioners.

Source: OECD (2015), *Pensions at a Glance 2015: OECD and G20 Indicators*.

Figure 21. **The employment rate of seniors[1] has risen strongly, but their poverty rate remains high**



1. Defined as those aged over 65.
2. The poverty threshold is 50% of median disposable income estimated for total households in each country.
3. After taxes and transfers.

Source: Ministry of Finance; OECD (2015), *In It Together – Why Less Inequality Benefits All*, Annex Table 1.A1.1; OECD, *Labour Force Statistics Database*; calculations from the *OECD Income Distribution Database*, *www.oecd.org/social/income-distribution-database.htm*.

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its 2000-02 average level would cost about NIS 2 billion annually (0.2% of GDP). The 2015-16 budget makes a step in this direction with an uprating of the income supplement by 5-13%, costing NIS 600 million annually. But further adjustment might be warranted, including by relaxing some restrictive conditions for the access to this income supplement, such as not owning an expensive vehicle. The fiscal impact of a more generous income supplement would be temporary. Over time, fewer and fewer retirees are likely to benefit from a more generous income supplement, because it is means-tested and a growing number of retirees will receive a second-pillar pension. However, since the income supplement is available even to those who have never worked, further large increases could also weaken work incentives.

The tax deduction for second-pillar contributions, costing 1.1% of GDP in 2014 (Table 4), was left unchanged when this scheme became mandatory in 2008, although making it mandatory removed the need for a tax incentive, at least for contributions up to the average wage. The incentive is very regressive. More than half its value goes to the top decile of the income distribution (Figure 21, Panel B), whereas the households who earn too little to pay income tax receive nothing at all. To address this issue the authorities plan to lower the tax-free limit on employer contributions from 4 to 2½ times the average wage.

Table 4. **Total pension-related public spending**

2014

	NIS billion	% of GDP
Total	77.0	7.1
First-pillar NII pensions, old-age and survivors[1]	27.0	2.5
Civil servants' pension, old-age and survivors	25.2	2.3
Central government	22.8	2.1
Local government[1]	2.4	0.2
Second pillar	24.8	2.3
Assistance to old funded defined benefit funds	3.8	0.3
Designated debt subsidy to all pension funds	3.5	0.3
New defined contribution pension funds	17.5	1.7
of which:		
Tax benefit at deposit	11.5	1.1
Capital income tax break	6.0	0.6

1. Desk's estimate based on 2013 data.

Source: NII, data provided by the Ministry of Finance, *OECD Social Expenditure Database* and OECD estimates.

While welcome, such a move will not prevent the high mandatory contributions required of all employees regardless of their income, family circumstances or tax position from unbalancing low-income households' revenue flows over their lifetime. There is thus a case for offsetting more of the impact on net current income of relatively high mandatory contributions to pension savings for low-income workers. The tax advantage on mandatory contributions could be made refundable, although this would come at a fiscal cost. Alternatively, it could be abolished for the mandatory contributions up to the average wage and replaced by a lower contribution rate below this threshold. In any case, measures aiming at addressing the regressive nature of the tax deductibility on contributions to the second pillar will need to be considered in the light of its implications for the progressivity of the tax-transfer system as a whole.

Employment rates of older people have been rising (Figure 21, Panel C), but some features of the pension system still discourage work. The minimum pension eligibility age for women-currently 62 – should be gradually aligned with the male minimum of 67 (Flug, 2014); this matter will be considered in the near future. Extending women's working lifetimes, and thus the amount of their second-pillar pensions, would reduce the risk of poverty among older women, which is considerably higher than among men (Panel D). The authorities should also index the retirement age to keep constant the share of adult lifetimes expected to be spent in retirement (based on life expectancy at 65). Moreover, the effective marginal tax rate for a pensioner choosing to work without postponing pension receipt is excessively high: 74-97% (for a salary above half the average wage), due to the reduction of the basic allowance, which is means tested for men below 70 and women below 68, the loss of rights to the earned income tax credit and the impact of additional income tax and social contributions paid (Brill, 2014). This substantial disincentive to work should be sharply reduced or eliminated.

Israel's pension fund management costs do not seem particularly high by international standards, but reducing them by enough to generate an average rise of one percentage point in the net annual return on pension savings schemes would increase pensioners' assets by 20% after 40 years of contributions (Whitehouse, 2001; Sharpe, 2013). One promising route is the development of passive (indexed) pension funds, which mechanically replicate the average market performance and reduce management fees by as much as 97% in the United States (Bogle, 2014; Edelen et al., 2013). To promote their use the authorities should require that fund managers offer such schemes as the default option. Behavioural economics suggests that this would be effective owing to consumers' inertia (Lunn, 2014). Moreover, giving preference to a simple choice could mitigate information asymmetries, given the complexity of both the pension system and the underlying financial products. An alternative means to achieve cost savings is for providers to streamline their distribution channels. This could be promoted if all new contracts with pension schemes were automatically awarded to the funds with the lowest management costs, as has been done in Chile and Mexico to strengthen competition in this sector (Ionescu and Robles, 2014).

Strengthening climate change policy

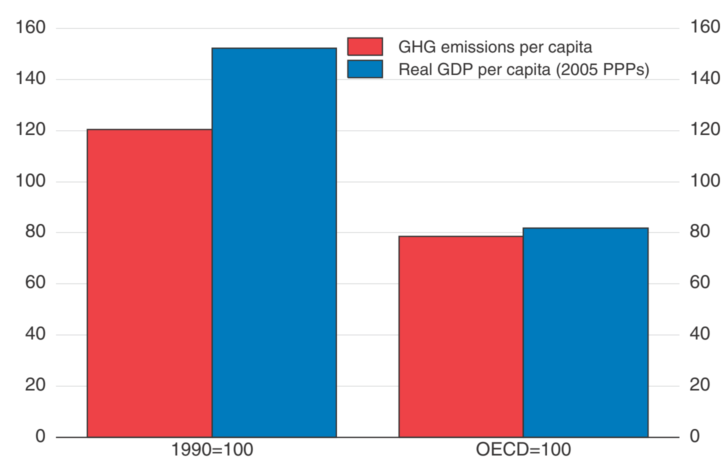
Israel accounts for only 0.2% of the world's global greenhouse gas (GHG) emissions, and annual emissions per capita are not particularly high and have risen less than GDP per capita since 1990 (Figure 22). Under a business-as-usual (BAU) scenario, these emissions are projected to remain at a level of around 10.0 tonnes (CO_2 equivalent) per capita until 2030, implying a level increase of around 27% relative to 2015 because of population growth and economic development.

Israel ratified the UN Climate Change Convention in 1996 as a non-Annex I country and the Kyoto Protocol in 2004, and in 2010 it committed to reduce its GHG emissions by 20% by 2020 compared to the BAU scenario. In August 2015 the national emissions plan was cancelled, and the authorities focused on the preparation of policy measures and strategic planning for GHG emissions reduction by 2030, which was required for the December 2015 UNFCC climate change conference in Paris.

The objective is to maintain Israel's emissions target on per capita basis below the OECD average. To this end, the costs and benefits of a list of possible abatement measures have been assessed, and a proposal has been developed for reducing GHG emissions per

Figure 22. **GHG emissions have risen less than GDP**

2010 data



Source: OECD, *Environment – GHG Emissions Statistics Database*; *National Accounts Database*; *Economic Outlook Database*.

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capita by 26% by 2030 compared to 2015 to 7.7 tonnes (CO2 equivalent), with an increase of the share of electricity generation from renewable sources from 5% now to 17%. A substantial expansion of solar electricity, which is almost the only source of renewable energy in Israel, will be needed. The strategy will also include a national monitoring system to follow up, record and report on its implementation.

As the previous *Survey* noted, Israel should more fully develop its economic instruments for environmental policy to meet its emissions reduction objectives at minimum cost. The authorities could use the existing levies on primary fuels as a basis for establishing carbon pricing in the form of a carbon tax. Alternatively, if a permit trading system is preferred, then this system should be designed with a view to raising revenues and to making possible participation in international emissions permits trading mechanisms. In the shorter term, greater use should be made of taxes based on kilometres travelled with vehicles rather than ownership, and the tax advantages for business vehicles should be reduced. Finally, faster development of urban public transport would also be desirable, as mentioned above.

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ANNEX 1.

Progress in structural reform

This Annex reviews the measures taken in response to the recommendations from previous Economic Surveys. The recommendations that are new to the present Economic Survey are contained in the corresponding chapters.

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.

Recommendations in previous *Surveys*	Action taken
1. Fiscal Policy	
1.1. Bolster the medium-term budgeting framework by monitoring the multi-year budgetary impact of new policy measures.	Starting with the 2017 budget, medium-term fiscal commitments will be published twice a year and will have to meet the expenditure rule. If the commitments for the coming years exceed the expenditure rule, the government will be forced to cut expenditures, in order to make new commitments. The government will not be able to take decisions which reduce revenues if the projections are that the deficit rule is exceeded..
1.2. Be ready to raise taxes further, preferably by base broadening and further reducing avoidance and evasion. Prioritise environmental taxes, exploit immobile tax bases, and prune tax expenditures. If needs be, raise the rate of VAT rather than income tax rates, and tackle the resulting poverty and distributional issues through the social welfare system.	Recent efforts have been taken to improve tax collection. However, the government intends to cut both the standard VAT rate from 18 to 17% and the corporate tax rate from 26.5 to 25%.
2. Financial sector regulation and macro-prudential policy	
2.1. Remove the supervisory duties currently carried out by CMISD from the Ministry of Finance. Further strengthen oversight communication and co-ordination.	No action taken.
2.2. Focus in particular on regulatory reform and supervision of the non-banking financial sector.	Following the February 2015 report of an investigation group on Consumer Credit Firms, the MoF is preparing legislation to establish a new regulator in the non-bank sector. The CMISD has published instructions whose purpose was to improve non-bank corporate governance including an obligation for pension and provident funds to appoint Compliance and Risk Officers.
2.3. Monitor and respond to financial market risks. Take further macro prudential actions, as necessary, to constrain high risk mortgage lending.	In September 2014 banks were required to gradually increase their Common Equity Tier 1 capital ratio targets (9% by 2015 and 10% by 2017 for the two largest banks) by 1% of their outstanding housing credit portfolio by 1 January, 2017. Banks are required to implement Basel III Liquidity (LCR) and leverage ratio (6% for the 2 largest, 5% for the others) from 2018. Following previous steps applied to mortgage lending, in September 2014 banks were required to hold an additional Core Tier 1 capital buffer equivalent to 1% of outstanding housing loans.
2.4. Build in strong safeguards in the plans to permit wider securitisation.	In August 2014 legislative amendments were proposed to lift the obstacles to developing securitisation, in the light of lessons learnt from the 2008 global crisis.
2.5. Strengthen mechanisms for dealing with banks in difficulty, for instance by augmenting the powers of the Bank of Israel for early intervention.	The BoI is working with the Ministry of Justice on amending banking laws to raise its powers for early intervention, including widening the supervisory tool-box.
3. Housing market policies (2011 Survey)	
3.1. Pursue plans to decentralise planning through permanent reforms to the ILA and planning processes.	Initiatives have been announced in this domain, with ILA and all other planning bodies being brought into the MoF.
3.2. Consider raising property taxation (Arnona).	No action taken.
3.3. Aim for a simpler and more transparent system of housing support. In addition:	
3.3.1. Consider raising rent subsidies while scaling back support for home purchase.	Rent subsidies will be raised and support for loans decreased.
3.3.2. Make eligibility for social housing more uniform. Neglect siblings in the points system.	The new initiative does not include extra points for siblings in the points system.
3.3.3. Introduce minimum criteria in rental contracts.	No action taken.
4. Education policy (2010 Survey)	
4.1. In the primary and secondary sector, implement targeted policies, in particularly to improve education standards for Arab-Israelis.	The budgetary mechanism in the primary and secondary sectors was adapted to grant higher budgets to schools with pupils from low socio-economic backgrounds.
4.2. Make all state funding of Haredi schools conditional on their teaching core subjects. Consider universal core curriculum requirements.	The new government plans to relax the conditionality of funding for Haredi schools on the extent to which they teach maths, science and foreign languages.
4.3. In the tertiary sector give providers greater leeway in setting fees, and ensure access through student loans and grants. Make staff pay and progression more transparent and flexible.	The 2011-16 tertiary education reform programme has implemented a new more transparent and flexible budget model. A major effort is also underway to improve the access of Haredi and Arab youths to higher education.
5. Labour market, social and welfare policies (2010 Survey)	
5.1. Tax breaks, entitlement conditions and employment services	
5.1.1. Make more use and ensure better take up of the earned income tax credit as part of wider welfare to work measures, such as employment services reforms.	The EITC is now available nationwide, and take-up has increased dramatically. Benefits to working mothers and single parents were raised.

Recommendations in previous *Surveys*	Action taken
5.1.2. Reform disability benefits to further promote work incentives. Consider shifting the approach for medical assessment from general disability to capacity for work.	No action taken.
5.2. Childcare services	
5.2.1. Support for childcare services for Arab-Israeli children warrant particular attention.	Procedures for building childcare centres were eased in 2014. 20% of the budget is spent on the Arab community.
5.3. Labour regulation	
5.3.1. Improve enforcement of labour regulation, in particular in sectors dominated by foreign workers. Limit rent-seeking in the permit system for foreign workers. Lower the value of the minimum wage relative to median earnings.	The number of labour inspectors, investigations and penalties increased in 2013-14. The number of foreign worker permits are set by bilateral agreements and moves inversely with the unemployment rate. Their pension payments are kept by the government and delivered to them when they leave. Employers and unions have agreed with the government to raise the minimum wage by 16% over 3 years from April 2015.
5.4. Pensions	
5.4.1. For first-pillar pensions, eligibility rules for the Income Supplement should be reviewed to widen its coverage.	No significant reform.
5.4.2. Increase the age at which women become eligible for state pensions to the same level as men (67 years).	No action taken.
5.4.3. Pursue plans to reform the tax treatment of pensions and for life-cycle portfolios.	The draft 2015-16 budget would cut the tax-free limit on employer contributions from 4 to 3 times the average wage.
5.4.4. Phase out tax breaks on savings in the “advanced training funds”.	No change.
6. Policies affecting business (2011 Survey)	
Competition policy	
6.1. Reduce **support for agriculture**, and make it less distorting.	In 2014 duty-free import quotas for dairy products and meat were increased.
6.2. As regards the **Israel Antitrust Authority** (IAA), consider authorising civil penalties, increasing the budget to deal with staff-retention problems and making the IAA's advocacy and regulatory roles more explicit.	IAA resources (both its budget and staff) have been raised significantly since 2011. A Competitiveness Department was established in 2012 to track trends in selected markets. The laws 'promoting competitiveness' (2013) and ''promoting competitiveness in the food sector' (2014) provided it with extra-legal instruments.
6.3. Persevere with investigating and strengthening competition in **retail supply chains**.	Parallel imports have been allowed for non-sensitive foods (e.g. breakfast cereals) alongside lifting other regulatory barriers. Also, barriers to cosmetic imports have been lifted.
6.4. In the **Electricity sector** introduce reforms based on a competitive model.	The new government has planned to discuss a new model to promote competition.
6.5. In **telecommunications**, follow through on plans to introduce an independent regulator. Continue to push for market opening, notably by local loop unbundling.	Unbundling of the local loop was decided at end-2014. but its implementation has been prevented because of network owners' resistance.
6.6. Privatise and introduce or strengthen competition for services in **post, sea ports and water**.	Privatisation of the existing ports and the construction of 2 new ports is proceeding. A postal reform, including partial privatisation, was adopted at end-2014, but its implementation has been delayed.
6.7. For **gas**, remain vigilant on competition and the risk that policies end up providing implicit fuel subsidies.	See Chapter 1, paragraphs 1.79-1.85.
7. Environmental and transport policies (2011 Survey)	
7.1. Energy efficiency and the environment	
7.1.1. Introduce GHG monitoring and a system of rolling targets that looks beyond 2020.	Preparations are being made for 2030 GHG cuts to a business-as-usual baseline to be presented to COP21.
7.1.2. Consider basing an economy-wide carbon tax on the existing excise tax on primary fuels, and aim for greater participation in international emissions trading.	No action taken.
7.1.3. Improve energy efficiency in buildings. Introduce energy-efficiency standards and certification.	Spending on the energy efficiency programme has been halted.
7.2. Transport	
7.2.1. Continue to invest in economically efficient public transport, with a focus on urban areas.	Construction of the light rail project in Tel Aviv is underway.
7.2.2. Raise taxes influencing vehicle use, rather than ownership, and prune tax breaks for company cars.	Effective tax on leasing companies has been raised by lowering the depreciation rate from 20% to 16% and cancelling the option to postpone capital gains tax.
8. Health care policy (2013 Survey)	
Governance of the health insurance system	
8.1. Ensure universal National Health Insurance services remain at the core of the system. Provide adequate public funds for it.	NHI remains at the core of the system. In recent years funding has risen by an average annual rate of 7.5%.
8.1.1. Widen the scope of reductions in co-payments to low income households.	No action taken

Recommendations in previous *Surveys*	Action taken
8.1.2. Do not severely limit non-NHI activity, but ensure sufficient checks against the crowding out of NHI-based treatment.	A 2015 health Insurance reform improved the regulation of the private insurance market and of the private health system to lower costs and ensure NHI viability.
8.1.3. 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.	No action taken.
8.2. Competition	
8.2.1. Prevent backdoor cream-skimming strategies and cross subsidies between NHI and VHI activities.	The 2015 reform includes provisions to limit physicians' conflicts of interest and prevent public resources abuse.
8.2.2. Improve transparency in insurance products by ensuring consumers are aware that commercial insurers offer products that are fully complementary to the Shaban.	The CMISD published instructions to clarify insurance coverage for private surgery. They require commercial insurers to offer complementary coverage. In addition, a new CMISD circular requires insurers and brokers to analyse their customers' characteristics and needs before selling them insurance products.
8.3. Policy towards health care professionals	
8.3.1. Further expand medical schools and nurse training.	The government's plan to improve emergency care includes protocols to shift some responsibilities and tasks from doctors to paramedics. The number of medical and nurse training students is steadily increasing.
8.3.2. Further exploit the potential for shifting tasks between professions, e.g. from doctors to nurses.	Measures to shift some responsibilities and tasks from doctors to paramedics for emergency care are planned.
8.3.3. Encourage older professionals to continue working, and provide childcare facilities for staff.	No action taken
8.3.4. Strengthen requirements on continuing professional development; consider linking this reform to the introduction of licence renewal systems.	No action taken
8.3.5. Consider extending requirements to work in the NHI system for those that have benefitted from subsidised medical training. Strive to shorten the time taken to acquire qualifications and specialisations.	No action taken
8.4. Funding mechanisms	
8.4.1. Consider adding further socio-economic variables to the capitation formula that determines government transfers to the health funds.	No action taken
8.4.2. Further shift payment mechanisms away from input-based measures (such as *per diem* charging for hospital care) and towards output-based formulae such as DRG mechanisms.	The government has been steadily shifting towards DRG mechanisms; however the process is incomplete and needs to be enhanced. In the last 3 years 116 new DRG prices were set.
8.4.3. Closely monitor negotiation processes between the health funds and providers, given the risk of collusion due to the small number of market players.	The government regulates the negotiation processes between the health funds and providers through legislation that determines purchasing floors and caps.
8.5. Quality of care, health promotion and data	
8.5.1. Make an in-depth study of hospital overcrowding.	In the recent budgets of 2013-14 and 2015-16, hospital beds were added, and a national plan to improve emergency care was crafted.
8.5.2. Further develop the collection and dissemination of information on the quality of hospital care.	The Ministry of Health has launched a series of hospital quality indicators to be made public periodically.
8.5.3. Press on vigorously with health promotion and focus on those groups with weak health outcomes.	The government has launched several plans focusing on improving health care and promotion for several groups.
8.6. Long-term care	
8.6.1. Simplify access to public support for long-term care (LTC) services. Create a one-stop shop for assessing LTC needs.	A working group is examining the policy changes needed in the LTC system and is expected to report its conclusions to the government by end-2015.
8.6.2. Remove biases that encourage employing foreign carers, including by tightening controls on intermediaries' fees in processing their applications.	The government has raised the stipend by 20% to those employing local care providers and not foreign workers.
9. Tax and benefit policies (2013 Survey)	
9.1. Indirect tax	
9.1.1. Renew efforts to remove the VAT exemptions on fruit and vegetables and services in Eilat.	No action taken.
9.1.2. Press on with the scheduled reductions in customs duties on consumer goods and food items.	Measures were announced to reduce import quotas for goat dairy products.

Recommendations in previous *Surveys*	Action taken
9.1.3. 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.	No action taken.
9.1.4. Further develop environmental levies.	No action taken.
9.2. Household income tax and benefits	
9.2.1. Avoid further increases in the tax wedge on low-wage labour and hikes in personal tax rates.	The pension contribution rate was raised from 15.0% to 17.5% in 2014.
9.2.2. Invest more in active social policies. Bring in new levels of benefit for those with more than 2 children. Avoid further increases in universal child allowances.	The new government plans to increase child allowances, abolishing the cuts carried out by its predecessor.
9.2.3. Further pare back universal support, and reduce tax credits that benefit middle/upper income earners.	No action taken.
9.2.4. Consider increases in means-tested income support, ensuring these do not create welfare traps.	The government has various measures to support low-income workers e.g. the EITC, subsidised childcare, etc.
9.3. Property taxation	
9.3.1. Make capital assets deemed to be realised at death for capital gains tax purposes.	No action taken.
9.4. Company taxes and transfers	
9.4.1. 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.	Preferential corporate income tax rates available via the Law for the Encouragement of Capital Investment (LECI) have been raised from 12% (2013) to 16% (2014) and in preferable areas (area A) from 6% to 9%.
9.4.2. Ensure taxation is adequate in immobile sectors (such as resource extraction).	At end-2014 the government approved the Sheshinski 2 Committee’s recommendation to impose surtax at rates of 25-42% on the profits in excess of a 14% return on natural resources extraction (potash, phosphates and other minerals).
9.4.3. Pursue plans to reduce tax compliance costs for business by simplifying the tax code so as to reduce the number of payments required.	No action taken.
9.5. Evasion, avoidance and tax administration	
9.5.1. Press on with campaigns combatting tax evasion and aggressive avoidance. Consider moving the Israel Tax Authority (ITA) outside the Ministry of Finance or strengthening its independence. Consider 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.	Some steps have been taken to deal with evasion and aggressive avoidance: henceforth, reports will be submitted only via electronic means, and information from financial institutions is being shared with the ITA.
9.5.2. Press on with the further development of electronic services in tax administration.	A website was created for submitting reports for the EITC programme. Calculators, simulators and online payment have been developed for several taxes.

ANNEX 2.

Quantification of the impact of product market reforms in Israel

A competitive product market environment that allows new firms to challenge incumbents, efficient firms to grow and inefficient ones to exit helps improve the allocation of resources and boost economic growth and living standards. A key policy ingredient for a growth-enhancing competition environment is for product market regulation to be set in a business-friendly way. Empirical studies have shown that greater competition and better regulation can raise overall output per capita by increasing investment and by encouraging companies to be more innovative and efficient, thereby lifting productivity (e.g. Conway et al., 2006; Bourlès et al., 2013).

This annex provides methodological information on the quantification of the macroeconomic effects of reforms that would increase competition. This quantitative assessment is based on a similar methodology as in previous work by the OECD for the G20. First, the scale and scope of a set of reform measures are evaluated in terms of OECD Product Market Regulation (PMR) indicators. Then the quantitative changes in the PMR indicator expected from each group of reform measures are associated with productivity growth at the sectoral level based on the empirical findings in past OECD studies. Finally, such sectoral productivity growth is aggregated into an economy-wide effect on GDP using each sector's value-added share as its weight.

The scenario simulated

The reform scenario envisaged in the main paper corresponds to a change in the overall product market regulations towards a more business-friendly regulatory environment that would prevail in an average OECD country. This corresponds to the case where Israel's PMR indicator converges to the average level of the indicator among the OECD countries, which represents a reduction of 33% from the level observed in 2013. Such

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a change is larger than the average progress observed in the past two decades among the reforming countries and therefore constitutes an ambitious reform programme. However, several countries have managed to adopt product market reforms on a similar or even larger scale over a shorter time period. This was the case for Greece, Hungary, Italy, Netherlands, Poland, Portugal and the Slovak Republic, which have all improved their overall product market regulation indicator by between 30% and more than 40% over a 10-year period.

Quantification method of the simulated change in product market regulation reforms

The exercise exploits the framework of Bourlès et al. (2010), who estimate the economic impact of the PMR reforms on multifactor productivity at a sectoral level. According to this approach, multifactor productivity (MFP) is assumed to follow a model of the form:

$$\Delta \ln MFP_{i,j,t} = a_0 \Delta \ln MFP_{F,j,t} + a_1 gap_{i,j,t-1} + a_2 REG_{i,j,t-1} + a_3 REG_{i,j,t-1} \times gap_{i,j,t-1} + f_i + f_{j,t},$$

where $MFP_{i,j,t}$ is the MFP level of a non-frontier country-sector pair i,j in year t, $MFP_{F,j,t}$ is the MFP level at the technological frontier F for sector i in year t, $REG_{i,j,t}$ is the OECD's regulatory impact indicator – which measures regulatory burdens stemming from anti-competitive product market regulations in the various sectors of the economy – in each country/sector/year triplet, and $gap_{i,j,t}$ is the country-sector distance from the sector frontier in year t, while f_i and $f_{j,t}$ denote respectively sector and country-year fixed effects.

$REG_{i,j,t}$ is calculated for each country by using total input-output coefficients as follows:

$$REG_{j,t} = \sum_k R_{k,t} \times w_{k,j},$$

where $R_{k,t}$ is the OECD indicator of anti-competitive regulation in sector *k* in year *t* and the weight $w_{k,j}$ (lying between 0 and 1) is the total input requirement of sector *j* for intermediate inputs from sector *k*. Depending on whether the intra-sector consumption is taken into account or not in the calculation of the weight $w_{k,j}$, the regulatory impact indicator $REG_{i,j,t}$ will account or not for the gains of an improved regulation in sector k on the sector itself. By including or not the intra-sector consumption of the input-output matrix, it is thus possible to decompose the impact of a set of reforms on the whole economy between their direct and indirect effects, with, in this latter case, the effects of sectoral reforms being only captured on downstream sectors.

Finally, $gap_{i,j,t}$ is defined as:

$$gap_{i,j,t} = \ln\left(\frac{MFP_{F,j,t}}{MFP_{i,j,t}}\right).$$

Estimates of this set of equations over the 1995-2007 period for 24 OECD countries indicate that the leader country's MFP growth in a particular sector has a positive impact on MFP growth in that same sector in less productive countries (technological pass-through effect), with $a_0 = 0.122$ (with a standard deviation of 0.019), while the gap variable also has a significant and positive effect on MFP growth (technology catch-up effect), with $a_1 = 0.032$ (0.005). Importantly, the indicator of regulatory burden has a negative influence on MFP growth ($a_2 = -0.124$ (0.062)). This effect is found to be even more negative for country/sector/period triplets close to the technological frontier, as suggested by the positive coefficient on the interaction term (a_3 = 0.132 (0.054)).

Although the methodology used by Bourlès et al. (2010) was intended to assess the impact of less stringent regulations in non-manufacturing upstream sectors (mainly network industries) on the rest of the economy, given the extent of regulatory obstacles to competition affecting the product markets in Israel, including non-upstream sectors, like food, this approach has been extended to all sectors of the economy.

Due to unavailability of adequate Israeli sectoral MFP data for this exercise, the productivity time series of three countries having some similarities with Israel (Korea, Spain and Portugal) were used as a proxy. The interaction between sectors through the utilisation of intermediate inputs and the calculation of the regulatory impact indicator for each sector has been estimated with Israel's 2011 input/output matrix. Once the impact on sectoral MFP of regulatory changes has been estimated using this set of equations, the overall effect on GDP is calculated using the economy's sectoral value-added decomposition.

Discussion of the results

As mentioned in the main text, moving towards a more business-friendly regulatory environment, as represented by the OECD average, would increase Israel's MFP level, and thus GDP, by about 3¾ per cent after 5 years and 5¾ per cent after 10 years. This quantification does not aim to provide more than an order of magnitude of the potential benefits of product market structural reforms. It indeed relies on a not-very-up-to-date set of equations, which are also used somewhat beyond the scope of analysis for which they were designed. Moreover, this quantification is based on a number of assumptions regarding, for instance, Israeli MFP development at the industry level. However, the estimated impact of reforms is little affected by the choice of either Korea's, Portugal's or Spain's MFP time series proxy for sectoral productivity change in Israel.

As expected, the quantification of the impact of reforms when it is restricted to the downstream sectors is significantly smaller than when it is calculated for the whole economy, since the estimated output gains reach only 1½ per cent after 5 years and 2½ per cent after 10 years (i.e. about 40% of the total effect). Overall, the order of magnitude of these output gains seems reasonable when compared with similar exercises performed for other OECD countries (Bourlès et al., 2010; Bouis and Duval, 2011; Anderson et al., 2014). Yet, it could be somewhat overestimated because of the likely staggered nature of product market reforms, which are often spread over time even in the case of ambitious reform agendas and thus take time to fully materialise.

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Chapter 1

Boosting competition on Israeli markets

Promoting competition to enhance productivity at the firm level and resulting income and growth improvement and a lower cost of living is an important economic and social challenge in Israel. Consistent evidence shows multiple deficiencies leading to a dual functioning of the economy between exposed and sheltered sectors. Product markets are hampered by regulations that are far from best practice. Because of its geographical and geopolitical situation, Israel is less open to foreign trade than other small OECD countries. Moreover, its product markets feature monopolies in many sectors. Addressing these issues have been high on the policy agenda since the 2011 "tent protests", and the authorities have adopted or launched reforms in many domains since then. However, further increases in foreign trade exposure by lowering non-tariff barriers, making regulation more competition-friendly in network industries, especially electricity, and reducing the oligopolistic structure of the food and banking sectors would still have considerable economic payoffs.

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Boosting competition and oiling the wheels of product market performance have ranked high on the Israeli authorities' list of priorities since the 2011 tent protests. There have been several signs of serious shortcomings in these areas. OECD indicators, for example, reveal that product markets are more strictly regulated in Israel than in most other OECD countries. Weak productivity, coupled with the high cost of living, has fuelled social tensions.

Market inefficiencies, whose origin lies in a mix of historical, geopolitical and cultural factors, include the presence of many sectors with concentrated market structures. Market liberalisation has, since its beginnings in the mid-1980s, radically transformed and improved many markets, but remains incomplete. The country's remoteness from its main markets restricts trade opportunities, limiting the potential for additional competition from trade openness. And despite its membership of the WTO, Israel remains outside the world's major trading blocs. There are also cultural and religious factors, such as Kashrut – religious dietary laws that apply only to a very small market, unlike other dietary rules such as Halal and Hindu vegetarianism.

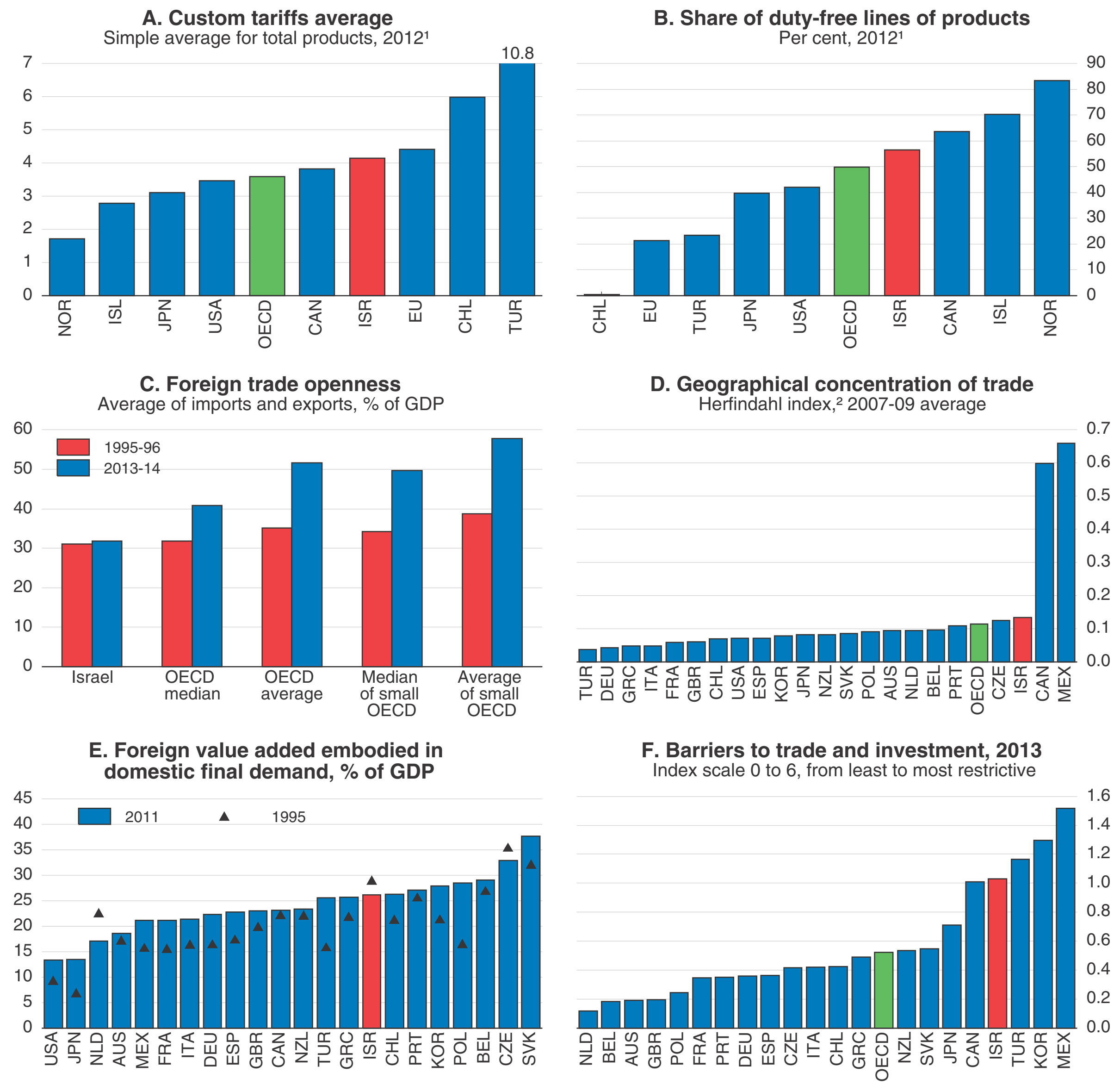
The authorities have embarked upon wide-ranging reforms of goods and services markets in recent years. The competition watchdog has been given new powers and resources. In late 2013 a bill was passed to reduce the excessive economic influence of major business groups. Other reforms have also been adopted or launched to boost competition, stimulate efficiency and/or cut excessive margins in the postal service, telecommunications, food, ports and banks. Further ambitious, broad-based reforms must be implemented: Israel must not only remedy serious failings in many sectors but also overcome specific barriers that will continue to impact some markets for geopolitical and cultural reasons. Accordingly, this chapter will first analyse the economic consequences of market dysfunction and then assess economic regulations, before reviewing conditions in a few key sectors. Relevant current and pending reforms will be reviewed in order to determine whether additional adjustments would be useful.

Product market shortcomings hurt growth

Significant shortcomings are disrupting many markets

Despite free trade and customs tariffs around average for developed countries (Figure 1.1, Panels A and B), the Israeli market for goods and services is relatively closed, controlling for its small size. Its exposure to international trade is lower than the OECD average and has increased less since the 1990s, especially compared to small countries in the OECD area (Panel C). Foreign trade is also less geographically diverse than that of other Member countries, except Canada and Mexico (Panel D). Most importantly, Israeli presence in global value chains (GVCs) is weakening, even as GVCs are growing more dominant in international trade, and production processes are increasingly broken up between countries (Panel E) (OECD, 2013a). This reflects both the country's geopolitical situation and the resulting weakness of its trade with its neighbours, and regulatory barriers to trade

Figure 1.1. **Foreign trade indicators**



1. 2013 for Turkey.
2. The Herfindahl index of geographical concentration for country A's exports (by harmonised series (HS)) is the sum of the squares of the export shares of each country of destination in the total world exports (by HS) of the country i, i.e.: H = SUM[Xi/SUM Xi]**2, where i = 1…n countries of destination. If each of the n countries of destination received the same export value from that country of dispatch, the Herfindahl index would be equal to: H = 1 / n. The nearer to 1, the more geographically concentrated is its trade.

Source: UNCTAD, *Trade Analysis and Information System* (TRAINS) *Database*; WB-UNCTAD, *World Integrated Trade Solution (WITS) Database*; OECD, *Economic Outlook Database*, *Product Market Regulation Database* and *OECD-WTO Trade in Value Added Database*.

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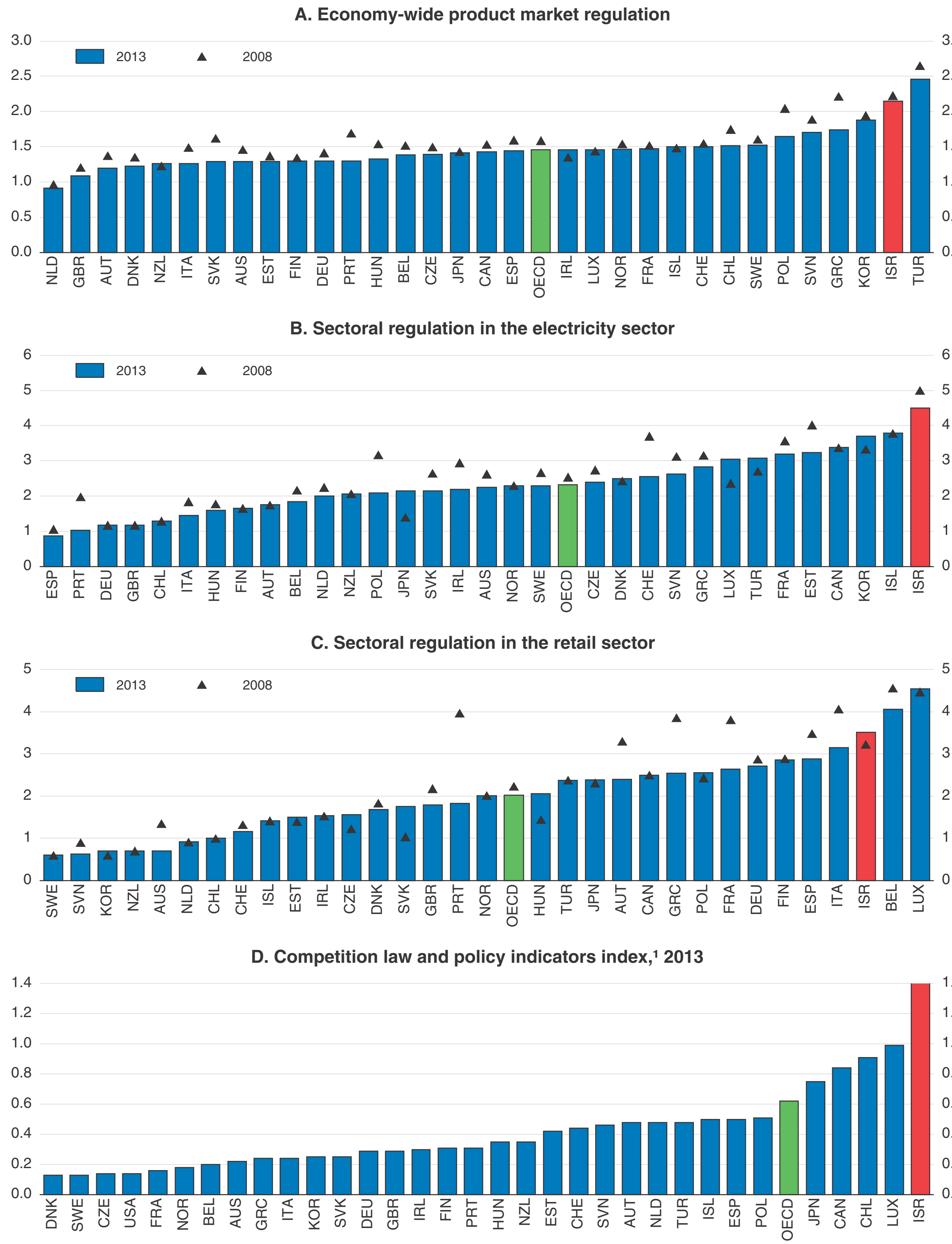
(Panel F), which consist of cumbersome import procedures and non-tariff barriers in most sectors, especially food and services. In some agricultural sectors, moreover, foreign competition is restricted by tariff protection and high subsidies (see below).

Product markets are also hampered by regulations that are far from best practice (Figure 1.2, Panel A). Regulatory reform has advanced only slowly in recent years, and Israel has fallen from 30th to 40th place in the World Bank's *Doing Business* ranking since 2008

Figure 1.2. **Product market regulation**

Index scale from 0 (least restrictive) to 6 (most restrictive)



1. The competition law and policy indicators index is the average of four components: scope of action, policy on anticompetitive behaviours, probity of investigation and advocacy.

Source: OECD, *Product Market Regulation Database* and OECD Competition Law and Policy Indicators.

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(World Bank, 2014). The restrictive effects of these regulations reach into many areas. Significant barriers exist in specific sectors, such as retail trade, professional services and several network industries, particularly electricity and rail (Panels B and C). The damage caused by other types of regulation, including the excessively complicated procedures for obtaining licences, is more pervasive, affecting many markets. This is in particular the case of environmental regulation, which is among the least amenable to competition among OECD countries (Kozluk, 2014). In addition, until recently the effectiveness of competition policy was limited as, for example, the reach and accountability of sector regulators was restricted and the antitrust authority's promotion of competition lacked a formal framework (Panel D), although this latter barrier has recently been eased.

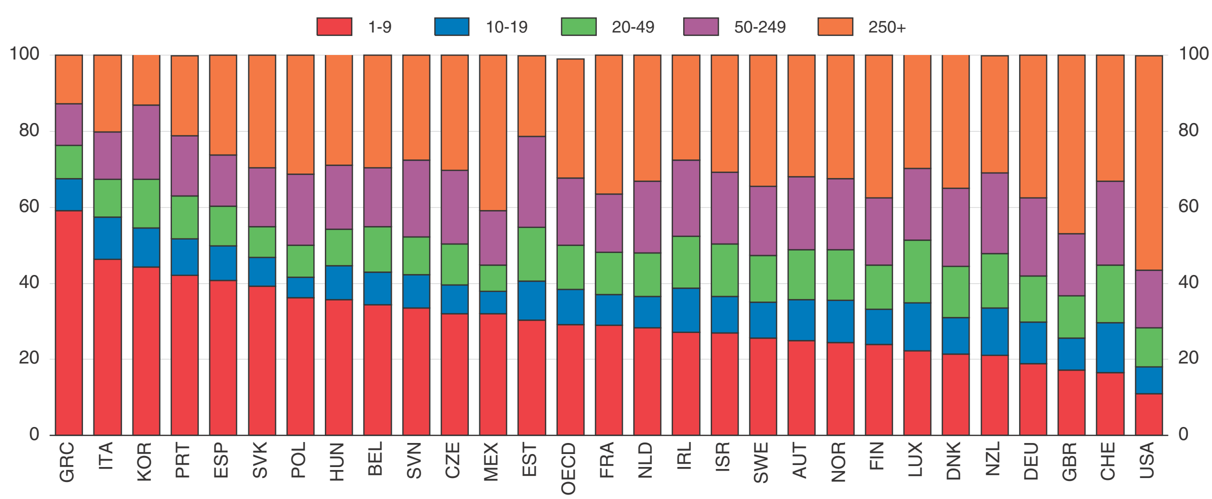
Monopolies exist in many sectors, and a small number of large business groups that control broad swathes of the economy. The food industry, banking, electricity, gas, cement, rail and sea ports, for example, are all dominated by major public and private enterprises. Despite its small size, therefore, the Israeli economy has an relatively high share of large companies (Figure 1.3). This also means that at the end of the last decade the five largest Israeli business groups held assets amounting to 63% of GDP, and the ten largest groups represented over 40% of total market capitalisation. This ownership concentration, which is based on complex business pyramids, is substantial. The pyramidal groups, which include major financial businesses, can have damaging effects on competition and the distribution of capital in the economy. The authorities have, however, recently taken steps to gradually reduce their economic weight and prevent large non-financial groups controlling major financial institutions (see below).

Flawed product markets reduce productivity and drive up costs and prices

The most serious effects of market dysfunction concern productivity. While productivity does not depend solely on competitive intensity, competition is a powerful driver in encouraging entrepreneurs to take risks, innovate, optimise the use of resources

Figure 1.3. **Employment by enterprise size class**

As a percentage of total employment, 2012[1]



1. Or latest available year.

Source: OECD (2015), *Entrepreneurship at a Glance 2015*, Figure 2.5.

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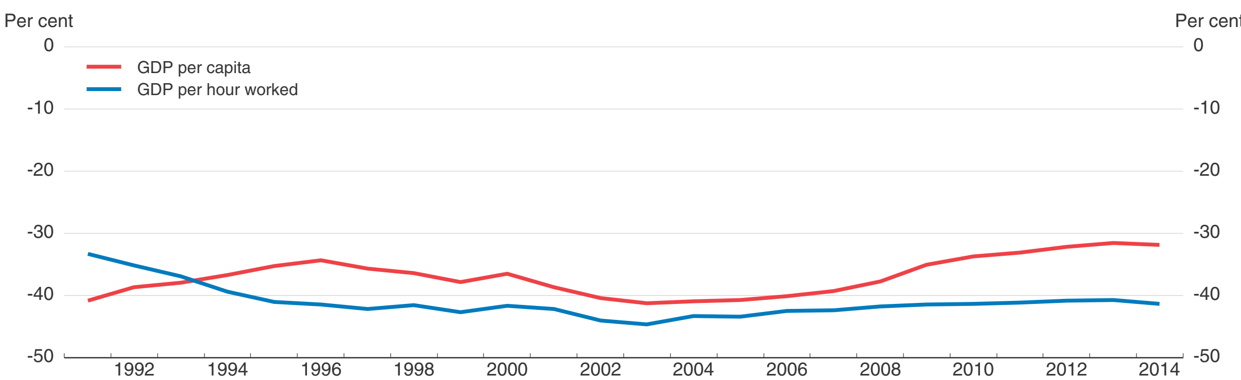
and improve efficiency. Despite the rise in average educational attainment in the workforce and the country's good macroeconomic results in the last decade or so, these measures of productivity have remained poor (Figure 1.4). Income per capita has gradually been catching up with the most advanced countries since 2003 but has not been matched by a similar convergence in productivity. The productivity deficit has hovered around 40% since 2008, despite strong growth in high added-value hi-tech sectors.

The reason for this poor productivity performance is the poor efficiency in sectors that are primarily focused on the domestic market. As in other countries, wide gaps have opened up in productivity growth between sectors since the mid-1990s (Figure 1.5). Differences in productivity by sector between Israel and the OECD average are positively

Figure 1.4. **Per capita GDP and productivity**

Gap relative to the upper half of OECD countries[1]



1. Percentage gap with respect to the simple average of the highest 17 OECD countries in terms of GDP per capita and GDP per hour worked (in constant 2010 PPPs).

Source: OECD, *National Accounts and Productivity Databases*.

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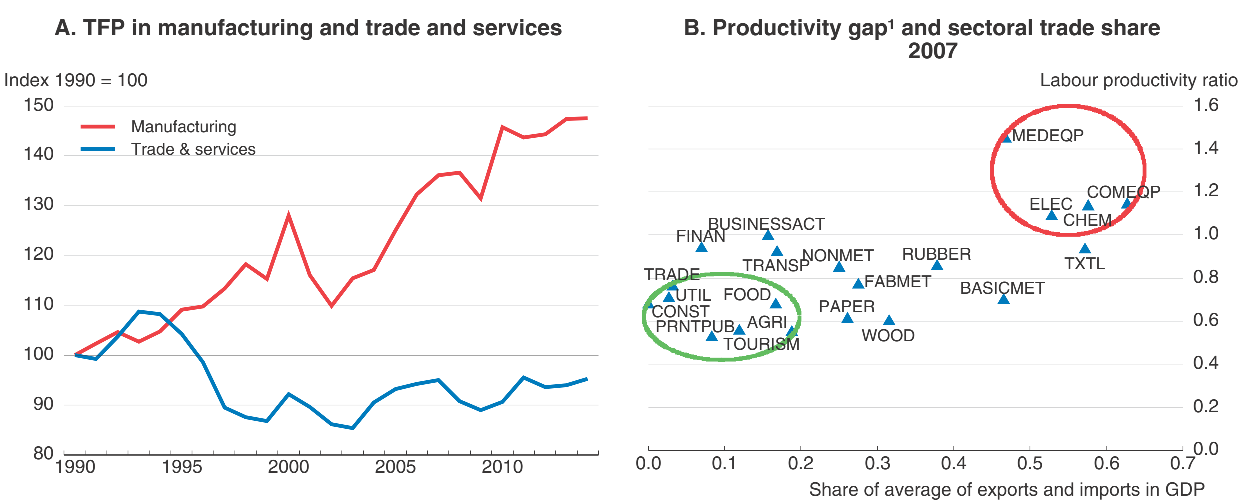
Figure 1.5. **TFP, productivity gap[1] and sectoral trade share**



1. Gap between Israel and OECD average.

Source: G. Brand (2015), "The Evolvement of the College Wage Premium in the Israeli Labor Market Supply and Demand Factors" (in Hebrew), Milken Institute; OECD and Central Bureau of Statistics.

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correlated to the sector's integration into global trade based on the average ratio of exports and imports to sector production. Furthermore, these differences in efficiency between exposed and sheltered sectors are wider than the OECD average, with Israel having lower investment rates for almost all sectors except manufacturing (BoI, 2013a and 2014a). Manufacturing's focus on exports promotes investment and innovation, fuelling competitiveness and productivity, with the result that a large share of these exports consists of hi-tech goods. Conversely, in many sectors the efficiency gains brought by globalisation have been limited by a restrictive regulatory framework and a relative lack of openness.

High prices are another sign of a lack of competition. In 2013 the cost of living was, for instance, respectively 20% and 30% higher than in Spain and Korea, which had a similar per capita GDP as Israel (Figure 1.6, Panel A). They are also a manifestation of the poor efficiency of the sheltered sector and relative closure to foreign trade. High prices are most pronounced in the food sector, and it was high food prices that triggered the tent protests in 2011. The protest movement prompted the authorities to appoint two Committees, Trajtenberg and Kedmi, with the former responsible for identifying the main thrust of reforms to respond to public anger and the latter for suggesting solutions to the problems specific to the food sector. As pointed out by the Kedmi Committee, food prices (in local currency) have risen faster than the OECD and EU averages since 2005 (Panel B). This, coupled with prices for many products that diverge from the OECD average (Panel C), reflects the food sector's many flaws: high tariff protection on some products, such as milk and meat; non-tariff barriers, including those linked to the application of religious laws requiring the consumption of kosher food; a strict regulatory framework at retail level; and a highly concentrated production and distribution structure. High food prices can only partly be explained by the VAT rate (18% in 2005, 16% in 2011, 18% in 2013 and most recently cut to 17%) being higher than in most other OECD countries, which often apply reduced rates to food.

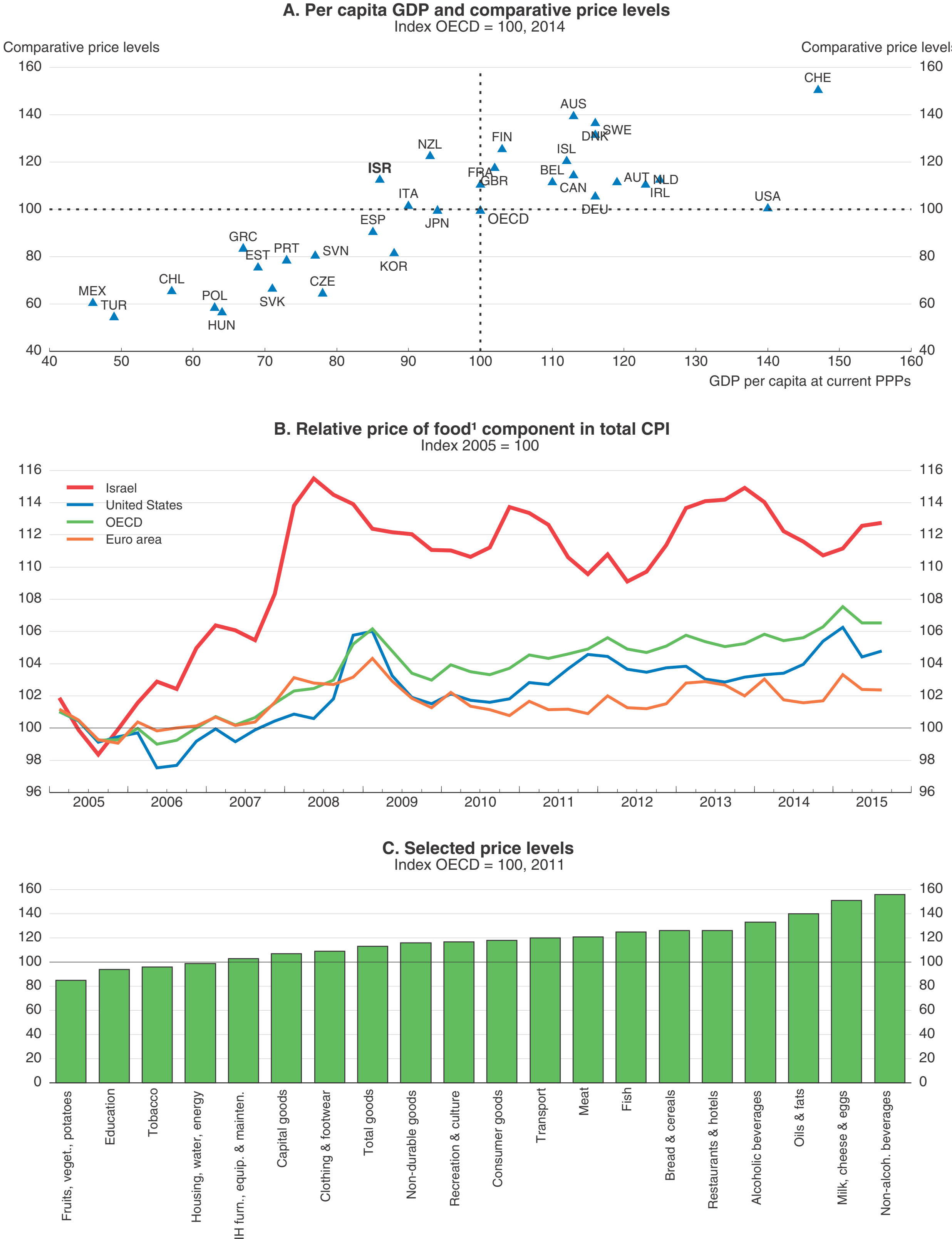
Room for progress on competition laws and their application

Since the end of the 1980s, Israel's competition policy has been heavily influenced by a drive to solve the problems related to high concentration in many sectors. The country's limited size –and hence also its markets, the lack of trade relations with its neighbours and the presence of large groups, many of which are privatised state enterprises, have encouraged the development of oligopolies and cartels (OECD, 2011a and 2011b).

This situation largely shaped the 1988 Restrictive Trade Practices (RTP) law, which long promoted criminal rather than civil action as the preferred means of combating antitrust behaviour. The implementation of this legislation by the Israel Antitrust Authority (IAA) (Box 1.1) focused on preventing the emergence of monopolies by strictly controlling mergers. Recently, new measures have, for instance, been aimed at reducing the weight of big conglomerates in the economy. On the other hand, the IAA had long been either less active or less effective in the detection and punishment of abuse of dominance, and in promoting a competition-friendly legal framework. However, this problem has been solved in recent years (see below).

In the past few years some reforms have aimed to rebalance the IAA's activities and enhance its effectiveness, based on analyses and internal assessments carried out by the 2006 Goshen Committee and, more recently, the pooling of experience with other

Figure 1.6. **Comparative price levels**



1. CPI food excluding restaurants, relative to total CPI.

Source: OECD, *Price and Main Economic Indicators Databases*.

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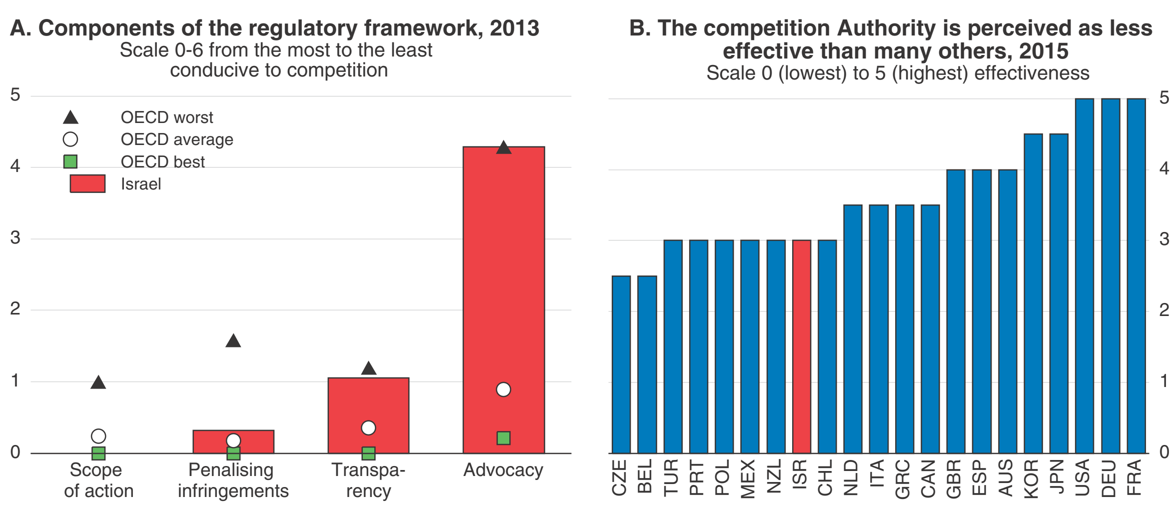
Box 1.1. **Israel's main competition bodies**

The Israel Antitrust Authority (IAA) was created in 1994 and is the only government agency responsible for applying the RTP law. In Israel, sector regulators have limited power to enforce competition. They may grant licences and approve some transactions in their field of expertise, while the IAA is focused on the application of competition law and has no consumer protection responsibilities.

The IAA is assisted in applying this law by an Antitrust Tribunal and the Jerusalem District Court (JDC). For criminal actions against anti-competitive practices the IAA carries out investigations and the JDC is responsible for judgements. The Tribunal has the authority to launch non-criminal proceedings related to competition, if, for example, an appeal is lodged against an IAA merger decision, or to approve, amend or reject the IAA director's administrative penalties and consent decrees to punish companies that have broken the law and would like to avoid criminal charges. Appeals may be lodged against decisions of the Tribunal and JDC in the Supreme Court.

OECD countries. Funding and staff levels have both increased since 2011. The number of staff has grown from 83 to 125, with a sharp rise in personnel responsible for economic analysis. The IAA's resources now fall within the OECD average range, after accounting for size differences between economies. The adaptation of competition policy to best practice has also led to significant progress in several areas, including the application of the RTP law, the management of concentration and monopolies, the effectiveness of antitrust penalties and IAA's role as a competition advocate. The OECD's indicators of the quality of competition law and policy (CLP) may not yet do justice to the most recent successes, but they suggest that further reform is still needed in some respects (Figure 1.7). Enforcement of the regulatory framework is perceived in particular to be less effective than in many other countries. A more systematic assessment of the competitive effects of regulation and reforming unduly restrictive regulations would be worthwhile. More generally, the

Figure 1.7. **The competition regulatory framework and its enforcement**



Source: OECD, OECD Competition Law and Policy Indicators; Global Competition Review (2015), *Rating Enforcement 2015*.

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government should heighten its attention and response to IAA advocacy for regulatory change.

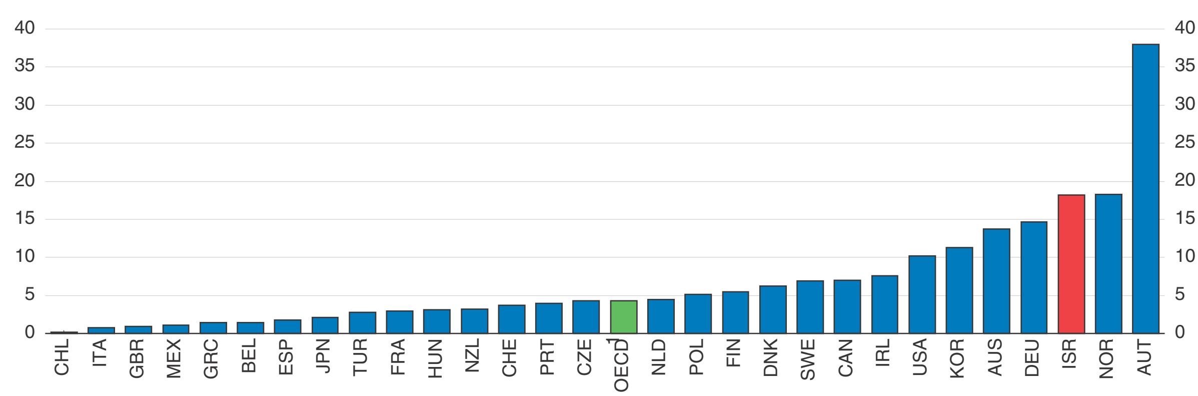
According to the OECD's CLP indicators, Israeli competition law, which covers both private and public enterprises (Figure 1.7, Panel A), is very broad in scope. In 2013 and 2014, moreover, the authorities extended its reach by limiting sector-specific exemptions in agriculture and in maritime and air transport (see below). The IAA also has various means at its disposal to apply competition law in the economy (Alemani et al., 2013): it can block mergers, instigate criminal proceedings against cartels, impose administrative sanctions in response to competition violations and lift them after negotiating consent decrees with the relevant parties involving the payment of a fine. The RTP law also allows members of the public, businesses and consumer groups to launch proceedings, including class actions, to obtain reparations for any damage caused by anti-competitive actions.

Major reforms have been introduced to reduce the high level of economic concentration

Generally speaking, however, the authorities have in the past focused their attention on the issue of mergers and acquisitions, using several lines of attack to remedy the resulting damage to the economy. The RTP law, for example, requires businesses to alert the authorities to planned mergers that could threaten competition. Most problems involve mergers that create businesses controlling over 50% of their market, which is a strict criterion requiring the review of a great many transactions without necessarily being a red flag for anti-competitive mergers (OECD, 2011a) (Figure 1.8). Since 2011, new ways of limiting the influence of oligopolies (or concentrated groups) have been developed following clarification of their definition in the RTP law and the granting of additional powers to the director of the IAA, who can now issue directives to oligopolistic companies and take action to eliminate cross-shareholdings between them (Capobianco and Chiasson, 2015). To promote competition in port services, for example, the IAA declared that the ports of Haifa and Ashdod constitute an oligopoly and, among other measures, banned them from participating in the management of the new ports to be built.

Figure 1.8. **Number of mergers filed**

Number of cases per million inhabitants



1. OECD median.

Source: Global Competition Review (2015), *Rating Enforcement* 2015.

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At the end of 2013 the Knesset also passed an important law to reduce economic concentration. This law signalled a significant change of approach, because previous efforts had aimed at neutralising the negative effects of concentration, rather than preventing them from arising in the first place. The law limits firms' use of pyramidal control structures, which create a disconnect between voting rights and shareholdings. These structures, which are particularly widespread and complex, have allowed a limited number of business groups to control a large proportion of the economy, as mentioned above (Bebchuk, 2012a). Under the law, these groups have until the end of 2018 to reduce the maximum number of levels in these pyramids to two. Another provision restricts the control of major financial institutions by large non-financial enterprises, as is already the case in the United States, Canada and Korea. Such cross-ownership can distort competition between businesses in that access to credit depends on whether they belong to one of these groups (Bebchuk, 2012b). Last, the law requires all government authorities to take competition considerations in account when granting licenses, franchises or selling an asset, which may affect market concentration and, in certain cases, to consult the IAA on the issue. When the licenses, franchises or asset sales concern essential infrastructure areas granted to large-scale or state-owned companies, the IAA must consider the impact of such actions on the concentration in the Israeli economy in consultation with the committee for economic concentration, which is chaired by the IAA's director. These are welcome changes, and they should be supported with increased efforts to detect, penalise and therefore deter anti-competitive practices (GCR, 2014).

Antitrust practices could be better detected and penalised

Some aspects of the leniency programme should be changed

In Israel, the detection of anti-competitive practices is based on complaints by the public, but also, more often, on information collected by the IAA's investigators (OECD, 2013b), which has far-reaching powers comparable to those of the police. The IAA director may demand or seize information pertinent to an enquiry; refusal to co-operate can attract a prison sentence. The IAA can also tap telephones and search people's homes with a court warrant. In addition, the authorities have a leniency programme for the detection of cartels, but it is not used very often: only two cartel investigations were started under the programme between 2003 and 2013, compared to 15 conducted by the IAA's investigators.

Measures should be considered to promote uptake of the leniency programme. As noted by the authorities, it is likely that cultural factors are partly to blame for its ineffectiveness (OECD, 2011a). The economy is small, and businesses that co-operate with the IAA to expose a cartel are worried about being blacklisted as informers and boycotted by other firms. Some aspects of the programme itself, however, help to explain its underutilisation: for example, there is no recourse to leniency once an investigation has been opened, even if it might speed up and improve results. Neither does the programme offer users full immunity from prosecution on charges indirectly linked to the cartel, such as conspiracy (OECD, 2011a).

Harsher penalties would strengthen compliance

Harsher penalties, including fines, would deter cartels and help to promote uptake of the leniency programme. Under Israeli competition law, violations – especially cartels, which are treated as white-collar crime – carry strong penalties of up to five years in prison. But the maximum fine applied under these procedures is only NIS 2.26 million (less than USD 0.6 million). Until now, moreover, nobody has been sentenced to more than nine months in prison for cartel offences, and many sentences have been commuted to community service. Substantially increasing the associated fines should be considered: the courts may be less reluctant to levy heavy financial penalties in these cases than to impose prison terms. The deterrent impact of harsher financial penalties should not be underestimated, as they would reinforce the impact of the relatively recent increase in class action lawsuits. Another welcome suggestion supported by the IAA is increasing potential damages resulting from class actions. In addition to these changes, the IAA expects to see the introduction of tougher prison sentences against cartels, and the Supreme Court wants judges to implement them.

A positive development in Israeli law allows the IAA director to impose monetary penalties for competition law infringements since 2012 (including cartel violation, abuse of dominant position or if mergers are carried out without the IAA approval), increasing the options open to the authorities. These new administrative penalties have a useful role to play in the case of minor offences, as criminal charges and prison sentences have not been applicable in practice in these cases, and these violations have rarely been punished, or only very lightly, using consent decrees (OECD, 2011a; GCR, 2014). The first such penalties were recently applied.

There is room for progress in the IAA's advocacy role and competition policy transparency

Until 2013, the IAA's power to undertake market analysis and draft opinions on proposals for competition laws was more limited than in other OECD countries (Figure 1.7, Panel A). Despite this, the IAA has recently been active in the temporary committees responsible for assessing the need for reforms to stimulate competition in some sectors, and has also replied to ministries seeking its opinion on their reform proposals. Its role in promoting competition was institutionalised and consolidated by the new law at the end of 2013. It has also been able to launch market analyses on its own initiative since March 2014 and has produced two detailed reports on the credit card sector and the regional concentration of supermarkets (see below).

These are positive changes, and the IAA's action in speedily suggesting measures to support competition in some sectors is to be welcomed and encouraged. This progress could, however, be taken further if the government were legally required to respond to the IAA's opinions and recommendations on proposed new laws and regulations affecting competition or market analysis produced on its own initiative. This would help to promote transparent debate on competition policy and push reforms forward.

According to the OECD's indicators, it should also be possible to improve competition policy transparency (Figure 1.7, Panel A). The Israeli system's shortcomings in this respect are not linked to government interference in the IAA's decisions, which is only possible under exceptional circumstances, and for strategic or diplomatic reasons. The IAA's political independence seems to be well protected, and it is important to preserve this. However, competition policy transparency could be increased by the more systematic circulation of directives to businesses clarifying the assessment criteria applied to certain practices. Great progress has already been made in this direction: the IAA has issued guidelines on its criteria for assessing horizontal mergers, excessive pricing by monopolies, on violations likely to be punished by monetary penalties and on how it sets these fines. It is worth pursuing these actions, especially those regarding the assessment criteria for vertical agreements.

Making state intervention more effective

It is worth pursuing privatisations and the reform of public enterprises

Since the middle of the 1980s the government has pursued reforms to rein in the traditionally interventionist State in several sectors of the economy, leading to a huge programme to privatise state-owned enterprises (SOEs), which are supervised by a special body – the Government Companies Authority (GCA) – that reports to the Finance Ministry. In 1992, SOEs represented almost 17% of GDP, over 4% of jobs and almost 20% of exports; but by 2013 these figures had fallen to 2.2% of GDP, 1.7% of jobs and less than 7% of exports. Reforms have also improved the regulatory framework imposed by the GCA to ensure competitive neutrality between public and private firms in the same market in terms of regulation, financing and taxation (OECD, 2011c).

Despite these reforms, the predominance and weak efficiency of SOEs in some key sectors continue to harm the economy. The SOEs' scope for action is greater than in the average OECD country, as they are strongly represented in defence and many network industries – maritime and rail transport, postal services, water management, electricity and other energy-related activities (Figure 1.9, Panels A and B). These are sectors that are relatively sheltered from competition, with a prevalence of either monopolies or oligopolies. This environment is unlikely to promote efficiency and has fostered the emergence of politicians appointing executives to roles that bear no relationship to their professional qualifications (OECD, 2011c), and also of employees seeking rents. Average SOE pay was 2.9 times the overall average in 2013 (State of Israel, 2014a). Many of these firms are significantly overstaffed, including Israel Military Industries and Israel Post Company, and some, such as Ashdod port, have long favoured relatives of serving staff in recruitment. The quality of some of the services provided is also a frequent source of dissatisfaction: the Israel Post Company, for example, has limited opening times that fail to meet the needs of its consumers, and waiting times are excessively long. These firms incur regular losses, and some are heavily indebted: Israel Electricity Corporation's debt represented almost 7% of GDP at end-2013 (though it has come down since then), and Israel Railways owed almost 13 times the company's annual income.

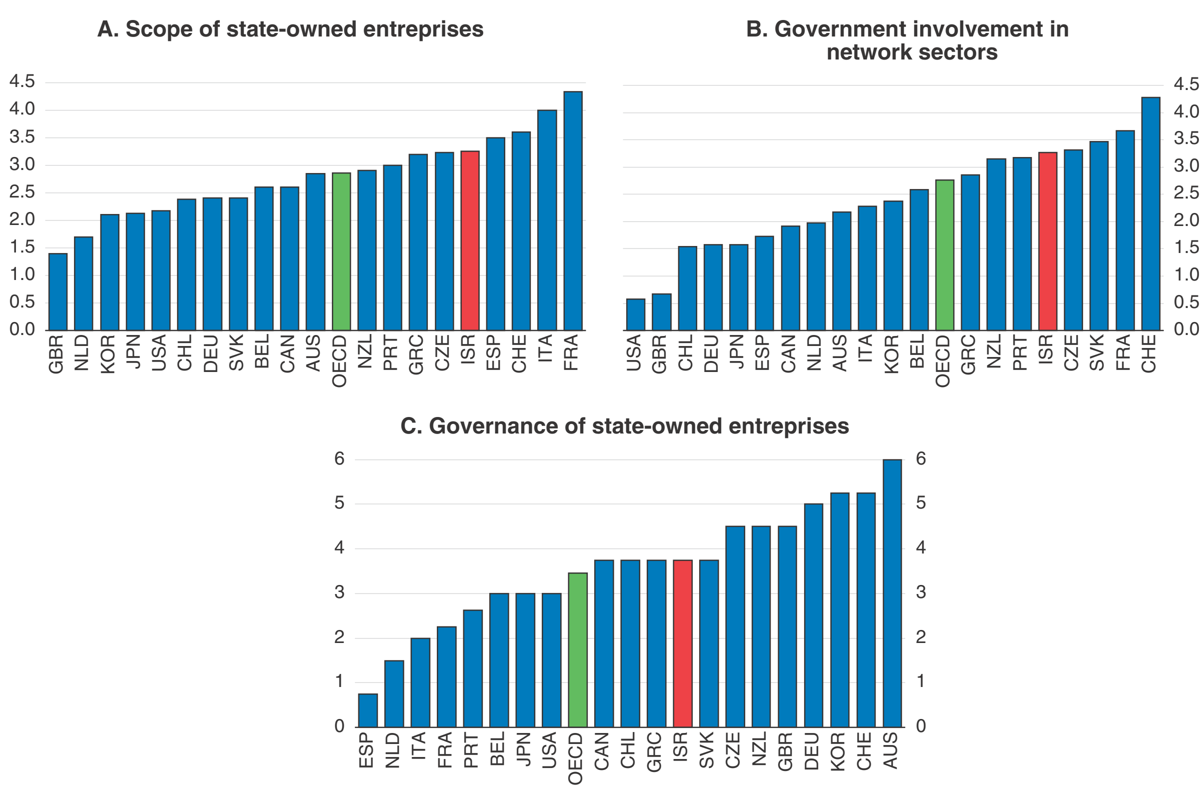
This situation has many causes, and the initiatives taken to solve them extend to SOE governance reforms and a new privatisation scheme. The former include measures to boost professional credentials in the boardroom: since late-2013, the appointment of SOE directors has been based on a list of candidates preselected according to their professional skills, with the final decision falling to the responsible minister. This system discourages appointments being made according to purely political criteria, which was a problem in the past (OECD, 2011c). A new three-year privatisation scheme of NIS 20 billion (1.75% of GDP) was recently drawn up, involving the full divestment of some enterprises (including the ports and the postal service), and a series of partial privatisations through IPOs (electricity, water and defence). Besides the public revenue generated, the authorities also expect it to have a positive impact on the firms' management and performance as a result of their increased exposure to market forces and stricter transparency requirements, as the experience of other countries suggests (Megginson, 2011).

These are positive changes, but they must be supported by further reform if they are to deliver the best results. The privatisation scheme must be rolled out alongside reforms that introduce more competition into those fields where it is feasible (see discussion by sector below). And while it is undeniably important to increase the professionalism of those managing public firms, the government still intervenes too much in the control and strategy of public enterprises, as suggested by OECD indicators (Figure 1.9, Panel C). As a general rule, public enterprises need to have clear objectives and gain sufficient managerial independence and flexibility to reach these objectives, for which their management should be held accountable. Some of the reforms that are being considered to boost the powers of the GCA and give it a more active role as shareholder and in the dismissal of inefficient managers will help to achieve this.

The authorities should also review the management of public service obligations that are often imposed on SOEs. These obligations consist, for example, of nationwide price equalisation for electricity, water, telecommunications and postal services, despite regional cost differentials. If justified, public-service obligations should be financed as transparently, for example by granting a specific subsidy for a firm's public service obligations (identified both in the government's budget and in the company's financial statements).

Figure 1.9. **Restrictiveness of regulation of state-owned enterprises**

Index scale from 0 (least restrictive) to 6 (most restrictive), 2013[1]



1. 2008 data for the United States.

Source: OECD, *Product Market Regulation Database*.

StatLink http://dx.doi.org/10.1787/888933317882

The rationalisation of public procurement management has been too slow

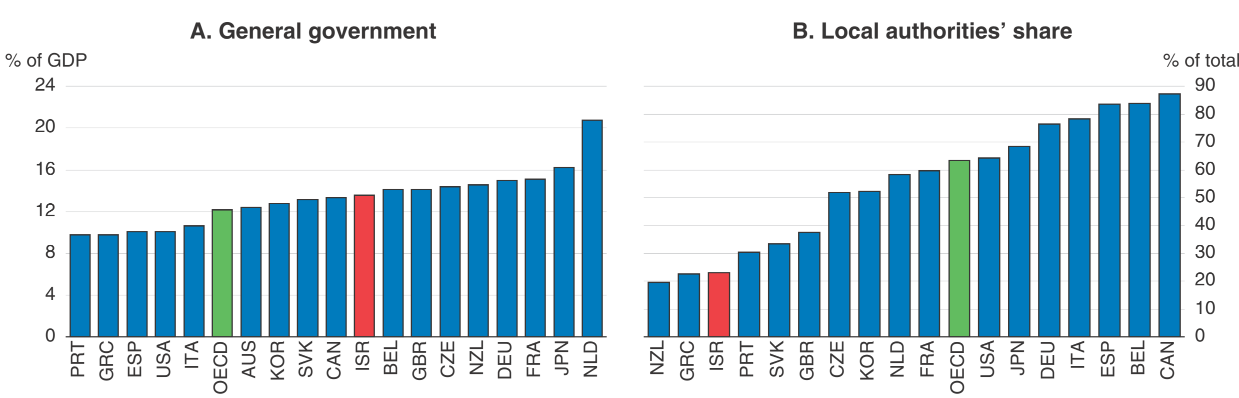
Competition has a vital role to play in procurement, given its effects on public finances and the weight of these markets, estimated at 13.5% of GDP (Figure 1.10, Panel A). Several provisions can help to encourage the efficient management of public procurement in Israel. The legal framework for adjudication procedures is based on 1992 legislation that enacted a WTO agreement and aims to optimise the use of taxpayer money and to ensure non-discriminatory, fair and transparent contract attribution processes. Public procurement is subject to greater central government control than in other OECD countries, which helps to prevent orders being fragmented into regional portions and undermining economies of scale (Panel B). As elsewhere, Israeli policy does not focus exclusively on obtaining the lowest price or the best quality, but also promotes subsidiary objectives, such as support for small businesses, women's entrepreneurship and improving the environment.

As in many other OECD countries, a lack of quantitative information makes it hard to judge the efficiency of public procurement. Nonetheless, some of the figures available point to potential efficiency gains in the attribution of contracts. Just 20-30% of total government tenders are subject to open competition; the rest is managed by selective tendering or the direct award of contracts. One reason for this is that, as in other OECD countries, orders worth less than sector-specific thresholds are not subject to calls for tender. Israel's highly centralised government ordering system, however, should limit the effects of this rule somewhat. For its part, defence spending, which is high, is exempt from some procurement rules. The rules do not apply, for example, to the purchase of foreign equipment financed by foreign aid nor to equipment financed by internal resources if there exists only a single Israeli supplier. Defence procurement is, however, subject to Ministry of Finance oversight. Several other exemptions exist for specific goods and services, such as police equipment (ICGL, 2015).

Their analysis of public procurement procedures led the authorities to embark on a reform programme to generate efficiency gains and budget savings. The programme, which is based on March 2013 recommendations made by a Governance Committee tasked with assessing various aspects of public management, aims to correct the failing caused by

Figure 1.10. **Size of government procurement**

2013 data



Source: OECD (2015), *Government at a Glance 2015*, Figures 9.1 and 9.2.

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the over-decentralisation of public procurement by specific agencies in the ministries. To this end, the first objective has been to streamline and standardise the working methods of the decentralised procurement units in order to promote information exchange and improve inter-ministerial co-ordination. To support this goal the Department of Public Procurement has launched a review and simplification of the administrative procedures for calls for tender. A second objective is the introduction of a genuinely centralised ordering system based on e-procurement. In recent years the computerisation of adjudication procedures has resulted in the proliferation of different technological platforms in government departments, increasing complexity and inefficiency. To solve this problem, the Department will centralise this infrastructure and promote a standard approach to awarding contracts through framework agreements. A third objective is to encourage the professionalisation of staff responsible for managing public procurement in response to the job's growing complexity – meeting multiple public objectives and mastering new adjudication techniques that require special skills. The new system also cuts contract management costs by eliminating some redundant procedures.

These reforms are useful, but their implementation has been limited so far. Just 10% to 15% of total public procurement at the central government level is processed using the new, more standardised and centralised adjudication procedures. These procedures should be extended, as depending on the agency, their utilisation can generate savings of 12-40%.

After completing the implementation of the reform programme in central government, the authorities should extend it to local administrations, which are not currently under any obligation to use the new procedures for awarding public contracts, although they may choose to do so. It would also make sense to review all exemptions from competition rules to ensure they are justified. Special attention should be paid to defence spending, given the privatisations underway in this sector. Maintaining exemptions from competitive calls for tender for some kinds of military contracts could, even in the case of partial privatisation, transfer the rent-seeking they engender from the public to the private sector.

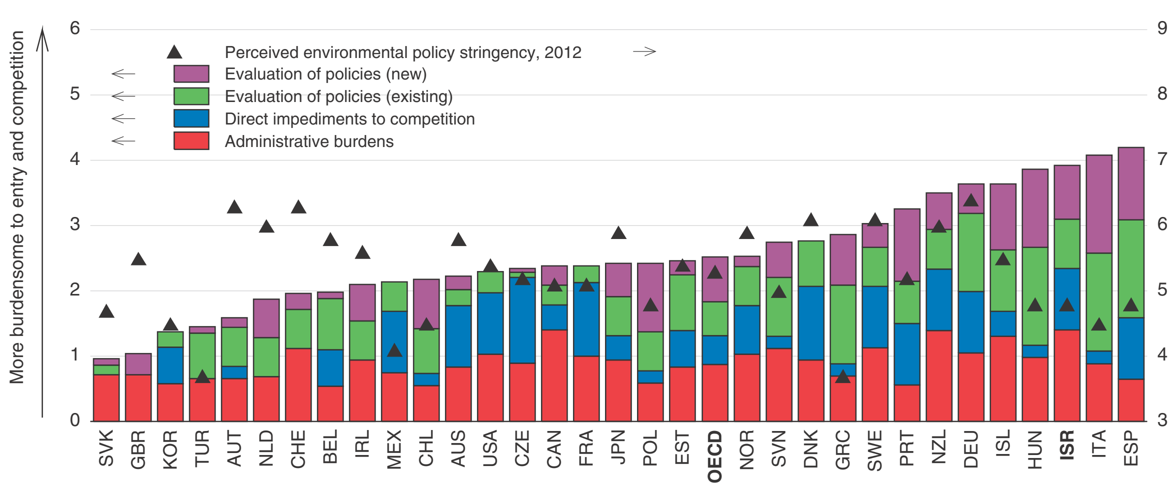
Steps should also be taken to improve the collection of quantitative information about public procurement, without which there can be no rigorous, regular assessment of current policies. Data as basic as the share of public contracts awarded to foreign firms, for example, are not available. Better information and statistics would be particularly useful in the light of the risk of consistency conflicts between the essential target of the cost-effective management of public procurement and secondary goals that aim, for example, to facilitate access for SMEs (OECD, 2015a). From this point of view, the Israeli authorities should contribute actively to an ongoing OECD project that aims to make up for the widespread lack of data about public procurement in Member countries (OECD, 2014a). The calculation of comparable indicators across countries on efficiency, openness to competition, the transparency of public contract awards, the assessment of contract completion and the professional qualifications of those handling the public contracts would provide valuable information for designing future reforms.

Regulations should be made more competition-friendly, including in the environmental domain

As stressed by the business sector and recognised by the authorities, the regulatory burden needs to be substantially reduced to promote a more business-friendly environment. To address this issue, in October 2014 the government adopted an ambitious plan to reduce the administrative and compliance costs associated with the existing bureaucratic burden of regulation. This plan includes two central components. The first aims to lower the cost of existing regulations in all ministries by 25% by 2019. The second requires carrying out an assessment of the expected impact of regulation before formulating new regulatory texts as from 2016. This policy initiative, which relies on the OECD recommendations on regulatory policy and governance, is welcome. However, making progress will depend crucially on the implementation and quality of regulatory impact assessments (RIAs). The decision of the authorities to consult with the business sector to formulate their action plan was thus important. Since the task of reducing the regulatory burden will be assigned to each ministry, it would also be desirable to ensure that a team well-trained in the domain of RIA closely assists and checks the quality the work performed at least until departments become more familiar with these new procedures.

Environmental regulation illustrates this excessive burden issue. Recent OECD indicators analysing its cost show that it creates unnecessary barriers to entry and distorts competition in product markets (Figure 1.11). This is due to heavy administrative procedures, such as absence of single contact points, single applications or integrated permits. Vintage-differentiated regulation and tax/subsidy measures are also common and tend to discriminate between new entrants and incumbents. Procedures and requirements for policy evaluation should also become more effective. There is thus ample room to pursue environmental targets in a way that is more amenable to competition (Kozluk, 2014). The need for streamlining existing environmental permits into one integrated permit and creating one unified and simplified approval procedure ("green licencing") has been recognised by the Israeli government. In April 2014 the authorities thus approved a draft reform based the European Union's Integrated Pollution Prevention and Control (IPPC) methodology. However, Knesset approval of this text was postponed by the early elections of March 2015.

Figure 1.11. **Burdens on the economy due to environmental policies and their perceived stringency**



Source: T. Kozluk (2014), "The Indicators of the Economic Burdens of Environmental Policy Design – Results from the OECD Questionnaire", *OECD Economics Department Working Papers*, No. 1178, OECD Publishing; and OECD calculations.

StatLink http://dx.doi.org/10.1787/888933317906

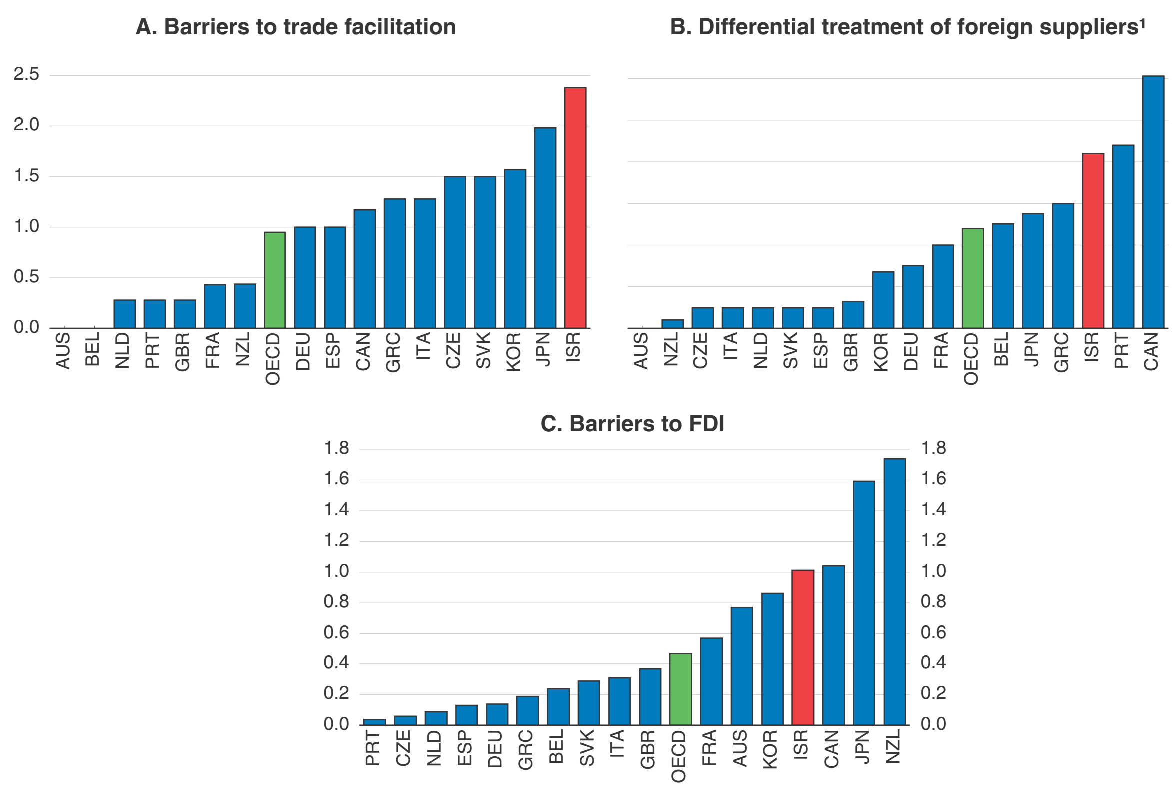
Lowering import barriers would boost competition from abroad

The Trajtenberg and Kedmi Committees highlighted the significant barriers facing imports, even though average customs tariffs, at around 4% in 2012, were fairly low and declined in 2013 (WTO, 2014). However, non-tariff barriers are more restrictive than average for OECD countries (Figure 1.12). Laborious, complex and costly procedures require importers to file applications for prior authorisation and check that foreign products comply with Israeli standards and technical obligations before commercialisation. These standards often differ from their international counterparts, generating additional costs. They are issued by 37 different bodies, and they are therefore heterogeneous and often applied arbitrarily, depending on the sensitivity of the particular product being imported. Transparency is also low; standards are relatively hard for the public and commercial entities to access, hampering the growth of parallel imports that can compete with exclusive importers of foreign products, who dominate in several sectors, and who often adopt practices that may be legal but deter retailers from buying from their rivals by abusing their dominant position (State of Israel, 2014b).

These regulatory barriers to trade affect services as well. When 18 sectors were measured against the OECD's Services Trade Restrictiveness Index, they were on average far more restrictive than in other OECD countries, because of both general and sector-

Figure 1.12. **Non-tariff barriers to trade and investment**

Index scale from 0 (least restrictive) to 6 (most restrictive), 2013



1. Discrimination against foreign firms in taxes and subsidies, public procurement, entry regulation and appeal procedures.

Source: OECD, *Product Market Regulation Database*.

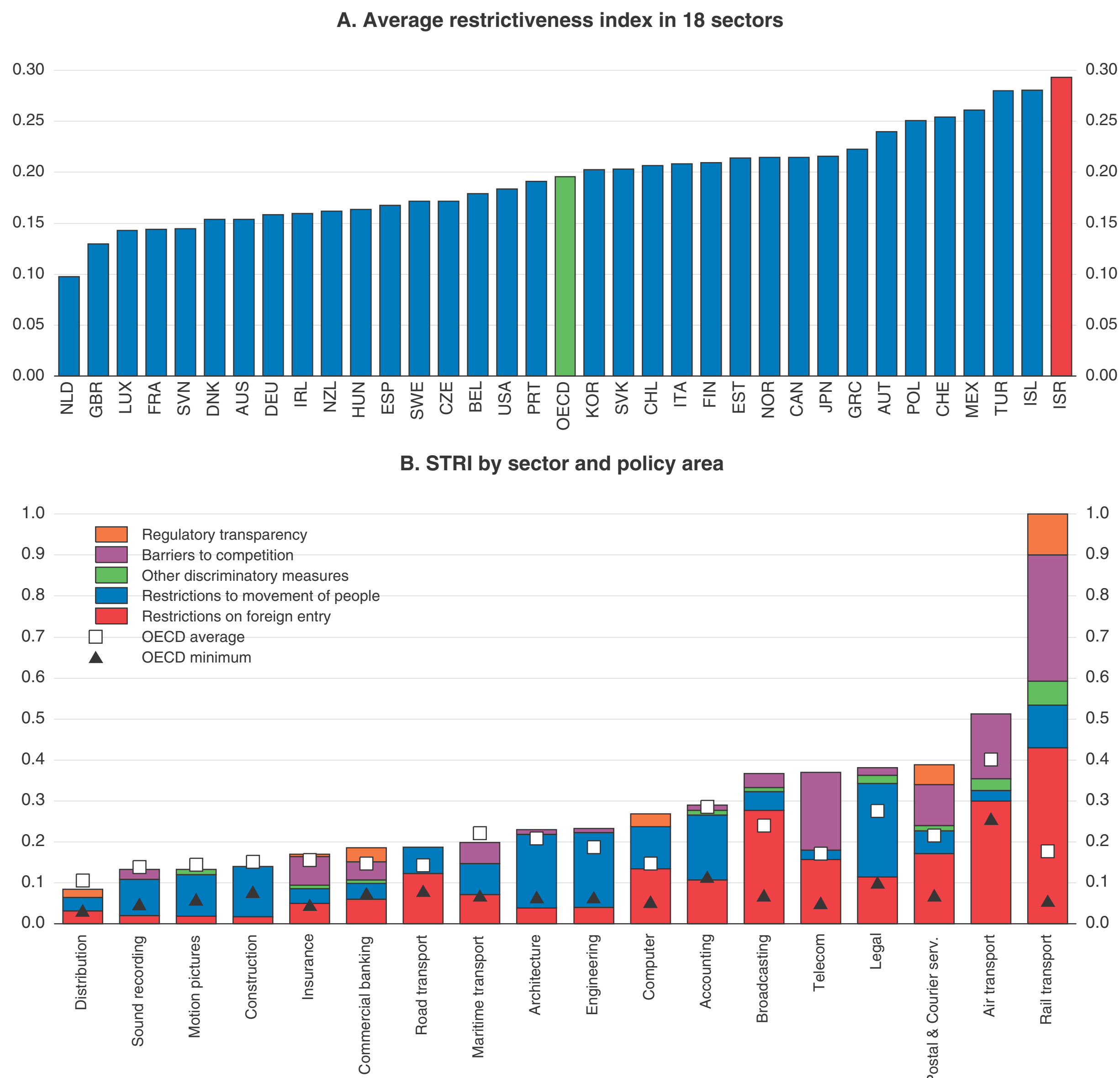
StatLink http://dx.doi.org/10.1787/888933317919

specific restrictions (Figure 1.13). These restrictions act as a brake on the entry into Israel of foreign workers and discourage foreign services companies from opening operations there, with restrictions that were tighter than the OECD average in 14 of the 18 sectors evaluated. This distorts competition between foreign and local services providers in fields such as rail freight, air transport, telecoms and some professional services.

The authorities have embarked on regulatory reform by appointing a Committee (chaired by Amit Lang) to recommend ways of lowering import barriers. In December 2014,

Figure 1.13. **Services trade restrictiveness index**

Index from 0 (open) to 1 (closed), 2015



Source: OECD, *Services Trade Restrictiveness Index Database*.

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the government accepted its recommendations, which included the following measures (State of Israel, 2014b):

- Simplification of import procedures, and switching from *ex ante* to *ex post* checks for compliance with the standards required of foreign products. Shifting responsibility for the enforcement of standards and obligations from the government to firms will be offset by heavier penalties for violations.
- A review of the standards applied to imported products to ensure their compatibility with those in force in other advanced economies.
- Increased transparency and importers' accessibility to regulatory procedures and obligations, and the creation of a website allowing exchanges among importers, customs and other public bodies.
- Reform and centralisation of the institutions responsible for drafting import regulations in order to rationalise and standardise their operation across different sectors.
- Careful examination of competition law in order to boost the IAA's regulatory tools and counter practices that restrict competition among importers.

Some of the Lang Committee's recommendations for increasing import competition by facilitating overseas consumer shopping for personal use were also implemented in 2014. They included raising the threshold for exempting overseas Internet orders from customs duties from USD 325 to USD 500. Other recommendations are still in progress as part of a wide plan in all relevant ministries and regulatory agencies. The authorities have also pursued their efforts to establish new trade agreements with emerging market countries and to extend their field of application to the reduction of non-tariff barriers. One such agreement was signed with Colombia in 2013 and included lower customs tariffs and regulatory barriers. Similar negotiations are underway with India.

These changes adopted in response to the Lang Committee's recommendations are positive steps. The promotion of new free-trade agreements and their extension to non-tariff issues are also very welcome. The authorities could, however, be more ambitious and implement unilateral reductions of many customs tariffs, given their positive impact on the economy, both in terms of lower consumer prices and the increased competition among businesses fuelled by lower costs for intermediate consumption. Like other OECD countries, Israel should also work harder to sign multilateral trade agreements. As international trade is increasingly dominated by global value chains and production processes that are increasingly dispersed among countries, maintaining a competitive economy and business sector will depend on reliable, easy and affordable access to imported inputs (OECD, 2013a).

The authorities should also reduce Israel's restrictions on foreign services providers by revising some general provisions that limit their activity, such as the maximum twelve-month limit on initial residency visas for independent and contract workers and those working on secondment for foreign companies. This mobility restriction is an obstacle to foreign services providers. It would also make sense to lower the restrictions on property acquisition by foreigners and to review the residency conditions CEOs have to meet in many services sectors. Specific barriers to competition in sectors such as rail freight and air transport should also be lifted.

Strengthening competition in the food sector

For several years discussion of Israel's economy has been dominated by competition matters and high prices in the food sector. Issues related to this sector range from the external angle, given the import barriers for food products related to agricultural policy, non-tariff barriers and specific religious dietary rules that affect the market, to regulatory and competition problems generated by the high level of concentration in the production and retail distribution of food products. These obstacles hamper the functioning and efficiency of the food and retail sectors, which is in turn contributing to the weaker economy-wide productivity growth in Israel compared with the OECD-country average (Regev and Brand, 2015). Several actions have been recently taken or are underway to address these issues in this field, but, as discussed in this section, further reforms would be desirable.

Reducing tariff barriers and speeding up agricultural policy reform

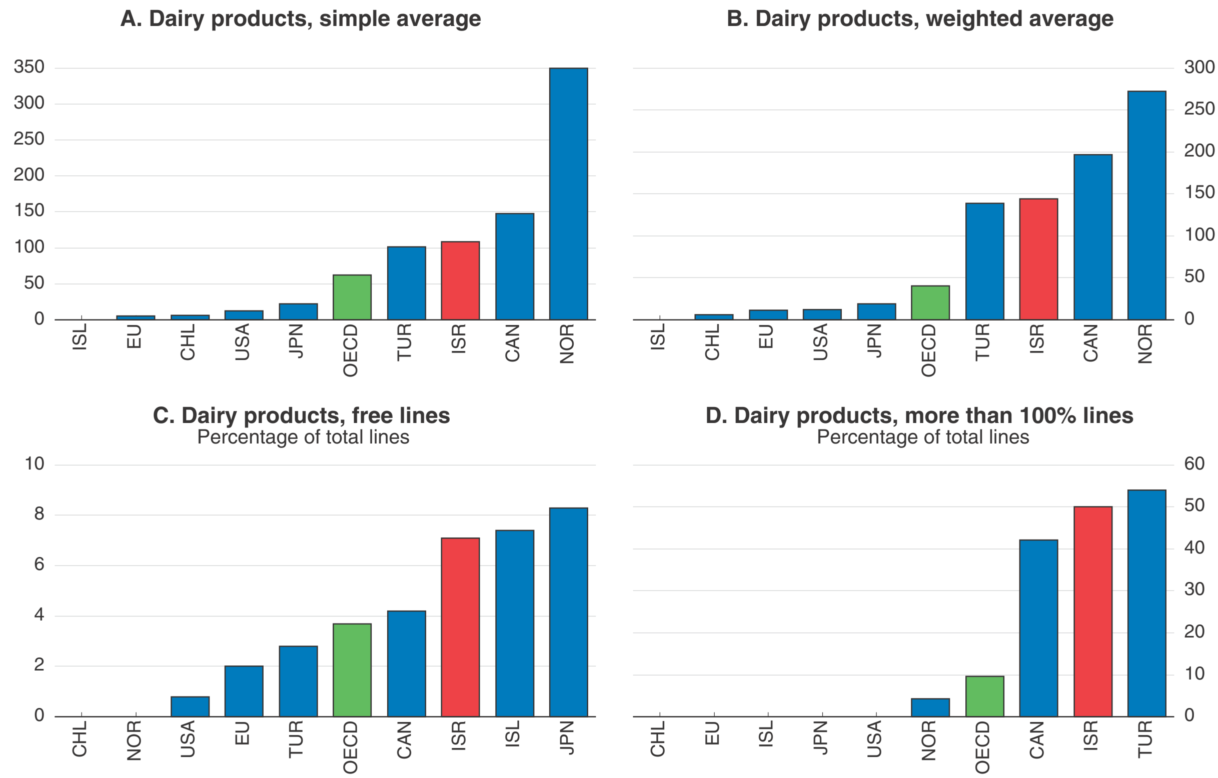
Behind the lack of foreign competition in the food sector lie both regulatory difficulties and problems with some customs tariffs. International benchmarks do not point to a high average level of tariffs, but taxes on imported agricultural products are more heterogeneous than the OECD average (Figure 1.14, Panels A-C). High tariff protection mainly concerns dairy, eggs and meat. Half the imported eggs and dairy product lines are subject to tax rates over 100%, whereas this kind of tariff applies only to 10% of these products on average in the OECD (Panel D). Average meat tariffs are also higher than the Member country average, and meat imports are also restricted by procedures for kosher certification.

These barriers raise prices on certain foodstuffs and are linked to Israel's agricultural policies. These policies have three main goals: to ensure the self-sufficiency of domestic production of dairy, meat and eggs; to increase fruit and vegetable exports; and to maintain the population in peripheral areas (OECD, 2013c). Achieving these goals is not as costly in terms of resources as elsewhere or as in the past, since total agricultural support in 2012-14 came to around 8% of agricultural production, or around half the OECD average and less than half the level of the mid-1990s (Figure 1.15, Panel A). The composition of support is nevertheless based more heavily on instruments that generate distortions in production and trade than in other countries. Public intervention with a direct impact on prices or agricultural production represented over 80% of the total, compared to around 25% in the United States and the European Union (Panel C). Most of this support is consumer-funded. Altogether, it adds an average 7% to domestic production prices compared to international prices, which is higher than in the European Union and the United States (Panel D). In the case of the most protected products, like milk and beef, the gap between domestic production prices and international prices came to an average 37% and 73%, respectively, between 2011 and 2013.

The authorities' efforts in the last several years to rein in agricultural subsidies should now shift to reducing their distortive effects and costs to the consumer. Despite the government's commitment to gradually increase duty-free quota on a range of staples, especially dairy products, as recommended by the Kedmi Committee, faster progress would be desirable (OECD, 2014b and 2015b). Israel should follow the example of many other OECD countries and reduce its market intervention (quotas, guaranteed prices, customs tariffs) – replacing it when necessary with direct payments to farmers. Measures going in this direction in the goat dairy industry recently announced by the government should be extended to other farm sectors. These changes should be supported with

Figure 1.14. **Tariffs on dairy products**

2012[1] data



1. 2013 for Turkey.

Source: UNCTAD, *Trade Analysis and Information System (TRAINS) Database.*

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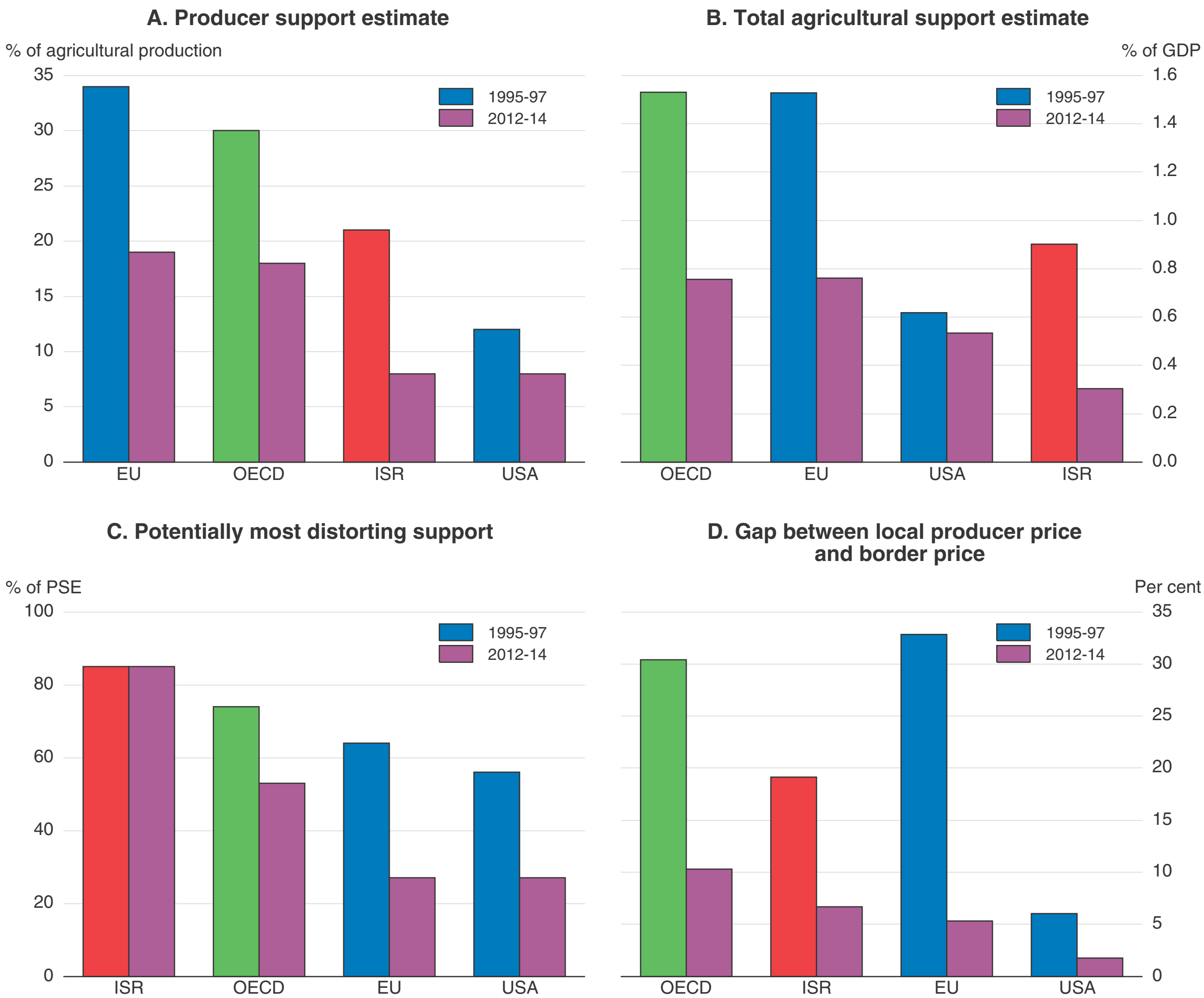
reforms that boost farmers' productivity by improving the operation of the domestic market. More generally, it is also essential to relax the government's tight control over the distribution of the main inputs – land, water and foreign labour – among producers, 80% of which are kibbutz or *moshav* (another form of co-operative settlement) (OECD, 2010). A first step would be to reduce the red tape involved in agricultural land and tenant farmer transactions (OECD, 2014b).

The authorities have also recently pursued initiatives to reduce non-tariff phytosanitary barriers to food imports. Under the current rules, importers must give the Health Ministry an exhaustive list of the ingredients in their products, which must be subjected to a battery of lab tests, the results of which must also be provided to obtain prior import authorisation. These costs encourage the emergence of monopolies. A Committee chaired by Harel Locker was tasked with examining these regulations and suggesting simplifications to the government, which accepted them in May 2014.

The Locker Committee's recommendations were based on a distinction between "sensitive" and "non-sensitive" products (i.e. those presenting a low health risk) and were to cut some of the red tape around import procedures for the latter category. It also recommended that Israel adopt the health rules in force for non-sensitive products in other developed countries, in order to eliminate testing for these products. Import procedures will no longer require prior authorisation, but only a statement by the importer

Figure 1.15. **Main characteristics of agricultural support**



Source: OECD (2015), *Agricultural Policy Monitoring and Evaluation 2015.*

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declaring their compliance with the standards in force. These products will be monitored *ex post*, and the information to be provided in the event of an inspection will be simplified to facilitate parallel imports. This reform should be supported and fast-tracked by the Knesset.

The health rules governing sensitive products also need review. It certainly makes sense to distinguish between sensitive and non-sensitive products insofar as some products require additional attention, especially during transport, and higher health standards. But the list of sensitive products, which represents over half of total imported foodstuffs, includes dairy, eggs, meat, honey, bottled water and baby food – goods that are traded internationally every day, within the European Union, for example, without such cumbersome and costly procedures as those currently in force in Israel. EU or similar standards could be adopted with *ex post* verification, as is planned for non-sensitive products.

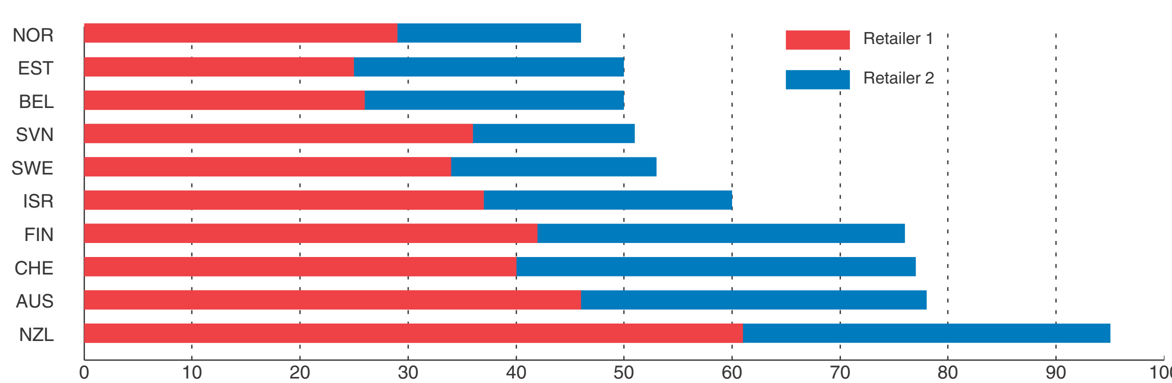
Reducing concentration and regulation in the agrifood chain

Concentration is high throughout the Israeli agrifood value chain. Just three companies control 40% of production in this sector (GAIN, 2014), and far higher concentration exists for some products. Recently declared a monopoly by the IAA, the company Tnuva controls 70-90% of sales in several dairy products. The IAA has also declared another firm – Strauss – a monopoly in other dairy products and confectionery, and Coca Cola Israel in carbonated drinks. Moreover, the government initiated grants in order to support the development of small or medium-sized firms in concentrated food markets. Concentration is also high in retail: supermarket chains increased their weight from 50% to 60% of spending on food between 2003 and 2011, and almost 60% of outlets belong to one of two networks (Shufersal and Mega) (Figure 1.16). Although recent financial difficulties of the Mega chain may lead to a change in the retail food market, this concentration in food retailing is high relative to other countries and is even more visible at the local level (IAA, 2014a). Another feature of this sector is the absence of foreign competition, despite the increasing internationalisation of this activity (Wrigley and Lowe, 2010). This situation is reflected in the high level of supermarket profitability that was recorded a few years ago (OECD, 2013d). More recently it seems that retail food margins have fallen back, but the problem has shifted to food producers and importers.

Commercial distribution is also more heavily regulated than in most other OECD countries (Figure 1.17). Authorisation requirements for opening shops are comparatively strict. Regulations protect established businesses, allowing their representative bodies to intervene in the approval of new outlets and supermarkets, a practise that has long been known to lead to self-serving behaviour in France (OECD, 2015c). Supermarkets are, moreover, subject to specific regulations. Price controls and/or supervision are also relatively extensive, affecting almost 20% of the CPI food basket (2.4% of the total). As in other OECD countries, these controls are partly the result of regulations on some public services such as electricity, water and public transport. In several fields, however, such as dairy products and eggs, they are used to solve competition problems.

Figure 1.16. **Ten most concentrated countries for grocery retailing within OECD**

Two-firm concentration ratio in per cent, 2009[1]



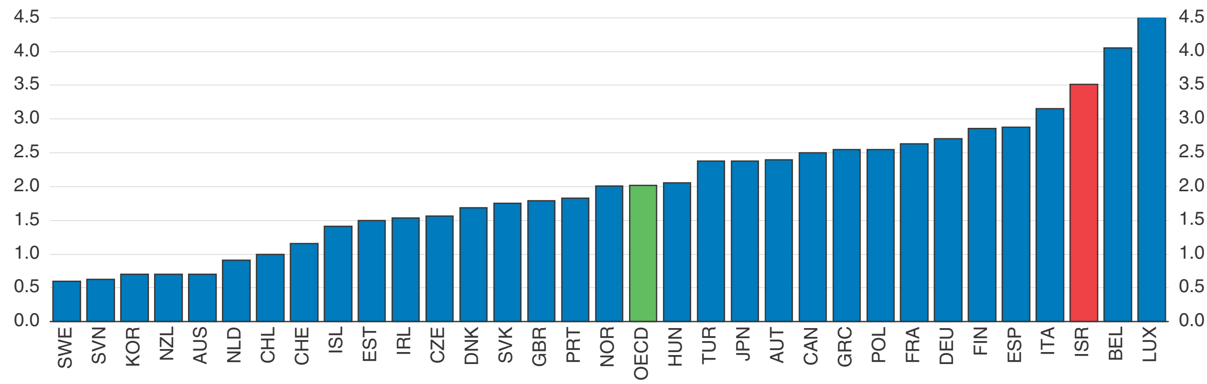
1. 2008 for Denmark, Finland, New Zealand and Norway and 2007 for Estonia.

Source: OECD (2013),"Roundtable on Competition Issues in Food Chain Industry", DAF/COMP/WD(2013)116.

StatLink http://dx.doi.org/10.1787/888933317958

Figure 1.17. **Regulation in retail trade**

Index scale from 0 (least restrictive) to 6 (most restrictive), 2013



Source: OECD, *Product Market Regulation Database*.

StatLink http://dx.doi.org/10.1787/888933317710

The authorities recently adopted two reforms designed to improve the retail food market. The first is the IAA's initiative to remove the blanket exemption of the wholesale market for agricultural products from competition rules. This reform was passed by the Knesset in 2014, and only wholesalers who are also farmers and agricultural producers themselves now qualify for exemption. The second reform is a law to promote competition, which enshrines the main conclusions of the Kedmi Committee. It introduces improvements in three areas:

- *Boosting local competition among retailers*. Supermarket chains with over 30% of sales in a given zone will no longer be able to open new outlets in that zone without the IAA director's agreement. If a chain's market share is over 50%, with at least three established shops, the IAA director may ask the Antitrust Tribunal to force the sale of some supermarket outlets to a competitor.
- *Improving the regulation of relations between suppliers and retailers*. To limit the pressure exerted on retail outlets by major suppliers, the new law prevents suppliers intervening in decisions concerning the organisation of supermarket shelving and taking up more than half the shelving space. Slotting allowances and other bonuses, sometimes used by producers to persuade retailers to accept higher prices to the detriment of the consumer, are also banned, as are recommended prices.
- *Increasing price transparency*. The main retail networks must now post the prices of all products sold in their outlets on their websites in real time, to promote the development of mobile applications that help consumers compare prices among outlets.

Increased competition can reduce margins and so lower prices. A recent Israeli survey found that the margins of supermarkets in a given region fall by around 4.5% when a rival moves into that region (Avner, 2012). The new law limits the expansion of the two main retail networks who therefore have to apply for IAA authorisation to open new outlets in zones covering around 79% and 21% of the Israeli population, respectively (where they exceed the aforementioned 30% threshold)* (IAA, 2014a). And a non-negligible proportion of Israeli supermarkets (about 5%) could be forcibly sold if the law is applied to the letter, i.e. when the chain's market share is above 50% with at least three established shops. In practice, the law's effectiveness will depend on its implementation, and the authorities should therefore assess its impact after an appropriate delay.

Nevertheless, further efforts could liberalise the retail food market, especially by reducing the red tape surrounding the opening of shops and the protection given to existing establishments. The authorities should proceed with their recent project to end the exemption to the poultry sector from anti-monopoly legislation and systematically screen anti-competitive provisions in the regulation of other sectors, possibly using the methodology of the OECD Competition Assessment Toolkit. The authorities must also resist the temptation to extend price controls, which they almost did recently in response to problems detected on certain markets, such as frozen vegetables or yoghurt (Ben-Israel, 2014). In fact, they should strive to reduce such controls by carrying out the requisite reforms beforehand. Once in place, price controls delay the fundamental reforms needed to improve market efficiency, strengthen competition and improve the distribution of resources. In free markets prices play a regulating role that is more efficient than distortive frameworks such as that in Israel's dairy industry, which features producer price controls, quotas and both tariff and non-tariff barriers, as well as consumer price controls, with the result that the consumer pays high prices and economic resources are wasted.

The economy would also benefit from greater competition in banking

The Israeli banking system saw out the financial crisis of 2008-09 without any bail-outs or bankruptcies. While strong and stable with adequate profit (Figure 1.18, Panel A), it is also structured in such a way as to discourage competition. It is more concentrated than in most OECD countries, and in some activities is oligopolistic. Five establishments hold 94% of bank assets, with the two largest having 57% (Figure 1.19, Panel A). No foreign banks are active in retail or online banking, and the sector's main players are closely interconnected: some banks have a shared ownership structure. For example, one bank may buy another's IT department, and the major banks share the management of credit card systems (see below) (IAA, 2012a). This kind of market organisation fosters rent-seeking by the banks and reduces efficiency (Lin et al., 2010). Banks have high operating expenses (especially salaries) in relation to income (Figure 1.18, Panel B), implying a lower level of efficiency in Israel than in the average OECD country. They are also relatively slow to adopt innovation, such as online banking services (Panel C).

The weakness of competitive pressures in this sector – much discussed in Israel in recent years –hits households and small businesses hardest. The banks exploit these customers' lack of mobility between banking establishments, a natural consequence of the cumbersome procedures involved in changing banks and of the poor transparency of financial services, which makes it hard to compare different offerings (BoI, 2012). Households and small businesses cannot rely on the growing competition in credit between non-banking institutions, which manage pension funds and concentrate on large corporations, fuelling high margins on loans to small businesses. Margins are more

* The 79% and 21% estimates of the Israeli population where the market share of supermarket chains is above 30% is an upper bound because it covers areas where both retailers have stores where concentration is above 30% (these areas are thus counted twice).

Figure 1.18. **Banking sector: efficiency, profitability and diffusion of Internet banking**

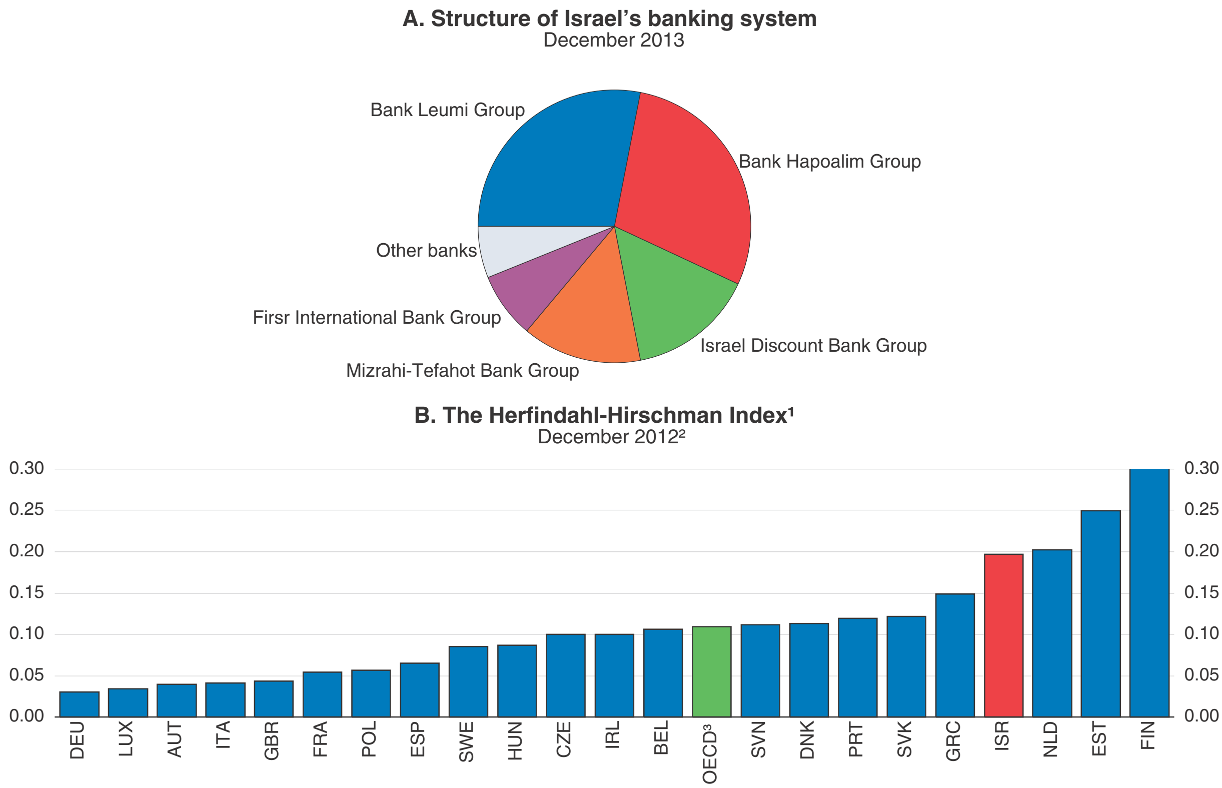
1. Average of the Q4 data (Q1 for Japan). For 2014, it is the latest available quarter.
2. Ratio of total operating expenses to total net interest and non-interest income.
3. Or latest available data.

Source: IMF, *Financial Soundness Indicators Database;* OECD (2014), *Measuring the Digital Economy: A New Perspective* and *ICT Database*; Eurostat, Information Society Statistics and national sources.

StatLink http://dx.doi.org/10.1787/888933317968

compressed on mortgage loans due to competition between banks which are required to provide a written offer each potential client who requests one. Moreover, although bank charges paid by households seem comparatively low (Van Dijk, 2013), those levied on retailers for the use of credit cards are high, and this indirectly affects consumers. The IAA has therefore proposed regulatory and legal changes that have been approved by the authorities (Box 1.2).

Figure 1.19. **Structure and concentration in the banking sector**



1. The Herfindahl-Hirschman Index (HHI) is a measure of the size of firms in relation to the industry and an indicator of the amount of competition among them. It is defined as the sum of squares of the market shares of the largest firms within the industry, where market shares are expressed as fractions. It can range from 0 to 1. Increases in the HHI generally indicate an increase of the concentration ratio. For this chart, the HHI calculation is based on total assets of the commercial banks.
2. For Israel, data is for December 2013. It is based on the total assets of the commercial banks and doesn't include activity of foreign banks while for the other countries, data include activity of foreign banks.
3. Average of the countries shown.

Source: Published financial statements for Israel and European Central Bank for all other countries.

StatLink *http://dx.doi.org/10.1787/888933317970*

In 2013, the authorities embarked on a reform programme to implement the recommendations of the Zaken Committee, which was charged with boosting competition in the banking sector. This programme has two main objectives: (i) increasing the number of competitors offering retail banking services, and (ii) stimulating competition among the current players on the market by providing households and small businesses with good information on banking fees and cutting the cost of switching banks. The Committee also recommended closer supervision and possibly even price controls for some financial services, in cases where effective competition is difficult to create.

These recommendations have been partially implemented by the Bank of Israel (BoI):

- The BoI has issued directives to simplify the process of changing banks, especially transferring standing orders between accounts. Opening an account online has also been made easier (BoI, 2013b and 2014b).
- In order to increase price transparency, since the beginning of 2015 banks have been required to keep customers informed of the cost of their securities transactions compared to those billed by other banks. Since April 2014, they have also been obliged to

Box 1.2. The organisation of the payment card market has encouraged rent-seeking by the financial institutions

The payment card market is organised in such a way as to reward rent-seeking by the major banks. The market leaders control the sole three firms that operate in this sector and the card network management system that collects and approves transactions. In the last few years, the Israeli Antitrust Authority (IAA) has taken several steps to reduce the cost of using payment cards and eliminate barriers to competition on this market, notably by:

- Adjusting the calculation of interchange fees, cutting them from 1.25% to 0.875% in 2010, then gradually to 0.7% in July 2014.
- Ordering the company Shva, which oversees the operation of the card network, to bring its system into line with international standards in 2013 and to remove all technical obstacles to new entry (IAA, 2014b).
- Carrying out a survey in 2014, which showed that the banks were exploiting several provisions that reduced the attractiveness of direct debit cards compared to deferred debit cards (IAA, 2014c), which dominate the market in Israel. Despite their lower credit risk, direct debit cards are not subject to lower interchange fees than deferred debit cards. Nor are retailers credited immediately with sale proceeds, whereas the consumer's account is debited immediately. According to the IAA, these regulatory anomalies are generating revenue for the financial institutions estimated at around NIS 450 million a year, compared to a scenario in which direct debit transactions would grow from practically zero to 35% of total transactions. This revenue is apparently generated by an unjustified level of interchange fees for direct debit cards and the financial institutions' profits on the financing of cash loans to retailers to cover the delayed settlement of their sales.

These findings led the authorities to commit to adjusting the law to correct the anomalies. In the meantime, the Bank of Israel (BoI) has set out directives for the distribution of direct debit cards at a lower cost and with lower fees than deferred debit cards in the course of 2016, with an immediate accounting of their transactions (BoI, 2015a).

offer their customers a flat-rate payment for a standard basket of transactions, which makes prices easier to compare than when billed per transaction. The BoI has, moreover, capped the price of the basic basket of financial services at NIS 10 per month, and banned billing considered abusive for some banking operations.

- To encourage new entry, the regulation of co-operative banks has been clarified and simplified.
- More fundamentally, the BoI is working on the creation of bank identity numbers and an extended credit rating system to share financial information on households in order to reduce the information handicap suffered by new nonbank financial institutions and smaller banks compared to their established rivals, and to permit clients to obtain multiple competitive offers for a loan or other credit product. The current framework allows the credit bureaux to circulate information about banks' customers without their consent only if that information is negative. The aim is therefore to ensure that both positive and negative information about banks' customers can be shared without

violating people's privacy. This credit rating system should begin operation in 2018, subject to the completion on the necessary legislative process.

Additional measures being considered by another committee (Strum Committee) set up after the 2015 elections include the creation of a deposit insurance system, which will help strengthen the smaller banks, and the entry of institutional and non-banking entities into the retail and SME credit segment, which will however have to be supervised in prudential and consumer protection areas. Separating the credit card companies from the two largest banks is also envisaged, with new credit card companies issuing bonds to finance their business (BoI, 2015b). A third committee (Baris Committee) recently defined the regulatory framework for non-banking credit institutions, and the needed legal changes had already been subjected to public consultation prior to the cabinet approval before submission to the Knesset. A decision over who will be the supervisor has not yet been made.

These measures should improve the balance between the objectives of maintaining the stability of the banking sector and increasing its efficiency. The implementation of some of these recommendations (such as simplifying the process of changing banks and increasing price transparency) have already yielded some initial positive results, such as a large drop in banking fees paid by households (Avissar, 2015). Giving households and small businesses more leverage in negotiating with banks will fuel competition, and the improvements currently being made to the credit reporting system should bring further benefits by encouraging new players to enter banking; they should be finalised and applied as soon as possible. By reducing the cost of accessing bank information, they will encourage the growth of retail banking services in non-banking institutions and increase Israel's attractiveness to Internet banks and leading international financial institutions (Tsai et al., 2011). Reducing the information imbalance among banks by pooling credit data is also likely to intensify competition among established banks and improve the allocation of credit in the economy (Lin et al., 2010).

To further increase competition, the authorities should consider extending the activities of the post office's bank. This state-controlled body is regulated by the Ministry of Communications and has a dense nationwide network of agencies reaching into the remotest regions. Current legislation allows it to offer its customers only a limited number of banking services, including deposit-taking, the management of current accounts, and international transfers, but excluding deposit remuneration and consumer credit. The postal network could be better exploited, as in many other OECD countries. Small banks or non-banking financial institutions could be allowed to access the post office's network of agencies to distribute credit. Over a longer-term horizon the capacity of the postal bank should be further enhanced in order to allow it to play a more effective role in ensuring effective competition for a wider range of financial services (again, subject to appropriate prudential supervision).

Network industries can be made to work better

Improving postal services, telecoms, maritime freight and air transport

Reforms have progressed

The authorities have adopted or recently launched several reforms in network industries, including postal services, telecommunications, maritime freight and air transport, to strengthen the effectiveness and improve the provision of their services.

These sectors, notably because of their oligopolistic structure, needed an overhaul. The postal sector has to adapt to the development of the Internet, which has led to a decline in the postage of letters and newspapers, while the rise of e-commerce has fuelled demand for parcel delivery, but the sector's organisation and greater-than-average regulatory restrictiveness have not allowed it to keep pace with market changes (Figure 1.20, Panel A). After the large price declines in mobile telephony following the reforms introduced from 2008 onwards (BoI, 2013a), it is also important to improve the provision of broadband internet services from fixed networks, which is less favourable than in many OECD countries (Panel B). The lack of competition and the segmentation of the maritime freight between the two public companies managing the ports of Ashdod and Haifa have hurt the quality of their services compared with other OECD countries (Panel C). In air transport, the government's desire to create a strong national airline until the middle of the 2000s penalised the evolution of relative prices and demand in this sector for many years (OECD, 2014c) (Panels D and E).

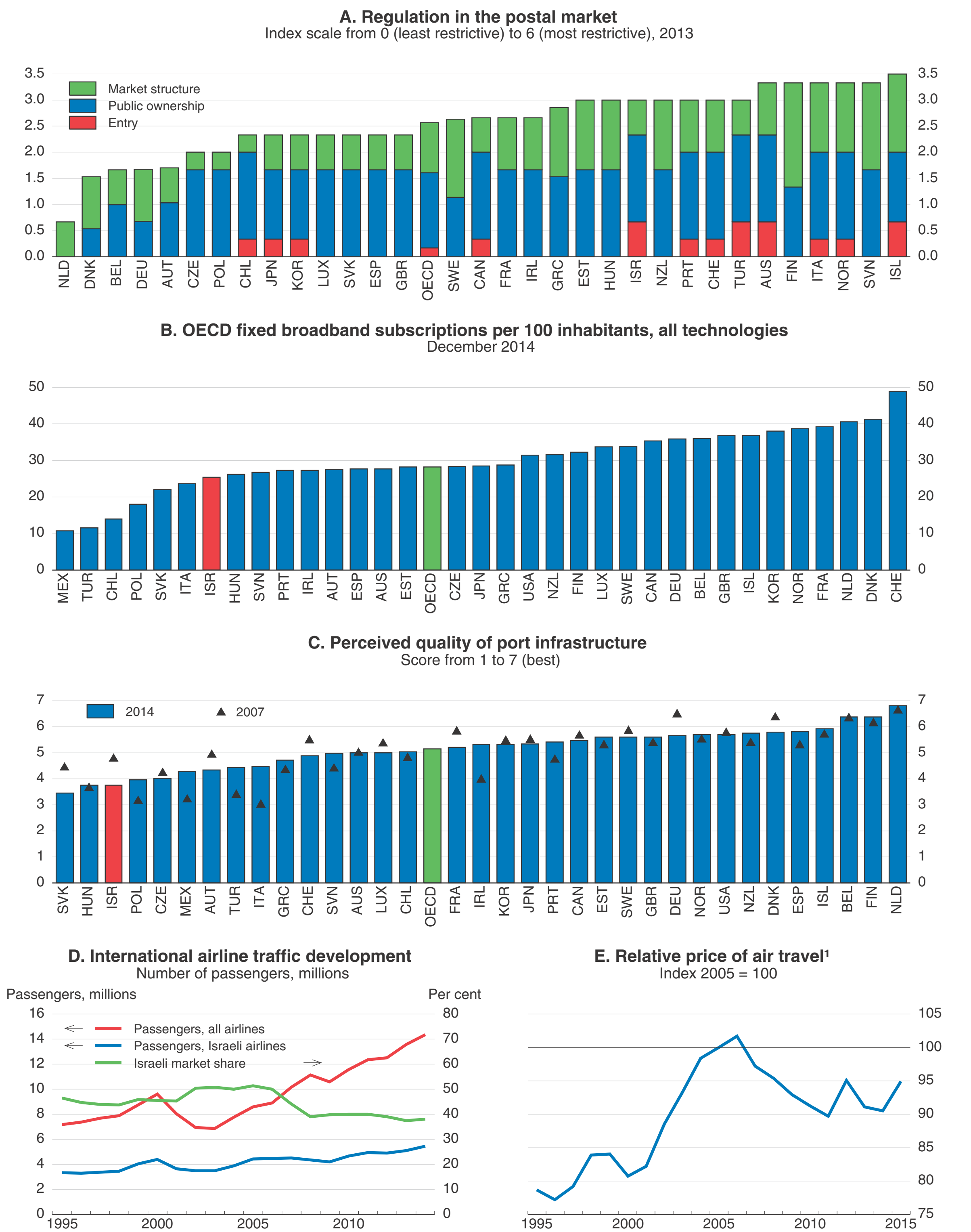
The main objective of the reforms has been to increase the number of firms in these markets:

- The privatisation of El Al in 2005 was followed by a liberalisation of the sector, following open skies agreements signed with the United States in 2010 and the European Union in 2013.
- To boost competition in maritime freight, in 2013 the authorities launched the construction of two new ports to be managed by separate private operators with plans to partially privatise the existing ports.
- To stimulate competition in fixed broadband Internet, in November 2014 the authorities decided to open up access to the two existing networks by unbundling their local loop. In addition, the development of fourth generation (4G) mobile networks has led the authorities to modify the regulation of these services and enable network and spectrum sharing to maintain a sufficient number of competitors, as the OECD recommends (OECD, 2014d). For technical reasons, only three bands of the frequencies needed to roll out 4G networks are available in Israel, which is insufficient for separate networks for five operators.
- Since late 2014, following the recommendations of the Reich Committee, the postal market has been more widely opened to private companies. The management autonomy of the public operator, Israel Postal Company (IPC), has also been increased, and IPC is to be partially privatised in 2016. The reform plan also provides for an adjustment of public service obligations, with a reduced frequency of mail delivery and improved parcel delivery services (State of Israel, 2014c).

Benefits for consumers and the economy as a whole of some of these reforms are already visible. Air transport prices have dropped significantly and demand has increased since 2005, which has boosted tourism. Like air transport, efficient maritime freight services operating in a competitive market will raise external trade and the openness of the economy to foreign competition. Changes in operating the postal sector will also help meet consumer demand for a better quality of services and rationalise their management.

Free third-party access to fixed telecom networks should also bring further benefits. So far, accessing fixed high-speed Internet involved taking out two separate subscriptions – to the infrastructure network and the Internet service provider. With the end of such segmentation, the market should be stimulated by the aggressive competition that already

Figure 1.20. **Product market indicators in postal services, telecom, ports and air transport**



1. CPI of expenditures for travel abroad and local flights over total CPI. Data for 2015 refer to the first nine months only.

Source: OECD, *Product Market Regulation Database*; Broadband Statistics; World Economic Forum (2014), *The Global Competitiveness Report 2014-15;* Central Bureau of Statistics.

StatLink http://dx.doi.org/10.1787/888933317981

exists among Internet service providers. For instance, the announcement in early 2015 by one of the mobile operators that it was developing a "triple-play" package, including Internet access, network connection and television, heightened competition in almost all telecom segments.

To complete the reform process, the Ministry of Communication needs to create independent regulators for both postal and telecom services, with well-defined mandates. Moreover, it would be important for these regulators, like other industry regulators, to be run by a CEO on a non-renewable contract, to limit the risk of their wishing to curry favour with the authorities to obtain a second term. These regulators lack the transparency and independence of their counterparts elsewhere in the OECD:

- In the telecom case the Israeli regulator is not required to publish much information about its activities and the reasons for its decisions. It does not produce an annual report, for example. Nor does it report to any authority other than the government, on which it depends. This dependence on the executive does not seem to have caused any particular problems in the past, because there were no public enterprises involved, and so no doubts were raised about the impartial application of regulation. Moreover, the regulator's task has also been made easier by the organisation of the market, in which the separation of network infrastructure operation between fixed and mobile operators limits the risk of legal disputes. Now, however, with shared networks, the risk of disputes will increase. Clearer differentiation is therefore needed between the task of designing regulation, overseen by the Ministry, and applying regulation, which ought to depend on an independent, transparent entity (OECD, 2014e).
- For postal services the dependence of the regulator on the Ministry of Communication generates a conflict of interest, since IPC belongs to the government. The potential pressure on the Ministry caused by the high degree of unionisation may also affect the decisions of the postal regulator, if its independence is not further secured (OECD, 2014e). An independent regulator with sufficient resources would help to safeguard non-discriminatory access to postal infrastructure and ensure that the IPC does not attempt, for instance, to eliminate competition using predatory pricing for non-regulated services.

Beyond these governance reforms, it might be worth considering some additional specific measures to enhance the functioning of maritime freight, air transport, postal services and telecoms:

- In maritime freight some modernisation of the old ports might be required to enable them to compete with the new players. Contrary to the new ports, the old ones will not benefit from deep-water capacity and may thus face an important competitive disadvantage that might weaken competition in the sector.
- In air transport there is room to improve regulation and reduce obstacles to foreign providers offering services in Israel, notably by relaxing the regulations governing the allocation of take-off and landing slots (allowing airlines to swap them, for example).
- In the postal sector the authorities could consider financing the universal service obligations on the basis of a compensation fund paid for by all postal operators, in line with best practice for this sector (OECD, 2001). The cost of universal service obligations is likely to rise over time, if demand for postal deliveries continues to fall and if competition from the private sector further erodes IPC's revenues by creaming off the most profitable market segments.

Regulatory reform and the extension of the rail network would improve land transport

The Israeli public transport system, which is essentially based on bus and coach networks, does not fully meet the needs of the country's highly urbanised population. According to the Ministry of Transport, rail lines account for only 6% of public passenger transport, compared to 30-60% in many OECD countries, and less than 6% of freight. In urban areas this sector is struggling with an infrastructure shortage estimated at around NIS 250 billion (25% of GDP) in 2012 (Sharaby et al ., 2012). And despite subsidies to ensure reduced rates for children and the elderly and affordable service reaches most parts of the country, take-up of urban and inter-city public transport is low. It is used for less than a quarter of journeys in cities, compared to 30-50% in other countries, largely because it is slow (Sharaby et al., 2012). The resulting heavy and growing use of private cars is causing serious road congestion, with important economic and environmental costs. The former was reckoned at an annual NIS 15 billion (1.5% of GDP) in 2012, mainly because of the loss of productivity due to the time wasted in traffic jams, which is estimated on average per day at more than 60 minutes per vehicle traveller, and could reach NIS 25 billion in 2030 (Sharaby et al., 2012).

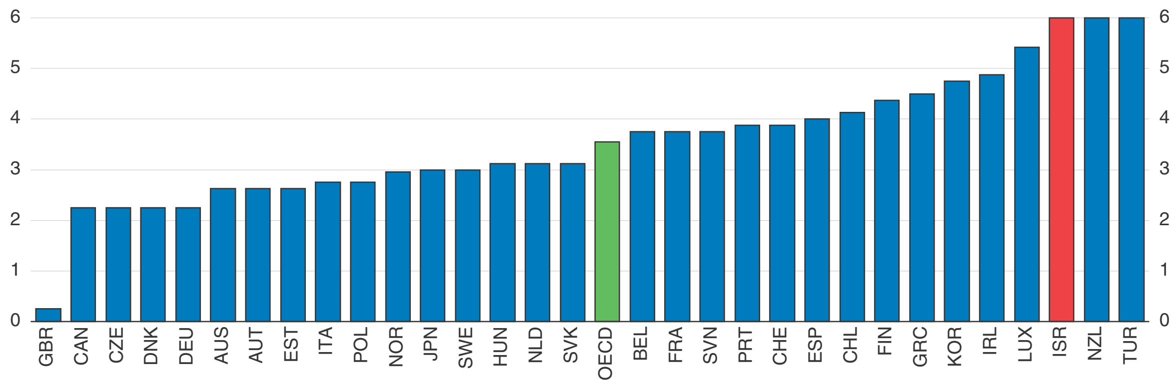
In response to this situation, the authorities have prioritised transport policy changes in the last 15 years: a special ministry to deal with the issue was set up in 2000, and transport networks, especially in rail, were developed, albeit too slowly. New investment led to the opening of a rail link between Ben Gurion airport and Tel Aviv in 2005, the fast Metronit bus line in Haifa in 2007, and the light rail line in Jerusalem in 2011. An express rail link between Jerusalem and Tel Aviv should open in 2018 and a light metro line in Tel Aviv in 2021. There are also plans to upgrade the inter-city rail network, with the replacement of diesel by electric locomotives.

To get the most out of these infrastructure improvements, however, the authorities will need to back them up with regulations that stimulate efficiency and service quality. Israel's rail regulation is among the most restrictive in the OECD (Figure 1.21), and, with the exception of Jerusalem's light rail, this sector is managed by the publicly owned and vertically integrated Israel Railways Ltd. This monopoly, despite its subsidies, is highly indebted and has posted repeated losses in the past. To improve its results and stimulate efficiency reforms were made in 2012 and 2013. Some maintenance activities, affecting 30% of rolling stock, were opened up to competition through a subcontracting system, and a subsidiary was set up to handle rail freight, with the authorities signalling their intention to privatise it at least partially. In 2014 Israel Railways made a profit for the first time since it was founded in 2003.

These measures take the sector in the right direction, but more ambitious reforms would be welcome. Maintenance activities could be more widely opened to competition. Most urgently, the management of the network's infrastructure should be separated from the operation of passenger rail services, as is already the case in many OECD countries. This separation has, in practice, already been made for freight. Unlike other countries' rail networks, Israel's is far too small to allow multiple operators to operate simultaneously on the same lines, and this kind of competition would not be very valuable in light of competition from road transport. The rights to operate rail services could, however, be allocated on the basis of regular tenders, as for public road transport where such reforms have had positive effects (Shiftan and Sharaby, 2006). Such procedures, similar to those

Figure 1.21. **Indicators of railway transport regulation**

Index scale from 0 (least restrictive) to 6 (most restrictive), 2013



Source: OECD, *Product Market Regulation Database*.

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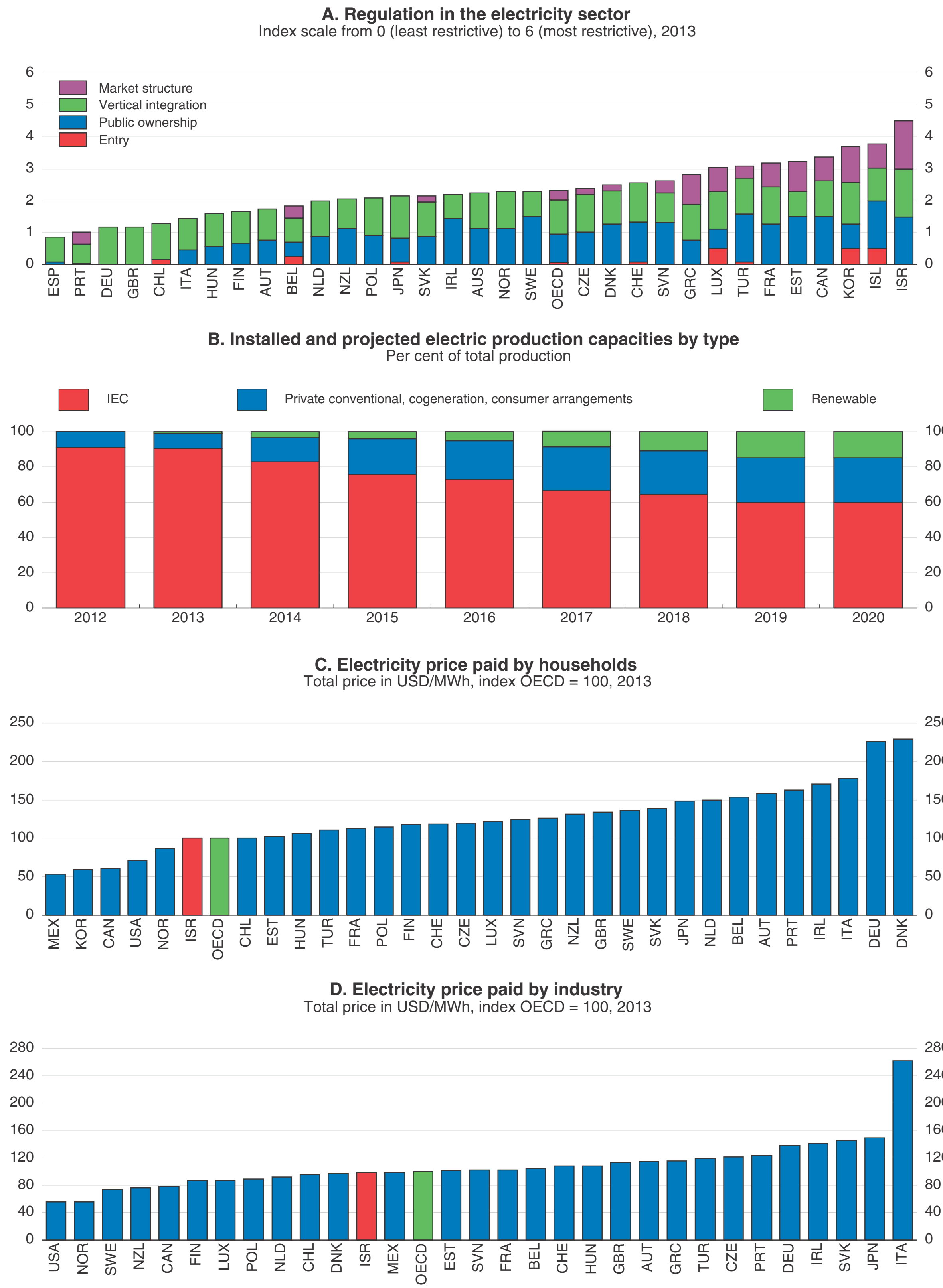
used for the Jerusalem light rail line and planned for its Tel Aviv counterpart, would stimulate efficiency and cut operating costs for these services.

Resuming the reform of the electricity sector

The Israeli electricity market is more strictly regulated than in many other OECD countries (Figure 1.22, Panel A), and Israel is one of the rare countries in which electricity is still largely managed by a publicly owned, vertically integrated company – the Israel Electricity Corporation (IEC). The IEC is responsible for operating the national grid and controls over 75% of generation, the entire transmission infrastructure and most of the distribution and supply to end users. Despite its monopolistic position, however, it is also financially weak, because its high debt is squeezing operating margins. The IEC does not set its prices, which are fixed by an independent regulator, and its investment plans have to be approved by its responsible Ministry. On a wide range of issues, including staff mobility, appointments to managerial positions, disciplinary procedures, redundancies and some calls for tender, the company's decisions are taken equally by management and workers' committees. All this keeps costs high, especially payroll. The workforce is bloated, with the surplus generally reckoned to be around 20%, and the highly unionised staff is paid more than is average in other SOEs and enjoys generous pension provision and other benefits, such as free electricity.

Reforms for the electricity sector were identified several years ago, but despite the authorities' repeated efforts to improve the sector by introducing market forces, progress has been slow. Several attempts at introducing change have failed, such as the most recent, led by the 2013-14 Yogev Committee, because of the unions' exorbitant demands for compensation in exchange for an agreement on structural adjustments. Key provisions of the Electricity Sector Law adopted in 1996 to encourage competition by separating generation, transmission and distribution have not yet been implemented, although it did set up an independent regulator, the Public Utilities Authority (PUA) – Electricity, which is responsible for setting electricity rates after examining the relevant costs, defining and upholding service quality standards, and granting production licences. The IEC's vertical integration is highly detrimental to transparency and impedes the evaluation and tracking

Figure 1.22. **Electricity sector indicators**



Source: Israel Public Utilities Authority – Electricity; IEA, *Energy Prices and Taxes Database*; OECD, *Product Market Regulation Database*

StatLink http://dx.doi.org/10.1787/888933318005

of costs in its various activities (PUA, 2014a), which in turn hampers efforts to detect cross-subsidisation between generation, transmission and distribution, which is illegal.

Although competition from independent private producers (IPPs) of electricity has been permitted since 1996, its emergence has been slow, delayed by the drafting of the requisite technical regulations to govern their operation and, from 2010, by supply problems with Egyptian gas (OECD, 2011b). It was not until the recent entry into production of the Tamar gas field that the IPPs' market share reached still modest 17% of output in 2014 (Figure 1.22, Panel B). Private competition still faces many obstacles, such as the uncertainty generated by the IEC's control of the grid. IPPs' expansion is also being curbed by the long-term contracts in the gas market, with take or pay clauses that require customers to buy gas in large quantities, which must be fully paid for, even if not fully consumed, and hence constitute a financial barrier to the development of competition.

Attempts to reform the electricity sector, and IEC in particular, should be urgently resumed, notwithstanding the 2013-14 failure. The gradual rise of competition from IPPs and increased production from renewable sources will inevitably reduce IEC's market share and results. According to some scenarios, it should see its share of electricity production fall to 60% by 2020 (Figure 1.22 Panel B). Therefore, the risk of further deterioration in its financial position should not be underestimated, and further delaying reform would increase the adjustment costs imposed on the public purse. Moreover, it is important to avoid any backtracking on past reforms, especially a weakening of the PUA's independence, as planned by the Economic Arrangements bill associated with the 2015-16 budget, which aims to subordinate the regulator to the Ministry of National Infrastructure and Energy.

In the light of past difficulties in reforming the electricity sector, the authorities could opt for sequential change that aims first to increase the transparency of IEC's management and reduce its financial fragility. To obtain this transparency, which is a *sine qua non* for assessing the need to rationalise the different segments of the market, it would be useful to restructure IEC into a holding company with several separate subsidiaries (for power station construction, electricity generation, transmission and distribution), as suggested by the PUA (PUA, 2014a). This would also facilitate monitoring the company's costs in its different activities and the detection of cross subsidies. IEC's corporate governance must also be reviewed to improve its financial position, which will call for a reduction of workers' committees' influence on management to secure the required rationalisation.

Necessary changes to the electricity sector also involve separating generation, transmission and distribution of electricity, with the creation of an independent operator for the national grid. The use of Take or Pay contracts on the gas market might be reduced and/or a secondary market could be established to allow electricity producers to resell the gas bought on the primary market and not consumed. The authorities should boost competition on the supply side by introducing a wholesale electricity market (Joskow, 2008). Such reforms, if well designed, can be successful in small economies, as shown by the examples of some regions of Australia, New Zealand and Northern Europe. To work properly, wholesale electricity markets need, for example, a sufficient number of electricity producers, none of which enjoys a dominant position. IEC would therefore have to divest some power stations.

These reforms should deliver efficiency gains and lower electricity costs and prices, although these effects might be felt only in the longer term. In the short term heightened competition will not only generate efficiency gains but will also force IEC to rationalise its management and reduce its debt, which could push prices higher if they are artificially low, as some studies suggest (World Bank, 2010). Despite a rise of 30% between 2011 and 2013 caused by the Egyptian gas supply crisis, most of this was reversed in 2015, and prices are again low compared to the OECD (Figure 1.22, Panels C and D).

Establishing an efficient natural gas market

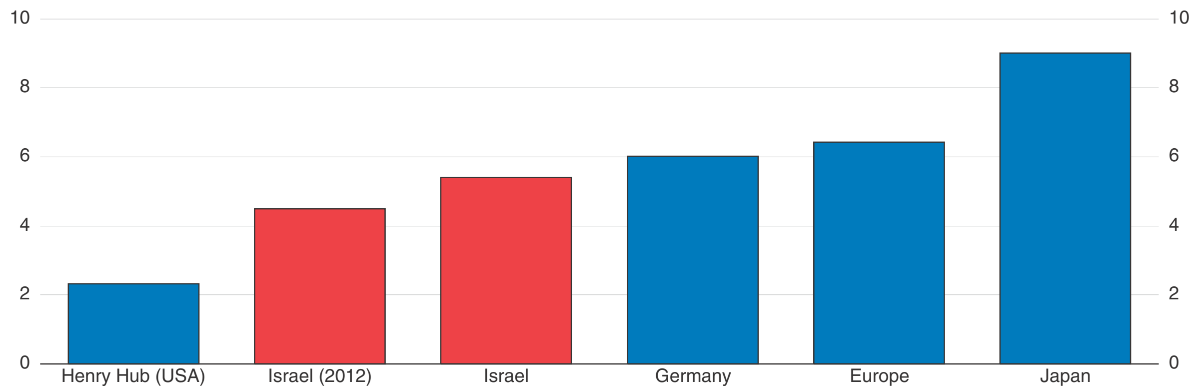
The natural gas market has only recently taken off in Israel, with major offshore reserves of natural gas discovered in its exclusive economic area in 2009 and 2010. These reserves, currently estimated at over 900 billion cubic metres, are enough to supply the country for several decades, based on annual consumption of around 8 billion cubic metres in 2013. However, provisions governing the natural gas sector are not conducive to competition, as supply is under the effective control of a consortium of private companies, Noble-Delek, with a monopoly position. The consortium holds most of the recoverable resources identified, especially the two big fields of Tamar (305 billion cubic metres) and Leviathan (470 billion cubic metres). Tamar meets over 95% of the country's current demand, while Leviathan and some other smaller fields (Karish and Tanin) still have to be developed.

On the demand side, the market is also small and not very dynamic, with the electricity sector using about 80% and big industrial companies the other 20%. Moreover, there is a lack of distribution infrastructure, which the authorities are attempting to remedy. The development of regional distribution networks has been slow, however, and small businesses face many bureaucratic hurdles in accessing natural gas, such as complexities linked to land settlement, problems defining and applying safety standards, a lack of co-ordination among public players and the under-resourcing of the bodies charged with expanding the gas distribution network (Cohen, 2015). In early 2015, just eight firms that are not in the business of producing electricity were connected to the natural gas network out of a potential market of around 2000. There are no plans for residential gas connections in the immediate future, and the country has yet to start exporting. In June 2013 the authorities decided to cap gas exports at around 40% of available reserves, keeping 540 billion cubic metres for the domestic market in order to secure the country's long-term energy future (State of Israel, 2012). However, the government has recently launched a reform in order to expedite connection of commercial users to natural gas. This reform is expected to have a large positive effect on productivity, especially in traditional industry.

Despite relatively low gas prices by international standards (Figure 1.23), the contracts with Noble-Delek to supply Tamar gas to Israeli electricity producers seem unbalanced and costly to the economy (PUA, 2014b). Gas prices are higher than those of other countries self-sufficient in gas, exceed those paid by Israel until 2012, when some gas was still imported from Egypt, and their indexation formula depends on aggregate consumer prices in Israel and the United States, taking no account of world energy prices (for crude oil, for example), and without a cap, as is customary for this sector. As a result, the IAA has endeavoured to promote new producers and stimulate competition, requesting that new exploration and drilling licences be granted to firms other than the current licensees (OECD, 2011a). It has declared the Noble-Delek consortium to be a monopoly on the Israeli market and required it to change some contracts with Israeli customers in order to ensure that they leave enough long-term demand for gas in the market to justify the development of new fields (IAA, 2012b and 2012c). More importantly, the IAA considered challenging the

Figure 1.23. **Natural gas price**

USD/MMBtu, October 2015



Source: *www.quandl.com*, Natural Gas Prices and Charts; Interfax, Global Gas Analytics.

StatLink http://dx.doi.org/10.1787/888933318012

legality of the Leviathan partnership between Noble and Delek and, therefore, the possibility of forcing the consortium to sell either Tamar or Leviathan to another operator.

However, the government felt that the IAA's position to overhaul the natural gas sector entailed excessive costs. It would jeopardise the development of the Leviathan field, because of lengthy court proceedings resulting from Noble-Delek opposition to IAA's decision, and so reduce tax revenues and limit gas export contracts with the Palestinian Authority, Jordan and Egypt, despite their considerable economic and geopolitical importance. Delays in developing Leviathan were also likely to slow that of other smaller reservoirs and discourage new exploration and drilling licences because of the export constraints and a local market too small to attract foreign investors. The government thus decided to use a clause in the competition law granting veto powers to the Minister of Economy on issues with sensitive strategic or diplomatic implications, which eventually led to the resignation of the IAA's director in summer 2015.

In the meantime the authorities also negotiated a compromise agreement with Noble-Delek in order to avoid undesirable delays in developing Leviathan, to lower the local price of gas, to partly lift the constraints on exports, and to gradually develop a more competitive structure of gas supply over time. The compromise agreed in August 2015 aims to increase the number of suppliers in the market: the smaller Karish and Tanin reservoirs would be sold to third parties within 14 months and Delek's holding in the Tamar field within six years, and Noble-Delek would develop the Leviathan field by 2019. According to the compromise, Tamar will be able to export part of its production. The gas price will also be regulated in the local market over the next six years with a new formula implying a fall from USD 5.4 per mmbtu to USD 4.7 per mmbtu by early 2016 for the new contracts and the renewal of the existing ones by 2020. Finally, it was agreed that, if the commitment of Noble and Delek to develop the Leviathan is fulfilled, there would be no change on the key points of this agreement over the next decade so as to stabilise the sector's regulatory framework.

This compromise agreement should be implemented. In the short term there is only limited room for effectively boosting competition without the entry of new competitors and the development of new gas fields. Temporary price regulation is also needed until there is sufficient competition in the local gas market. However, the authorities should ensure that this price control does not become permanent and that the infrastructure required for a competitive market (such as sufficient pipeline capacity or storage facilities) are properly developed. Geologists believe that more significant gas and probably oil reserves remain to be discovered, although their scale is hard to gauge. Real investment opportunities exist, and they should not be thwarted by dissuasive price controls and uncertain regulation, given investors' need to count on clear profitability prospects in return for committing costly investments over the long term. Lifting the obstacles limiting the demand for natural gas would also be useful. From this perspective, the measures recently announced for developing the gas distribution network and simplifying the regulatory procedures to allow local firms to rapidly access this network are welcome. Moreover, gas export regulation should be carefully assessed to make sure that they are not slowing market development. According to the Tzemach Committee, Israel's export restrictions are stricter than those in force in most other countries (State of Israel, 2012). The arrival of new foreign investors is to be encouraged for developing the country's natural gas resources, because Israel lacks skills in this field, and foreign investment depends on these investors being allowed to export.

However, there are also plenty of other prospective new sources of fossil fuels around the world, which, together with the likelihood that such energy will be subject to carbon taxes, could affect the incentives to invest in Israel under any regulatory regime. A case in point is the recent discovery of the Zohr gas field in Egyptian waters, which seems about 40% larger than Leviathan. The development of this reservoir could thus have important ramifications for Israeli gas development by potentially reducing its export options and increasing regional competition in this sector. On the other hand, the discovery of this new gas field could favour closer regional cooperation in the gas sector, with a view to facilitating the joint financing of the needed export infrastructure.

Recommendations for improving competition in the economy

Improving the legal framework and applying competition law

- Improve the leniency programme and increase financial penalties for criminal cases.
- Create independent regulators in telecoms, postal services and gas, with well-defined mandates.
- Ensure that the planned cut in the regulatory burden relies on high-quality regulatory impact assessments.

Making government intervention more effective

- Pursue state-owned enterprise reform and privatisation with a view to enhancing competition.
- Increase the transparency of the cost of state-owned enterprise public service obligations in public and business accounts.
- Increase the pace of public procurement reform in order to rationalise and standardise purchasing procedures, centralise orders and promote e-procurement take-up. Extend this reform to local government.

Lifting import barriers

- Further cut customs tariffs and fast-track implementation of the Lang Committee's recommendations to lower non-tariff barriers: simplify import procedures and align the standards applied to imports with those in force in other developed economies.

Recommendations for improving competition in the economy *(cont.)*

- Lift the barriers to foreign services providers: extend the maximum initial visa for workers on secondment from foreign companies; relax restrictions on foreigners buying property; and abolish the residency conditions widely applied to business leaders.

Strengthening competition in foodstuffs

Reform agricultural policy, and lower trade barriers facing food

- Replace quotas, guaranteed prices and customs tariffs with direct payments to farmers.
- Lessen State control over the distribution of production factors, starting with the reduction of red tape around the buying and selling of agricultural land and tenant farms.
- Further cut customs tariffs and non-tariff barriers, in particular by adopting the EU import procedures on non-sensitive foodstuffs as well as EU standards for sensitive agricultural goods.

Solve the concentration and regulation problems in the agri-food chain

- Rigorously apply the law on the promotion of competition in the food sector at local level, and assess it when sufficient time has passed.
- Eliminate regulatory constraints on opening new shops, the protection enjoyed by existing companies and specific restrictions applied to opening new supermarkets. Consider screening the anti-competitive provisions in the food sector, possibly using the OECD competition assessment toolkit.

Boosting competition in the banking sector

- Promote the entry of new competitors in retail banking, including by non-banking credit entities, with appropriate prudential and consumer protection regulation.
- Finalise the improvements to the credit reporting system. Make the changes required to increase uptake of direct debit cards. Separate the credit card companies from the two largest banks. Create a deposit insurance system.

Improving the efficiency of network industries

Modernise the postal service

- Pursue the postal reforms to open it more widely to private competitors, to enhance the management autonomy of the public operator, Israel Postal Company, and partially privatise it.
- Introduce a financing mechanism for the universal service obligation based on a compensation fund financed by all postal operators.

Improve transport regulation, especially in rail

- Allow more competition in maintenance activities for railway rolling stock. Separate the management of track infrastructure from the operation of rail services. Allocate the rights to operate rail services through regular calls for tender.
- Relax the rules governing airport take-off and landing slot allocation, and allow swapping among airlines.

Pursue electricity sector reform

- Turn IEC into a holding company with distinct subsidiaries for different activities, and create a separate infrastructure operator.
- Create a wholesale electricity market with a number of producers, making sure that none has a dominant position. Sell or privatise IEC power plants if necessary.

Recommendations for improving competition in the economy *(cont.)*

Create the right conditions for the development of an efficient natural gas market

- Implement the compromise agreement negotiated between the government and the private companies Noble-Delek, to ensure the development of the Leviathan gas fields and of the infrastructure needed to introduce competition in this market in the future. Avoid introducing permanent price controls in natural gas.
- 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.

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Chapter 2

Improving the pension system and the welfare of retirees in Israel

Israel is a young country with still dynamic population growth, but it is already beginning to face the consequences of population ageing. The pension system relies largely on mandatory private retirement saving, which will moderate the long-term fiscal impact. Yet, there are questions about the fairness of the pension system, given the regressive nature of some of its tax provisions, its ability to effectively protect the most vulnerable elderly, whose poverty rate is high, as is the case for the rest of the population, and its efficiency in securing and valuing these retirement savings to guarantee pension adequacy. This review examines ways forward for policy to address these issues by reinforcing the protective role of basic pensions, by encouraging people to work longer and by improving the fairness and effectiveness of the system's second pillar.

Israel will not escape the effects of an ageing population: it will be less pronounced than in the OECD on average, but the elderly dependency rate has been increasing since 2010 and is set to accelerate in the coming years. The country is financially well prepared to withstand this development, thanks to the reforms implemented since the mid-1990s. These reforms eliminated the large actuarial deficits that emerged in the 1980s and 1990s in schemes set up under agreements between employers and their workers, restored the pension system's long-term financial viability and prepared it for future demographic changes. The State's involvement in pension financing has been reduced with the development of a mandatory private defined contribution insurance system. Total public spending on pensions is thus relatively low and has been contained over the last decade.

However, the elderly poverty rate remains among the highest in the OECD and has not declined much over the past few years. Guaranteeing pension adequacy requires addressing longevity risks and preparing appropriately for potential financial market turmoil, given the important role played by private pension schemes. This could be done by promoting a further rise in senior employment rates, even though they have risen, by reinforcing the efficiency of the management of private retirement savings, and by discouraging rent-seeking behaviour by financial institutions to the disadvantage of households.

This chapter analyses the system and suggests improvements. It first examines the demographic situation and the main features of the system. It then evaluates its long-term viability, considers its performance in terms of avoiding poverty among the elderly, and more generally assesses its fairness and effectiveness in ensuring that everybody receives a sufficient pension.

To meet the challenge of an ageing population, Israel has embarked on significant pension reforms

The country is entering a phase of still moderate population ageing

As a young country, Israel has long enjoyed high population growth. Buoyed by both a high birth rate and significant immigration, its population has grown more rapidly than that of other OECD countries (Figure 2.1, Panels A and B). Over 35% of the population was aged under 20 in 2013, which is high by international standards, and the over-65s accounted for only 10%, which is very low (Panels C and D). But the situation is changing, albeit a little later than in other countries. Israel is now on the cusp of a demographic shift, signalling the gradual ageing of its population: since 2010, the elderly dependency rate, which compares the number of the elderly (those aged over 65) to the working-age population (20-64), has been rising, and that process is set to accelerate.

In recent demographic research, the Central Bureau of Statistics (CBS), the United Nations and the National Insurance Institute (NII) all agreed that the number of Israeli pensioners would rise sharply in the coming decades (Paltiel et al., 2012; NII, 2014a). The elderly dependency rate is expected to almost double between 2010 and 2060, from 19

Figure 2.1. **Demographic indicators**

1. Total fertility (children per woman), medium baseline.

Source: OECD, *Population Statistics Database*; United Nations (2015), *World Population Prospects: The 2015 Revision*.

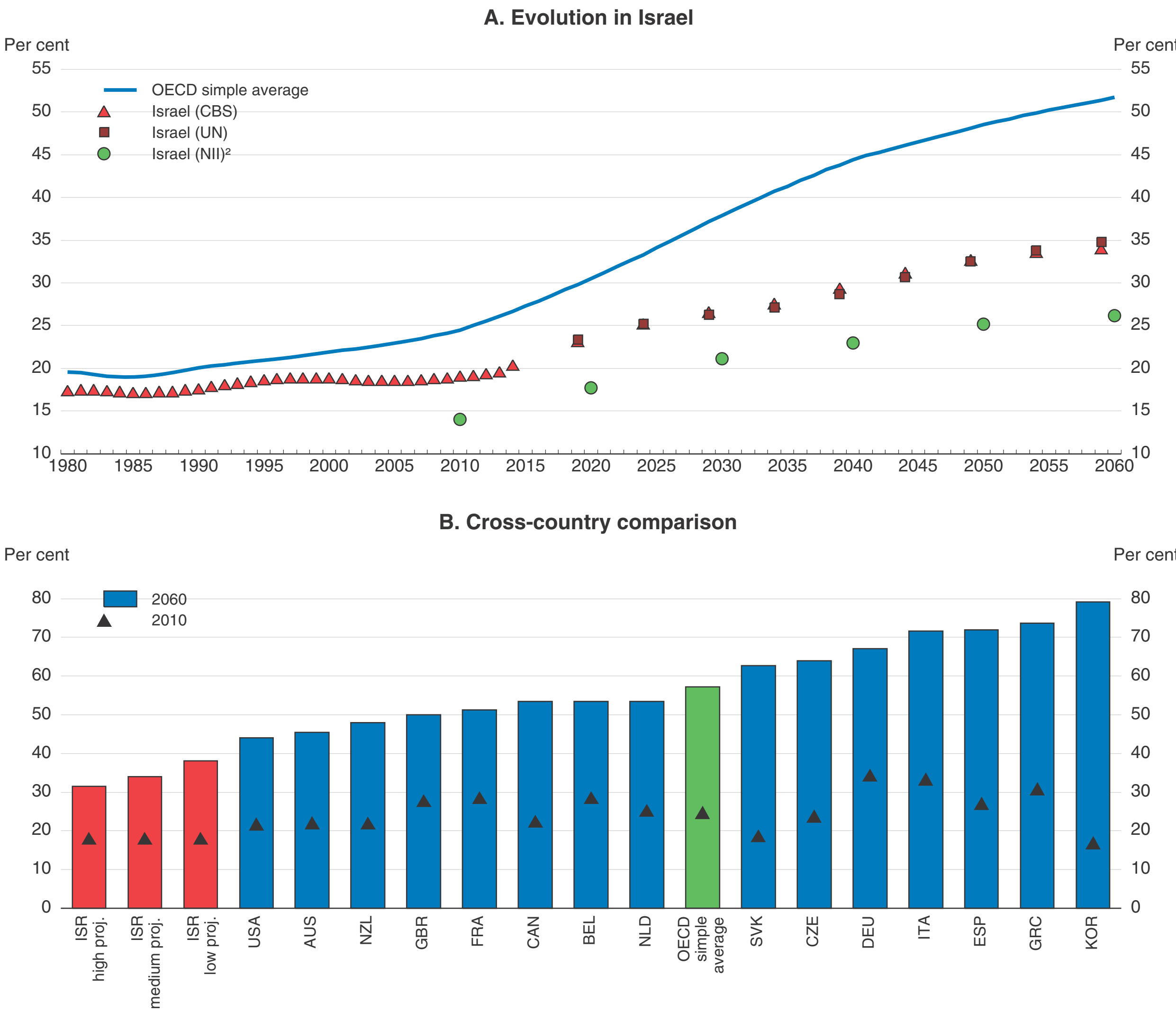
StatLink http://dx.doi.org/10.1787/888933318024

to 36% (Figure 2.2, Panel A). As in other countries, these changes are in part driven by an expected increase in life expectancy of 8-11 years during this period. Birth rates are expected to decline in the Haredi and Arab communities and to level out among non-Haredi Jews, although they will remain high. From a level of over 8 million in 2014, the Israeli population could practically double by 2060, even without any significant immigration.

Demographic forecasts are by nature imprecise, but they suggest that the population will age significantly less rapidly than in other OECD countries (Figure 2.2, Panel B). The elderly dependency rate, which could reach around 35% in 2060, is likely to be still the lowest in the OECD, and its rise relative to 2010 should be less steep than the Member country average. The relatively moderate rate of ageing seems also to be robust to alternative assumptions, such as a sharper fall in fertility, according to other scenarios. Conversely, a temporary brake on population ageing could result from fresh inflows of immigrants in future decades, as has occurred in the past.

An unusual feature of population ageing in Israel is persistently high birth rates in the country's Haredi and Arab communities, in which poverty rates are far higher than in the rest of the population. The weight of these communities in the over-65 age group should rise from 10% to 30% by 2060, and from 30% to 50% among people of working age (aged 20 to 64) (Figure 2.3). This matters because of the implications for – and potential tensions in – the pension system. Because of their low employment rate, these communities

Figure 2.2. **Old-age dependency**[1]



1. Elderly persons (65 and over) as a share of the working-age population (20-64).
2. The National Insurance Institute defines the old-age dependency ratio using 67, rather than 65, as the cut-off age.

Source: National Insurance Institute (2014), *Annual Survey 2013* (in Hebrew); A. Paltiel et al. (2012), "Long-Range Population Projections for Israel: 2009-59", CBS Demography and Census Department; United Nations (2015), *World Population Prospects: The 2015 Revision*.

StatLink http://dx.doi.org/10.1787/888933318037

contribute relatively little to the financing of first-pillar pensions compared to what they receive, and first-pillar old-age benefits account for a high share of retirees' income in these communities.

A defined-contribution pension system has been implemented

Since 1995, the authorities have rolled out a series of major reforms to improve the pension system, which is based on two pillars. Basic pensions are managed by the NII and supplemented by second-pillar funded, occupational, private pension schemes. People also save for retirement outside these schemes. The reforms were introduced in stages until 2008 and were designed to meet three challenges. First, the intention was to correct the design flaws of the previous private pension system – defined-benefit schemes based

Figure 2.3. **Demographic developments: composition by community**[1]

1. Share of each community in the specified age group relative to all communities' population in that age group.
Source: Central Bureau of Statistics, Demographic projections.

StatLink http://dx.doi.org/10.1787/888933318045

on voluntary pension savings that were excessively generous to their beneficiaries, offering both high State-guaranteed returns and generous tax deductions (Brender, 2009). Second, like many other countries, Israel had to take action to prepare itself for the expected ageing of its population to limit the resulting budgetary impact and ensure the financial viability of its pension system. The third major objective was to guarantee the adequacy of pensions, i.e. ensure sufficient income for the elderly and minimise their poverty rates.

To meet these challenges, the authorities deployed a strategy that consisted of withdrawing the public sector from the management of occupational pensions and transferring the risk of retirement income to individuals, stipulating a high mandatory level of private savings and extending the duration of working life. These measures completely overhauled of the second pension pillar, raised the retirement age and also had a (limited) effect on the first pillar.

Already relatively low, first-pillar pension spending has been further reduced

The first pillar, which is designed to guarantee a minimum income for pensioners, is funded from the public purse (Box 2.1). Ten years of contributions entitles claimants to benefits during their retirement, i.e. a set of basic old-age allowances and, in the event of the death of a spouse, a survivor's allowance. The amounts are the same for all beneficiaries. A means-tested income supplement is also available.

Box 2.1. **First-pillar allowances and funding**

There are several benefits under the first pension pillar:

- A basic old-age allowance, which in January 2014 came to almost 17% of the average salary for a single person and 25% for a couple.
- A seniority benefit that increases the basic allowance by 2% for every year of contributions after the first 10 years. It is capped at 50% of the basic allowance for claimants who have contributed for 35 years or more and came to 35% of this allowance on average in 2012 (BoI, 2014).
- A top-up of 5% on average for those aged 80 and over.
- A means-tested income supplement.
- The NII also pays an old-age benefit to most people who immigrated to Israel after reaching retirement age.

The first pillar distinguishes two retirement ages: one absolute and the other conditional. At the absolute eligibility age for retirement, which is 70 for men and 68 for women (to be raised to 70 by 2020), the basic and seniority benefits are paid without means testing. Means testing is applied to claimants who have reached the age of conditional eligibility for retirement (67 for men and 62 for women – to be raised to 64 by 2017, if approved by the Knesset), and who want to keep working. Currently, 90% of people over the age of conditional eligibility receive the basic benefit because occupational pensions are not included in the means testing (BoI, 2014).

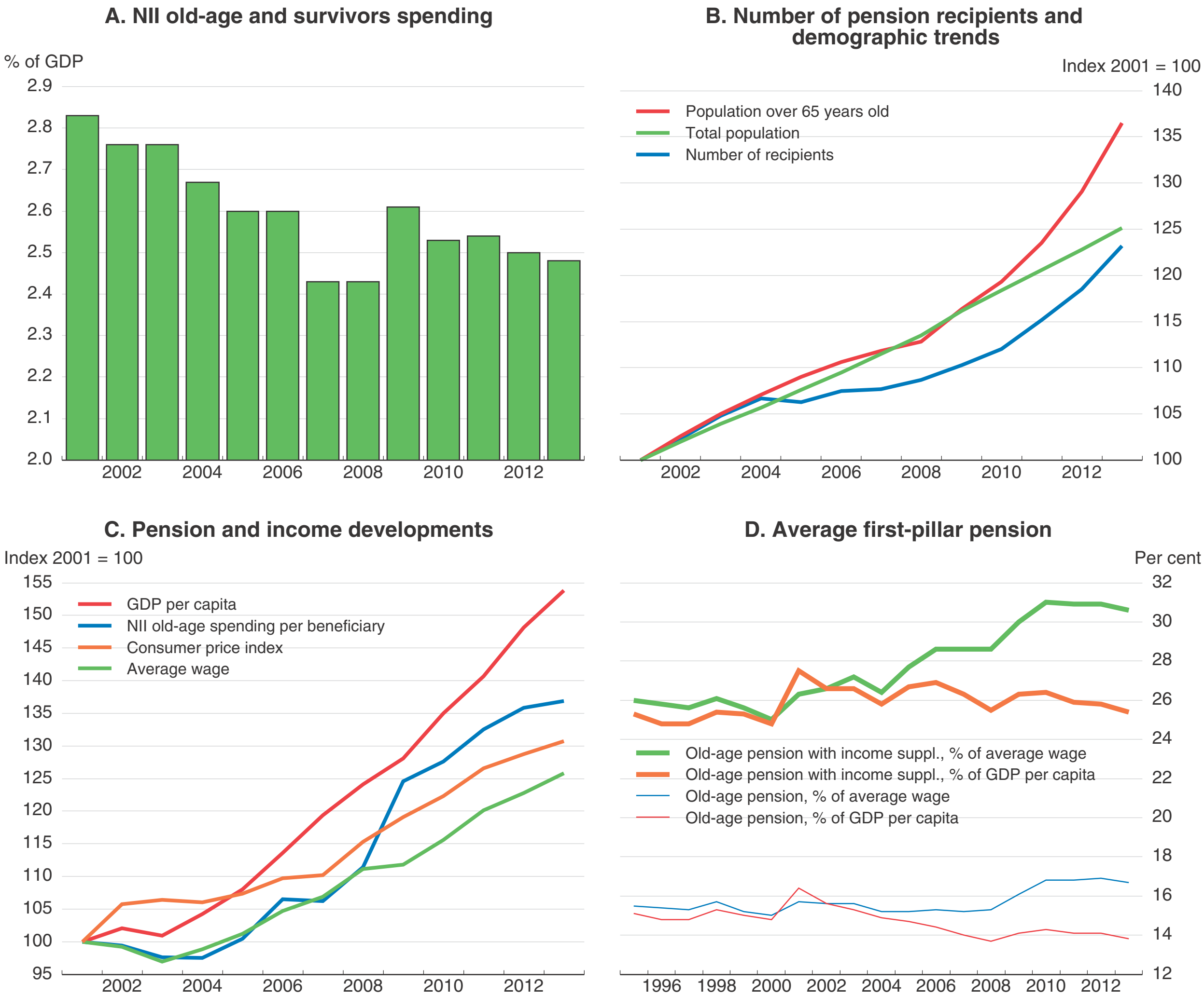
The NII is responsible for funding first-pillar pensions and the other social benefits out of three main sources of income:

- Contributions paid by most Israeli residents over 18, which represent over half the resources of the NII. These contributions are levied on monthly income up to a limit currently set at NIS 43 240, i.e. 4.7 times the average salary. They are relatively low for income below 60% of the average salary but rise significantly above this level.
- A State contribution, which represents 40% of the NII's resources and partly funds specific benefits, including old-age allowances to people who immigrated to Israel after reaching retirement age and the means-tested income supplement.
- Interest received by the NII on its financial reserves, which represent around 10% of its resources. At the end of 2013, these reserves came to NIS 177 billion, or 17% of GDP. They are invested in non-tradable government bonds with a guaranteed real interest rate of 5.57%, which involves an additional government subsidy of around NIS 3.5 billion in 2014 (NII, 2014a), although its estimated amount varies over time, depending on market interest rate developments.

Despite its relatively modest level, first-pillar pension spending has edged down by 0.4 percentage point of GDP since the beginning of the 2000s, stabilising at around 2.5% of GDP between 2007 and 2013 (Figure 2.4, Panel A), reflecting the authorities' objective of reducing the share of public benefits in elderly people's income and encouraging people to take responsibility for their pension provision by saving and staying active in the labour market for longer. Since the retirement age was raised from 65 to 67 for men between 2004 and 2009 and from 60 to 62 for women, the number of people claiming first-pillar pensions has grown at a slower rate than the population of over-65s, whose growth rate has risen since 2008 (Panel B). This trend should continue with the plan to increase the female retirement age to 64 by 2017, if approved by the Knesset.

Average pensions paid by the NII have also dipped as a proportion of GDP per capita since 2001 (Figure 2.4, Panel C), although they have remained broadly stable since the

Figure 2.4. **First-pillar pensions**



Source: Central Bureau of Statistics; National Insurance Institute; OECD, *Economic Outlook, Population Statistics and Social Expenditure Databases*.

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mid-90s, when income supplement is taken into account (Panel D). This relative decline of average first-pillar pensions since the beginning of the last decade partly reflects the robust increase in per capita GDP, whose growth has benefited from the strong increase in the employment rate. But, the average first-pillar pension also recorded a modest rise since 2001 in line with the weak growth in average pay, to which it was indexed until 2005, and which has fallen in real terms (Panel C). This indexation was replaced in 2005 with benefits indexed to consumer prices. As real pay increases have been small, this change has had only a limited effect. However, it carries the risk that the first pillar's role of protecting the elderly from relative poverty will be eroded when real pay rises again in the future.

Indeed, the level of first-pillar pension provision, measured by the future replacement rate, is low in part because of the indexation of pensions to inflation. The replacement rate, which is 12% for an average salary and 24% for income at half this level, is about half its average level in OECD countries with a top-up system of mandatory private pensions (Table 2.1). This estimate understates somewhat the current level of the replacement rate for low income earners, because it does not include the income supplement. However, few pensioners currently receive this supplement – only 22% did so in 2013. The criteria for awarding the income supplement are restrictive, with a very low maximum level of income (occupational pensions and other work-related income) and monetary savings for claimants.* Ownership of an expensive vehicle or property that is not the claimant's primary residence (such as agricultural land) disqualifies the applicant.

Table 2.1. **Gross and net pension replacement rates**[1]

Percentage of individual earnings estimated for 0.5, 1 and 1.5 times average wage, 2014

	Gross public			Gross mandatory private			Total gross mandatory			Total gross with voluntary			Total net with voluntary		
	0.5	1	1.5	0.5	1	1.5	0.5	1	1.5	0.5	1	1.5	0.5	1	1.5
Israel[2]	23.5	11.8	7.8	59.2	49.3	32.8	82.7	61.0	40.7	82.7	61.0	40.7	85.7	68.8	50.3
OECD country average with:															
A public pension system only	63.9	59.1	56.7				63.9	59.1	56.7	63.9	59.1	56.7	76.2	72.4	70.6
A public and mandatory private pension system	36.0	20.0	13.2	33.6	34.2	34.8	69.6	54.2	48.0	69.6	54.2	48.0	75.9	60.2	57.4
A public and voluntary private pension system	58.9	38.2	29.1				58.9	38.2	29.1	80.1	58.7	48.4	89.8	70.5	61.8

1. The gross (net) replacement rate is defined as the individual gross (net) pension entitlement divided by gross (net) pre-retirement earnings. The net replacement rate takes account of personal income taxes and social security contributions paid by workers and pensioners. For all countries, underlying assumptions retained are based on an inflation assumed to be 2% per year. Real wages are assumed to grow by 1.25% per year. The real rate of return on funded, defined-contribution pensions is assumed to be 3% per year. The calculations show the pension benefits of a worker who entered the system in 2014 at age 20 and retires after a full career. For more details, see OECD (2015), *Pensions at a Glance 2015: OECD and G20 Indicators*.
2. In the case of Israel, it is assumed that the first-pillar pension is indexed to prices. As in the cases of other countries with a public and mandatory private pension system, the calculation of the replacement rates does not take into account any voluntary contributions beyond those that are mandatory. For more details, see OECD (2015), *Pensions at a Glance 2015: OECD and G20 Indicators*.

Source: OECD (2015), *Pensions at a Glance 2015: OECD and G20 Indicators*.

The protection of the elderly from poverty should, however, be reinforced by the growing role that second-pillar pensions are expected to play in pensioners' income in the future (see below) and by the discretionary increases in first-pillar benefits. Basic old-age allowances were indeed revalued between 2007 and 2010, and the income supplement was raised by an even greater amount, but no revaluation has been made since then (Figure 2.4, Panel D). The impact of these moves was offset, however, by the dwindling share of pensioners who qualify for the income supplement, which has fallen by 8 percentage points since 2000, partly because of the passing away of old immigrants from the former Soviet Union who arrived in the 1990s.

The second pillar plays a central role in the Israeli pension system

Since the mid-1990s, most pension reforms have targeted the structure of the second pillar. As early as 1995, voluntary private saving schemes were closed to new account

* To qualify for the income supplement, a single person (couple) needed to receive pension payments of less than NIS 1204 (NIS 1 898) per month at 1 January 2015, or professional income (or a combination of professional income and pension payments) less than NIS 1 852 (NIS 2 222). Cash savings must be less than NIS 34 592 (NIS 51 888).

holders, and these old defined-benefit funds were replaced with a defined-contribution saving system, which became mandatory in 2008 (Brender, 2009). Defined-benefit pension funds for government employees were also closed in stages between 2002 and 2004, and civil servants recruited since then have been covered by the same system as private-sector workers.

Restoring the financial viability of old private pension funds and eliminating their actuarial deficits required an injection of public money and a significant reduction in members' pension rights. The government agreed to pay NIS 83 billion (15% of GDP) over 35 years on the understanding that these old funds would not then make any further claim on the government (OECD, 2011). Responsibility for the financial viability of these funds, most of which are now under the control of a public body, has therefore been transferred to their members, who continue to accumulate pension rights under defined-benefit schemes, although these benefits would in principle be adjusted were the funds' financial position to deteriorate. A stabilisation fund of NIS 15 billion has nevertheless been set up as a safety net in the event of a persistent decline in returns on investments in private securities. Total government support for the actuarial balance of the old funds came, for example, to 0.7% of GDP at the onset of the financial crisis in 2009 (Dahan and Hazan, 2014). To date none has had to cut members' benefits because of financial losses.

Adjustments made to the defined-benefit pensions of public-sector employees hired before 2002-04 (known as "budgetary pensions") have been far more limited than those adopted for the old private pension funds (Box 2.2). The more favourable treatment of the old public-sector schemes has been much discussed in Israel in recent years, not only because of fairness, but also because of the budgetary questions raised (see below).

Box 2.2. **Adjustments to old public and private pension funds**

Several measures were necessary to reduce the generosity of old private-sector pension funds and restore their financial viability (Achdut and Spivak, 2010; Brender, 2009; OECD, 2011):

- Increasing contributions from 17.5% to 20.5% of members' salaries in 2003.
- Charging previously non-invoiced management costs to the funds' members.
- Standardising and reducing the pension rights of fund members. Until 2003 the State had guaranteed a real rate of return of 5.57% on up to 93% of pension savings. The annual accumulation of pension rights now comes to 2% of members' income, capped at 70%. Members' income is generally defined as the average income in the three final years before retirement, or the nation-wide average salary.

The "budgetary pension" scheme (i.e. old defined-benefit pension system of public-sector employees) was closed to new public servants in 2002 and to new permanent members of the armed forces in 2004, although their status was only slightly altered, and benefits are still mostly funded by the State:

- Since 2005, members of "budgetary pension" schemes have been required to pay a contribution of 2% of their salary, whereas they were previously exempt.
- The annual accumulation of pension rights is likewise generally 2% of the reference salary up to a cap equal to 70% of that salary. The reference salary is the member's final salary, which tends to encourage a spate of promotions as people approach retirement.
- When the retirement age is less than the official age, as is the case for permanent members of the armed forces, who retire at 45 on average, and police officers and prison guards (55), a different calculation is used, which is usually more generous.

The new pension funds (which replaced the old private and public schemes) were designed to be financially viable and provide adequate retirement income. In 2008 it became mandatory to pay into a new defined-contribution fund under the supervision of the Capital Markets, Insurance and Savings Division (CMISD) of the Ministry of Finance. On retirement members must also withdraw a minimum share of their savings as an annuity. Mandatory contributions are levied on the portion of the employee's remuneration up to the average salary, but people may opt to raise this threshold under collective or company agreements. New members are also free to choose from three vehicles that are essentially differentiated by type of risk covered (Table 2.2). New pension funds, for example, which protect against the risk of longevity and disability and include an allowance in the event of death, have wider risk coverage than provident funds and life insurance.

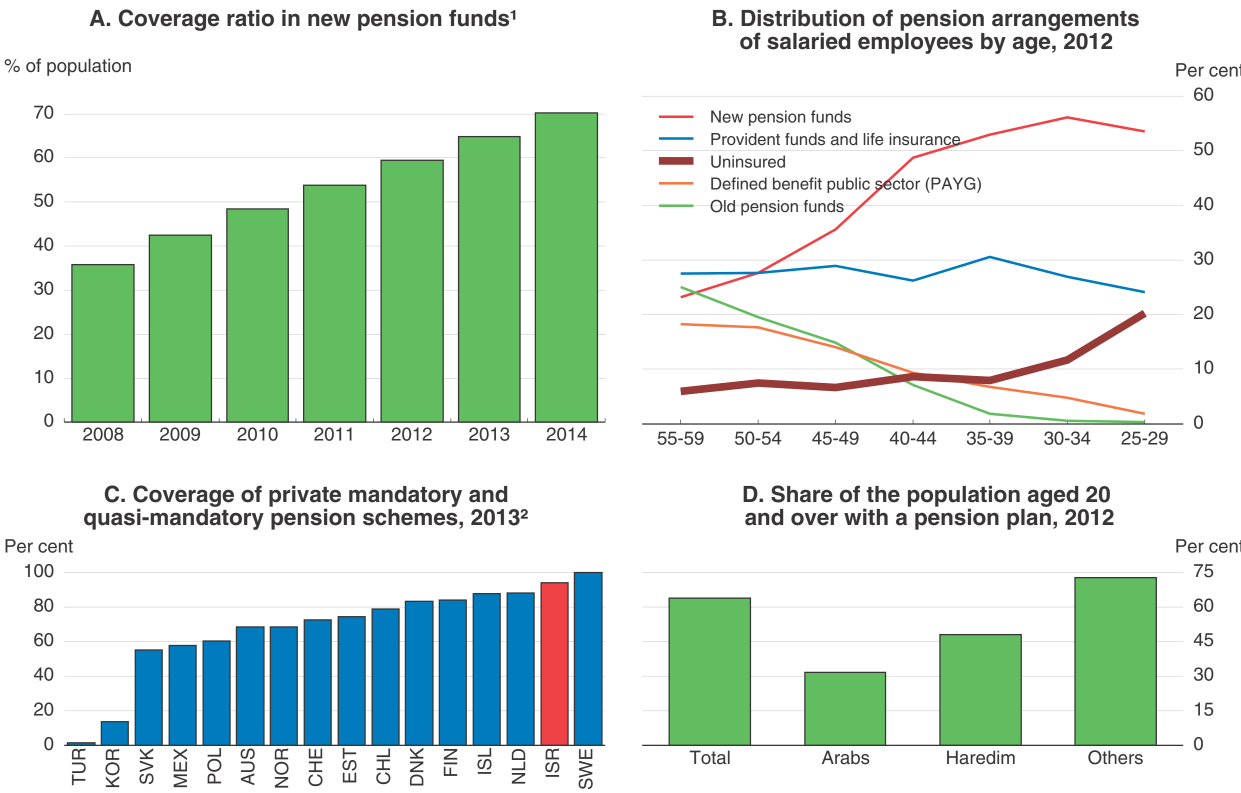
Table 2.2. **Main characteristics of the different types of second pillar pension plans**

	Contribution	Investment	Withdrawal
Old Pension Fund	• Tax incentives • Mutual life and disability insurance	• Tax relief • Partly defined benefit plans • Accrued pension rights limited at 2% per year • Investment subsidies • Actuarial balance	• Annuity
New Pension Funds	• Tax incentives • Mutual life and disability insurance	• Tax relief • Defined contribution • Mutual risk bearing • Investment subsidies	• Annuity – Basic sum • Lump sum/Annuity – exceeding amount • Mutual insuring of longevity risk
Provident Funds	• Tax incentives	• Tax relief • Defined contribution	• Annuity – Basic sum • Lump sum/Annuity – Exceeding amount
Life Insurance Policies	• Tax incentives • Life and disability insurance	• Tax relief • Defined contribution	• Annuity – Basic sum • Lump sum/Annuity – Exceeding amount • Insuring of longevity risk

Source: Capital Markets, Insurance and Savings Division (CMISD), Ministry of Finance.

These reforms have increased coverage by occupational pensions. The coverage rate of the new funds grew from 36% to 70% of the economically active population between 2008 and 2014 (Figure 2.5, Panel A). The new defined-contribution system remains immature, however, and around 40% of workers aged over 50 still belong to old public or private pension schemes (Panel B). The average coverage rate by private pension systems in Israel is high by international standards (Panel C), but this masks wide disparities among the population. Almost 20% of the economically active aged under 20 have no pension savings account (Panel B), because they are opened only after six months' continuous employment with the same employer. Coverage is also different across communities: in 2012 the coverage rate was only 32% for Israeli Arabs and 48% for Haredim, compared to 73% in the rest of the population (Panel D), largely because both Arab Israelis and Haredim have lower employment rates. The difference in coverage between communities is smaller when considering only the employed: in 2012 the coverage rate was 60.5% for employed Israeli Arabs, 76.8% for employed Haredim and 85.7% in the rest of the employed population. Moreover, coverage also rises with education and income. Very few workers on the lowest incomes had a pension savings scheme before they became mandatory (Brender, 2009 and 2011).

Figure 2.5. **Second pillar of the pension system**



1. Total members of new pension funds as a percentage of the population aged 15 and above.
2. Including all persons who do not contribute but have acquired pension rights as a percentage of the working-age population (15-64 years). 2013 data or latest available year.

Source: Ministry of Finance – Capital Markets, Insurance and Savings Division; Bank of Israel estimates based on CBS (2012), *Social Survey*; OECD (2015), *Global Pension Statistics* and OECD estimates.

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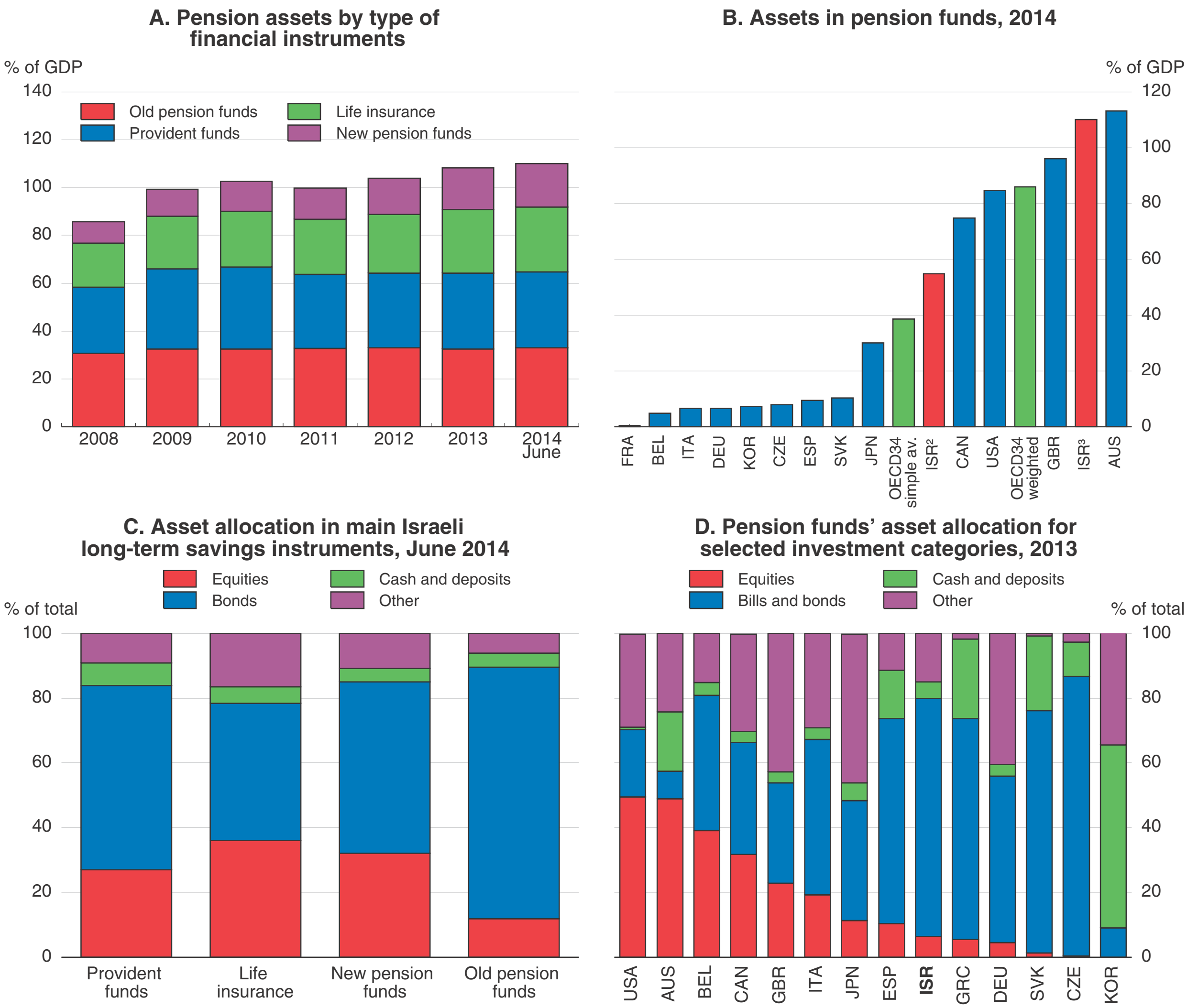
To ensure the elderly have adequate income the authorities have also gradually increased the minimum rate of mandatory pension saving in the second pillar to 17.5% of salary since 2014. This is high compared to other countries, even though part of the contribution – 6 percentage points – can be used as unemployment insurance. This pillar's replacement rates have therefore reached 50% to 60% for average and low incomes, respectively, placing Israel 15 to 25 percentage points above the average for OECD countries with a system of top-up private pensions (Table 2.1).The replacement rate remains relatively high, between 33% and 40%, even if all contributions to unemployment insurance are used as redundancy pay-outs.

Increased participation rates in occupational pensions and the high level of contributions should drive a future rise in this source of pension revenue. Second-pillar financial assets grew to some 110% of GDP in 2014 (Figure 2.6, Panel A). International benchmarks suggest that this level is high (Panel B), making the Israeli pension system more dependent on its second pillar than those in other OECD countries.

In addition to these pension reforms, the government has also partially withdrawn from the management of second-pillar assets, reducing the guarantee of high yields previously offered (Box 2.2) and abandoning it completely for provident funds and life insurance, although not for old and new pension funds, which must invest 30% of their

Figure 2.6. **Assets in the second pension pillar**[1]



1. In Panels C and D the data are not fully consistent since they come from different sources.
2. Pension funds only.
3. Including pension funds, life insurance and provident funds. Life insurance also plays an important role for long-term savings instruments in some other countries, such as Denmark.

Source: Ministry of Finance – Capital Markets, Insurance and Savings Division; OECD (2015), *Global Pension Statistics*.

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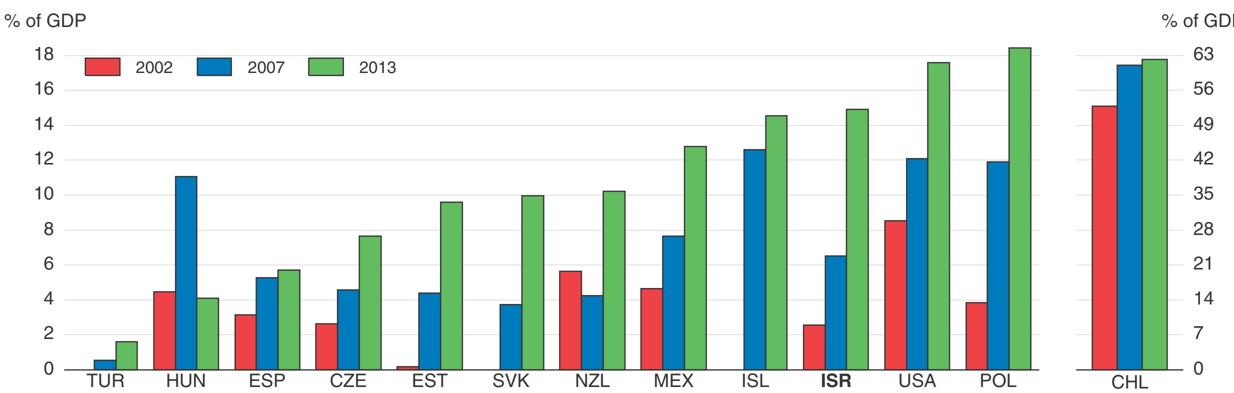
assets in non-tradable public bonds with a guaranteed real interest rate of 4.86% (also called designated bonds). This regulation was initially intended to reduce the volatility of returns on pension savings and in effect re-introduces a sort of defined-benefit component into the system. To reinforce pensioner protection against possible financial shocks, in January 2016 the authorities decided to modify the distribution of these designated bonds to take into account the saver's age. As from the second quarter of 2016, those below 50 will lose the protection of these investments in designated bonds, those between 50 and retirement age will have 30% of their cumulated pension assets invested in these bonds, while existing pensioners will have 60% of their assets invested in them. At current market interest rates, it implies a subsidy, whose size depends on the evolution of market rates. It also increases the weight of bonds in the assets of old and new funds, even though the management of these assets has been extensively liberalised, and investment caps (for equities, for example, or foreign investments) have been abolished (Figure 2.6, Panels C and D).

Despite its depth, the reform process has brought little change to the taxation of second-pillar pension savings, which enjoy four advantages (Brender, 2011): (i) an exemption from NII contributions and tax for employees on employer pension contributions on salaries up to four times the average wage; (ii) a non-refundable 35% income tax credit for employees on 7% of their insured income up to the average wage; for the self-employed the income tax credit is on 5% of their insured income up to twice the average wage; (iii) a tax exemption for income from fund investments; and (iv) an income tax exemption for 35% of the pension annuity received on retirement, up to a maximum of 30% of the economy-wide average salary; this tax exemption is expected to rise to 67% of the pension annuity by 2025. By contrast, private pensions based on personal savings offer no tax advantages. Personal pension savings have grown rapidly, however, with assets amounting to 12.7% of GDP in 2012, compared to 2.6% 10 years earlier (Figure 2.7).

Figure 2.7. **Total assets cumulated in personal pension plans**



Source: OECD (2015), *Global Pension Statistics*.

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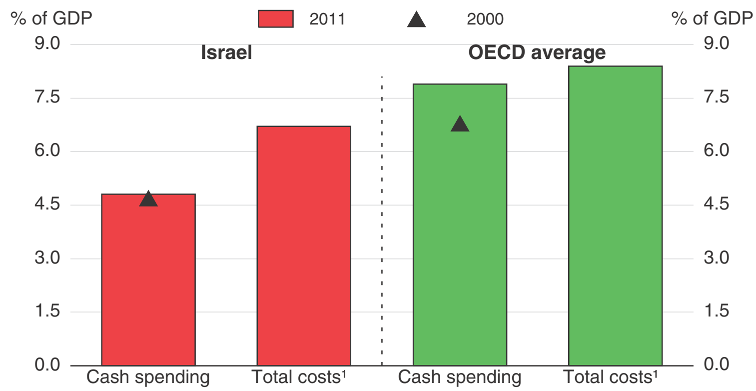
State involvement in pension financing is relatively limited

Public spending on pensions is comparatively low

The Israeli government's involvement in the financing of old-age benefits takes many forms, including cash spending in the shape of first-pillar pensions paid by the NII and pensions paid to public service retirees hired before 2002 or 2004. It also provides funds to the second pillar with subsidies to old, now closed, pension schemes, tax breaks on contributions to pension saving and annuities upon pay-out, and the interest guarantee on some second-pillar pension assets.

By international standards, total government pension spending is nevertheless low, partly because the Israeli population is younger than in most other OECD countries. Public cash pensions were 4.8% of GDP in 2011, compared to the OECD average of 7.9% of GDP (Figure 2.8). They have remained stable in Israel since 2000, whereas they have grown by an average of 1 percentage point in the average OECD country. If the subsidies and tax

Figure 2.8. **Public pension costs**



1. Including tax deductions on contributions for the second pillar pension funds.

Source: OECD, *Social Expenditure Database* and OECD estimates based on data provided by the Ministry of Finance.

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deductions granted to pension saving schemes are included, Israel's public spending on pensions came to almost 7% of GDP in 2011 (with only a small rise since then) (Table 2.3), 1.5 percentage points below the equivalent OECD average.

Table 2.3. **Total pension-related public spending**

2014

	NIS billion	% of GDP
Total	77.0	7.1
First-pillar NII pensions, old-age and survivors[1]	27.0	2.5
Civil servant pensions, old-age and survivors	25.2	2.3
Central government	22.8	2.1
Local government[1]	2.4	0.2
Second-pillar pensions	24.8	2.3
Assistance to old funded defined-benefit funds	3.8	0.3
Designated debt subsidy to all pension funds	3.5	0.3
New defined-contribution pension funds	17.5	1.7
of which:		
Tax benefit at deposit	11.5	1.1
Capital income tax break	6.0	0.6

1. OECD estimate based on 2013 data.

Source: NII data provided by the Ministry of Finance, *OECD Social Expenditure Database* and OECD estimates.

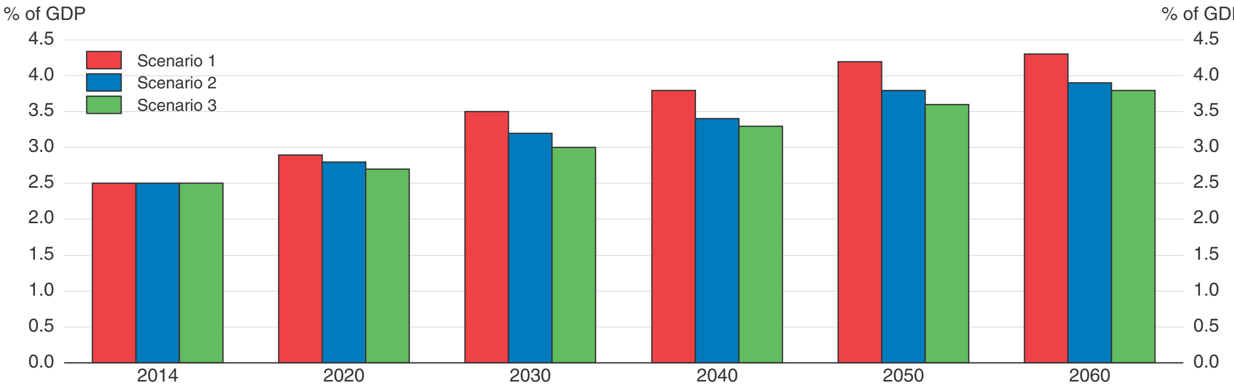
Public spending increases on pensions in the coming decades will be moderate and manageable

An analysis of public pension spending suggests that, absent future legal changes, spending is set to rise by about ½ percentage point of GDP by 2030, but this increase will be almost fully reversed by 2060 as lower public spending on civil servants' pensions is projected to offset the rising cost of first-pillar pensions.

The rise in the cost of basic old-age benefits in the first pillar is expected to be modest

First-pillar pension spending is expected to increase by 1.0% by 2030 and 1.8% of GDP by 2060 because of the rise in the dependency rate (Figure 2.9). These estimated increases

Figure 2.9. **Long-term projections of first-pillar pension spending[1]**



The ratio of pension spending to GDP can be decomposed as follows:
Pension/GDP = (Number of Pensions/Elderly population)* (Elderly population/Working-age population)* (Working-age population/Employment)* ((Pension/Number of Pensions) / (GDP/Employment))
Scenario 1 assumes that Pension/GDP is only affected by the rise in the old-age dependency ratio (Elderly population/Working-age population).
Scenario 2 assumes that in addition to scenario 1, the employment rate increases by about 8 percentage points between 2014 and 2030.
Scenario 3 assumes that in addition to scenario 2, by 2020 the number of pensions declines by 4% in proportion of the number of elderly.
Source: OECD estimates based on NII and CBS long-term projections.

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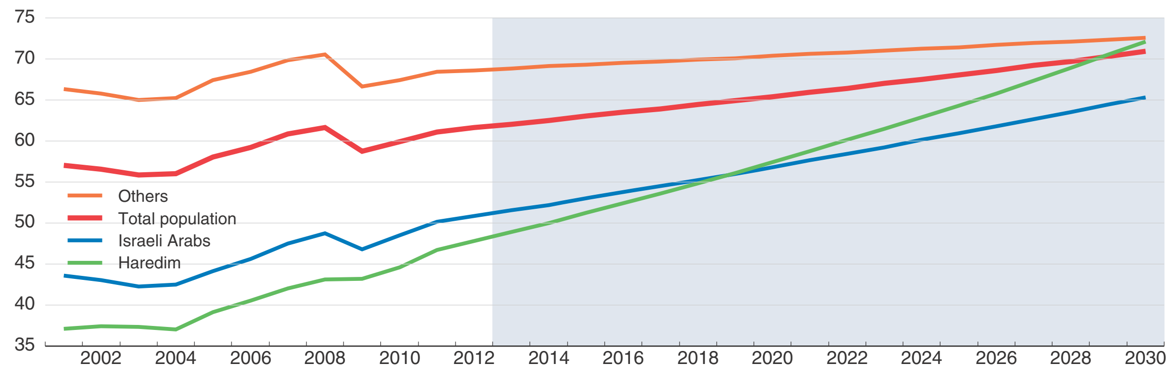
due to population ageing are based on assumptions of an unchanged employment rate, a fixed share of pensioners in the population over retirement age and stable total benefits relative to productivity and salary trends. However, it is likely that the low employment rates of the Haredi and Arab communities will continue to grow, which will dampen the rise in first-pillar spending as a share of GDP. If the employment rate rises by 11 percentage points between 2010 and 2030 and then levels out (Figure 2.10), as assumed by the NII in its analysis of its long-term financial sustainability (NII, 2014a), the increase in the first-pillar pension spending would be reduced by 0.3-0.4 percentage point of GDP by 2030 and 2060. Such a dampening effect might well be somewhat smaller, however, if the pace of increase in the employment rates of Haredim and Israeli-Arabs is slower. On the other hand, if the female retirement age increases to 64, the number of pensions as a proportion of the population aged 20-67 might decline, which would reduce the rise in these old-age allowances by an additional 0.1-0.2 percentage point of GDP by 2030 and 2060.

It is harder to predict the future trend in the average basic pension relative to the average salary. The ratio might fall because of the new system of indexing to prices. Alternatively, social pressure to increase first-pillar benefits could force increases. The success of a pensioners' rights party in the 2006 general election, though short-lived, testifies to the existence of voter potential to force decisions to revalue the old-age allowance. The possibility of these forces exerting themselves again cannot be ruled out, given the expected growth in the proportion of pensioners on low incomes in the Haredi and Arab communities and the high poverty rate among the elderly (see below).

In sum, first-pillar pensions should rise by a total of around ½ to ¾ per cent of GDP by 2030 and by 1¼ to 1½ per cent of GDP by 2060, assuming that Haredi and Arab-Israeli employment rates continue to increase, women work longer, and the basic pension remains stable relative to the average salary.

Figure 2.10. **Employment rate projections**

In per cent of the 20-67 year-old population



Source: National Insurance Institute (2014), *Annual Survey 2013* (in Hebrew).

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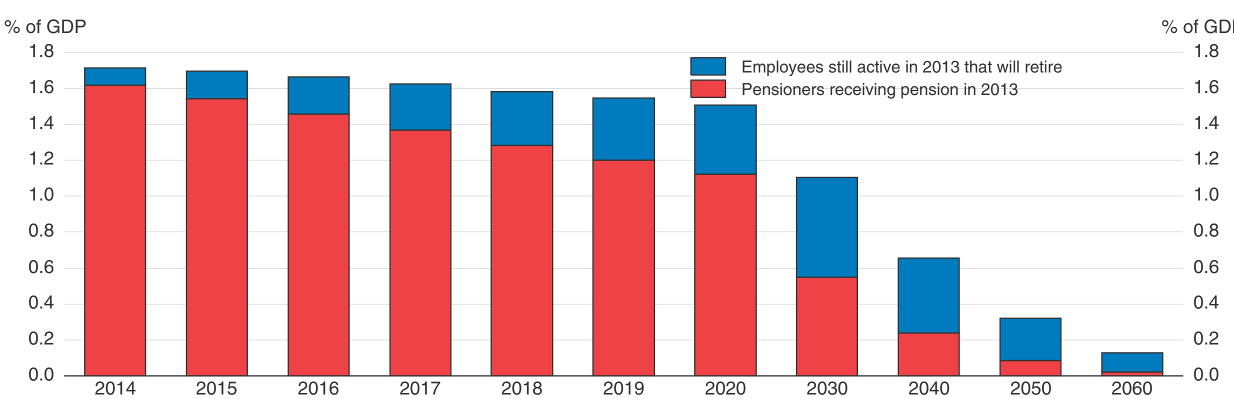
Pension spending for public-sector employees is likely to fall, but there remain risks

The rise in the cost of first-pillar pensions will, however, be almost fully offset by the expected decline in pension spending for public-sector employees between 2030 and 2060. On the one hand, pension spending for civil servant hired before 2002 or 2004 (the so called "budgetary pensions") is set to fall gradually from an estimated 1.7% of GDP in 2014 to 1.1% of GDP in 2030, before practically vanishing by 2060 because of the scheme's closure to new members (Figure 2.11). On the other hand, government spending on defined-contribution pension schemes for new employees, which probably accounts for about 1.2% of GDP in 2014, is projected to reach 1.8-1.9% of GDP in 2030 and stay around this level until 2060 (Geva, 2013). Overall, total government spending for civil servants' pensions is thus likely to remain broadly stable between 2014 and 2030, before declining by about 1% of GDP by 2060. Several other OECD countries, such as Australia and New-Zealand, have switched over to a DC schemes several years ago and have no long-term pension liability or have created a fund to guarantee the payment of civil service pensions, which do not entail defined contributions.

Figure 2.11. **Budgetary pensions**



Source: OECD estimates based on Ministry of Finance, Accountant General, *Financial Statements as of 31st December 2013.*

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Despite this relatively positive outlook, doubts remain over the actual extent of the State's total pension commitments to its workers (Box 2.3). The figures available on "budgetary pension" commitments are not exhaustive (MoF, 2014), and governance of public servants' pensions presents shortcomings that could have undesirable consequences for controlling their cost. Furthermore, the transparency of the State's contingent liabilities for pension schemes in public enterprises and other bodies seems poor. It would be helpful to transfer the management of pensions for the armed forces, police and prison guards from the Ministries of Defence and Internal Security to the Ministry of Finance, which manages pensions for all the other Ministries. And greater transparency is needed in the State's contingent pension liabilities in various public entities.

Box 2.3. **Improving the governance of "budgetary pensions" and the transparency of the government's contingent pension liabilities**

The government's "budgetary pension" commitments, estimated on an actuarial basis at NIS 565 billion (54% of GDP) at the end of 2013 (MoF, 2014), include neither local authority pensions nor early retirement or "transition" pensions. Early retirement pensions are granted to permanent members of the armed forces, civil defence employees and others employed in defence between their early retirement age of 45 and the official retirement age of 67. They are still granted to people recruited after 2004 who belong to a funded pension scheme.

The cost of transition pensions is not known exactly (MoF, 2014), and recent studies suggest that outlays may have surged in recent years (see below). These difficulties seem to be partly related to a governance problem: the Ministry of Finance manages "budgetary pensions" for all ministries except Defence and Internal Security, which also covers the police and prison guards, among others.

The government's contingent liabilities are also poorly evaluated for university pensions and pensions for public enterprises and other public bodies (State Comptroller, 2009). Pensions for these entities' employees are based on specific agreements between management and unions, but these agreements are not transparent enough, as is the case for IEC, the public electricity company, which is heavily indebted. This situation encourages arrangements that contravene the principles of good management and fairness and prevent the actual level of the government's contingency liabilities being established. While responsibility for funding these pensions largely falls to the employers, debts contracted to finance employees' pensions are, because of their public nature, ultimately, financial commitments of the taxpayer, should the entity concerned run into budgetary difficulties.

The issues raised by the extremely generous pension systems of some public bodies can be illustrated by the case of the Hebrew University of Jerusalem (Tsipori, 2014). The excessive cost of its unfunded pension scheme, which includes the accumulation of pension rights at a rate of 3.5% per year of service, compared with 2% in public service, required intervention by the Ministry of Finance in 2014 to prevent the institution's bankruptcy. It was necessary to offer budgetary support and cut pensions, in direct contravention of the pension agreements negotiated by the University. The action taken by the Ministry of Finance could pave the way to a more general renegotiation of unfunded, and sometimes very generous, university pensions.

The cost of second-pillar subsidies and tax deductions are set to remain stable

Upward pressure on second-pillar public subsidies and tax deductions should be relatively mild. For one thing, support for the old pension funds, which is estimated at an annual 0.3% of GDP, should end before 2040. And, assuming no change in the law, the cost of tax deductions for contributions to pension savings could also fall relative to GDP. Some of these deductions affecting income tax are not refundable, and an increasing proportion of workers on low incomes in the expanding Arab and Haredi communities are likely not to be subject to income tax. The share of (non-refundable) exemptions from income tax granted to pension annuities could also slip a little in the future, as an increasing number of pensioners on low incomes take retirement. On the other hand, the cost of tax exemptions for pension fund earnings, despite considerable annual variance, should not in theory follow an upward trend if the long-term average yield of these funds is close to the economy's long-term growth rate, once these funds have reached a steady state in terms of accumulation.

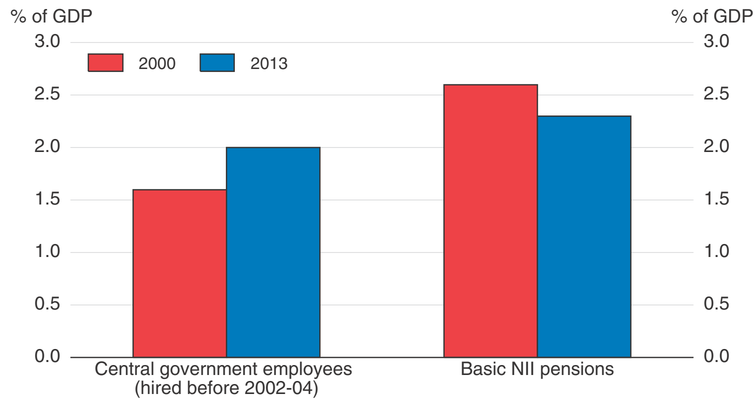
The cost of subsidies to pension funds linked to the government-guaranteed return on 30% of total assets is relatively heavy for the public finances, although it may vary over time depending on market interest rate developments. Its cost, resulting in higher interest payments, was estimated at around ¼ per cent of GDP in 2014. This subsidy could also rise in the coming years, but not significantly. Any increase would depend partly on the gap between these guaranteed rates of return and market rates and partly on the growth in value of the funds' assets. An increase of 10% of GDP of these assets, for example, would increase subsidies by 0.03% of GDP for every percentage point of the gap between the government-guaranteed return and the market rate. Thus, between 2008 and 2013, when pension fund assets grew by 10% of GDP, the average gap of almost 3.5 percentage points between the government-guaranteed return and the real interest rate for its ten-year bonds pushed the cost of these subsidies up by only 0.1% of GDP.

There is room for budgetary savings to pay for the pre-2030 increase in total public spending on pensions

One option to pay for the pre-2030 increase in total public spending on pensions is to raise the contribution rate of public employees hired before 2002-04, who benefit from a generous scheme and a much lower (2% after tax) contribution rate than for those in the current scheme (7% for public employees and 5.5% for private employees, both tax deductible). Raising this contribution rate would also enhance equity between older and younger public employees. As stated above, generous "budgetary pensions" have scarcely been dented by welfare cuts introduced since the beginning of the 2000s in other schemes. These pensions were not affected by the cost slashing faced by defined-benefit private pensions nor even by the more tempered adjustments to first-pillar pensions. Spending on "budgetary pensions", which represent a commitment of 54% of GDP on a present-value basis, therefore climbed 5.4% per annum in real terms between 2000 and 2013, compared with 2.5% for first-pillar pensions. The cost of pensions paid to central government employees grew by 0.4 percentage points of GDP between 2000 and 2013, while NII pensions declined by 0.2 points of GDP (Figure 2.12).

This fairness issue also looms large over the pensions of public entities, even if their budgets are independent. The pension system of new employees in both private and public sectors does not apply to the employees of these entities. Moreover, there seems to be, in some respects, another equity question among public employees, with the thorny question of defence-sector pensions, which is one of the points recently addressed by the Locker Committee in its report on the Ministry of Defence's budget. The present value of "budgetary pension" commitments in the defence sector came to 43% of total "budgetary pension" commitments and annual spending of 0.65% of GDP in 2013. By way of comparison, "budgetary pensions" in the education system represented 27% of total

Figure 2.12. **Direct public spending on old-age and survivors' pensions**



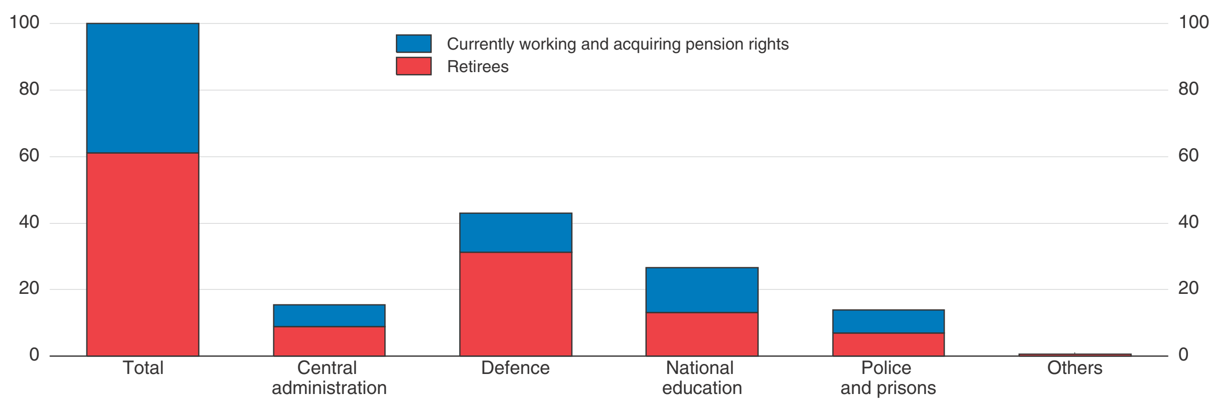
Source: OECD, *Social Expenditure Database*.

StatLink http://dx.doi.org/10.1787/888933318130

"budgetary pension" commitments (Figure 2.13) and annual spending of 0.35% of GDP, even if it covers about twice as many workers. The defence-sector pensions are not managed by the Ministry of Finance, and this exemption to the rules fosters a kind of financial permissiveness. Between 2006 and 2012 transition pensions of permanent members of the armed forces grew by 9% per year (compared to 4% for those managed by the Ministry of Finance) and then jumped by 57% in 2013-14 (Knesset, 2014).

Figure 2.13. **Composition of budgetary pensions**

As a percentage of the liabilities on budgetary pensions, at end-2013



Source: Ministry of Finance, Accountant General, Liability for Budgetary Pension – Financial Statements 2013.

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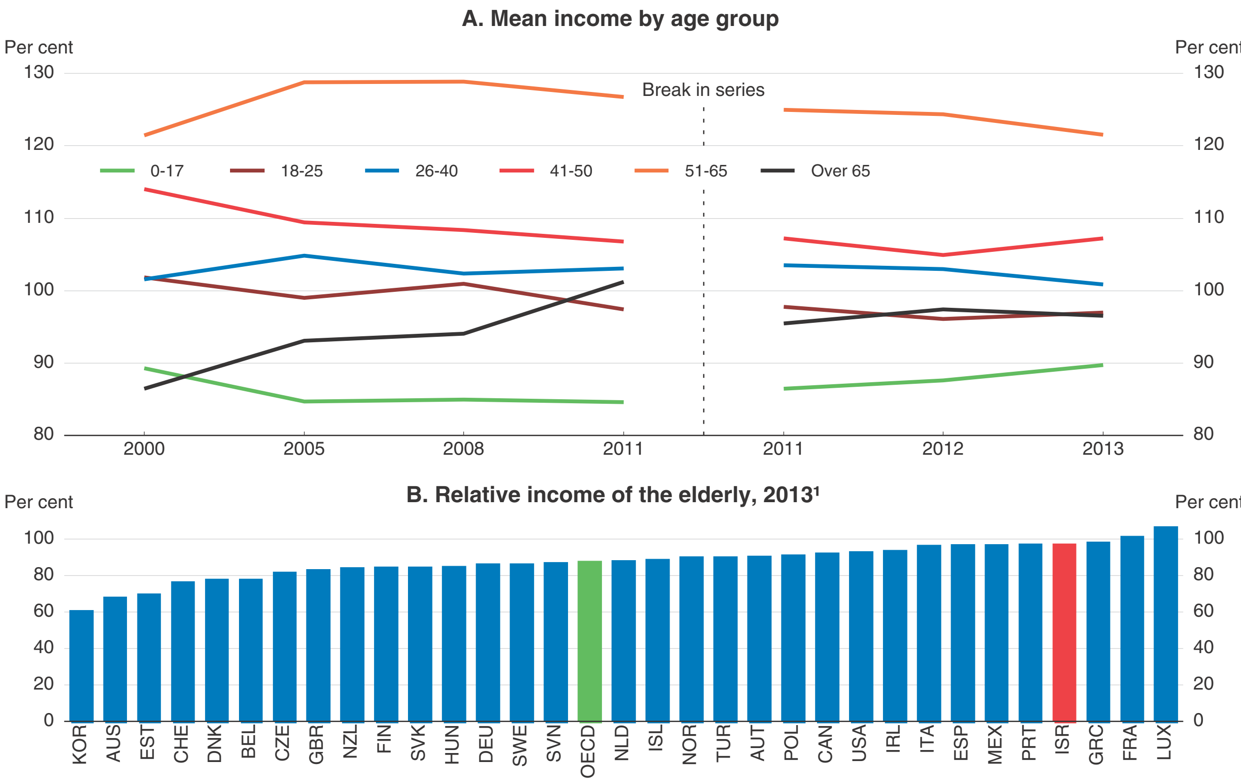
The decline in poverty among the elderly has so far been limited

Average income of the elderly has increased as their employment rates have risen

The relative financial position of people aged over 65 has improved considerably since the early 2000s (Figure 2.14, Panel A). Their average disposable income grew by an annual average of 2.3% in real terms between 2000 and 2013, compared with 1.4% for the rest of the population. As a proportion of average income for the whole population, that of the over 65s rose from 86.5% in 2000 to 96.5% in 2013, which puts Israel among the top OECD countries in terms of the relative position of the elderly (Panel B). This increase is mainly due to significant

Figure 2.14. **Mean income of those over 65**

As a percentage of the mean income of total population



1. Or latest available data.

Source: Calculations from the *OECD Income Distribution Database*, via *www.oecd.org/social/income-distribution-database.htm*.

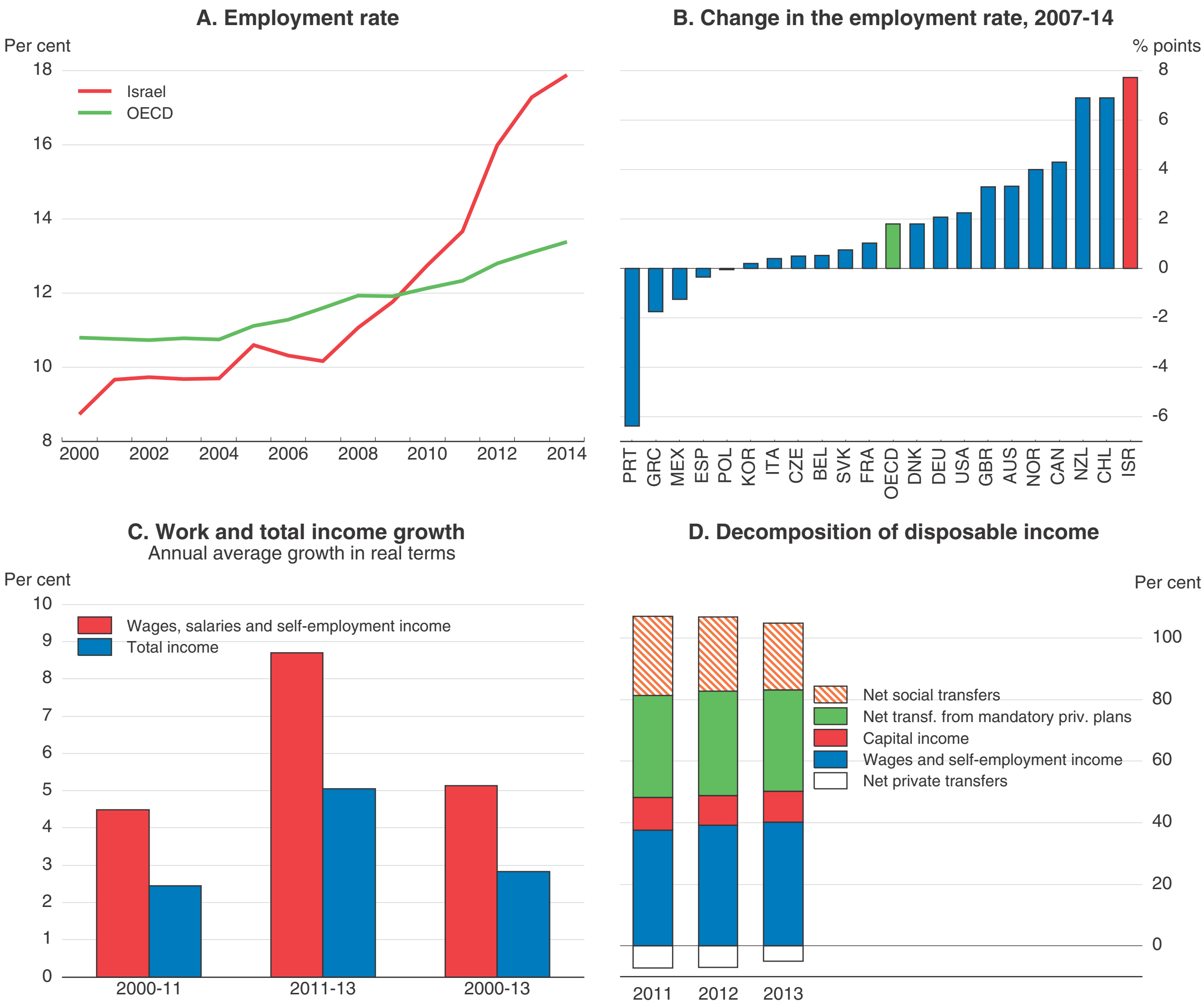
StatLink http://dx.doi.org/10.1787/888933318157

growth in work-related income, which reflected a rapid increase in the employment rate of senior workers from the mid-2000s, especially among the 65-74 age group. This increase was fuelled by the rise in the retirement age and has been far stronger than in other OECD countries since 2007 (Figure 2.15, Panels A and B). Over 65s' work-related income, which grew by an annual 6% in real terms between 2001 and 2013, represented 46% of their gross income in 2013 (Panels C and D).

Conversely, net public cash transfers to the elderly, who largely depend on first-pillar pensions, rose far more slowly. In 2013, they accounted for less than 22% of the average disposable income of people aged 65 and over, down from 30% in 2000. At the end of the 2000s, public cash transfers as a share of elderly people's income put Israel at the lower end of the OECD, whereas its share of occupational pensions and capital income ranked among the highest (Figure 2.16).

Despite the vigorous growth of second-pillar occupational pension savings, this has so far had only a limited impact on the disposable income of the elderly. The effect of the mandatory private pension system introduced in 2008 will kick in gradually and should intensify over time. A third of the over 65s had an occupational pension scheme in 2000, and this was still only 47% in 2012. As mentioned above, behind these average coverage rates lie wide disparities: 85% of those earning less than the median salary had no second-pillar pension before 2008 (Brender, 2011).

Figure 2.15. **Employment and disposable income developments among those over 65**



Source: OECD, Labour Force Statistics; calculations from the *OECD Income Distribution Database*, via *www.oecd.org/social/income-distribution-database.htm*.

StatLink http://dx.doi.org/10.1787/888933318165

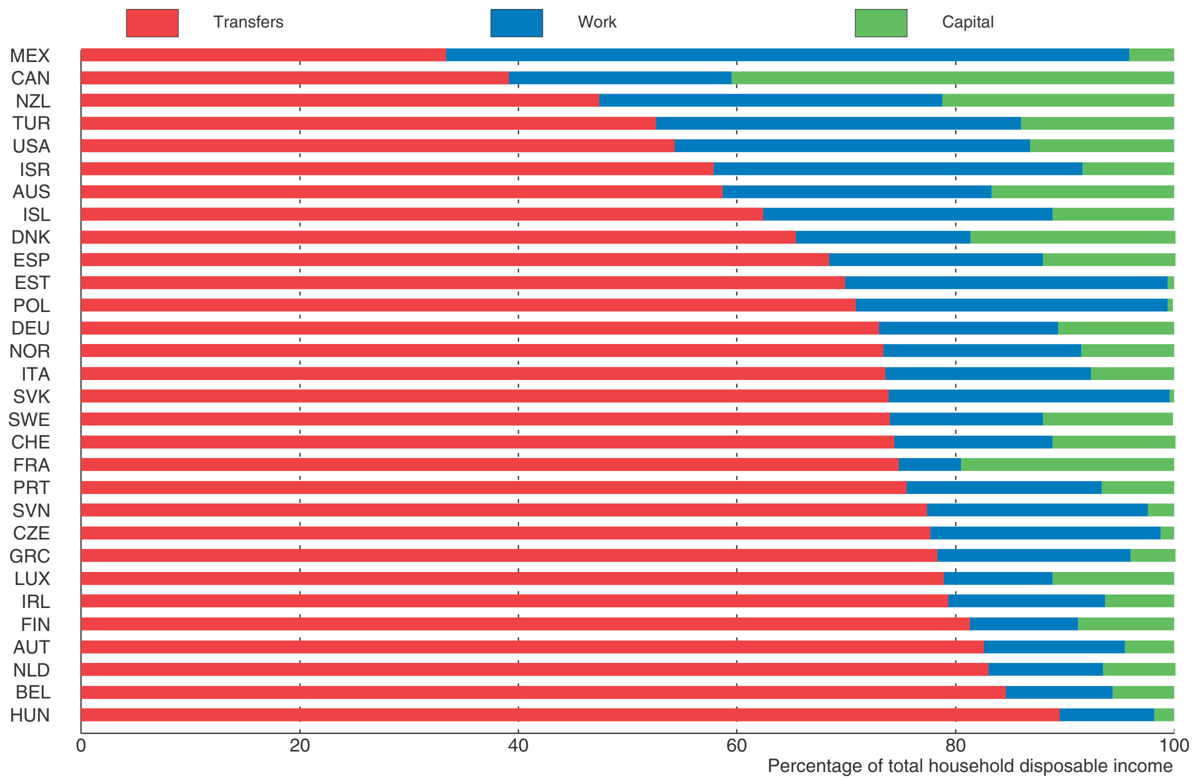
For some elderly people, poverty did not fall

The trend increase in the average income of the elderly did nothing to level the significant disparities between the living standards of the Jewish and Arab communities (Figure 2.17). The income gap between the two groups overall actually widened from 54% to 58% between 2001 and 2011, driven mainly by very different trends in work-related income and employment rates among the elderly: the latter grew moderately for Arab men (up 6 percentage points between 2001 and 2011), almost not at all for women (up 1 point) and rapidly among Jews (up 12 percentage points for men and 6 for women) (Kimhi and Shraberman, 2013).

The relative poverty rate among the elderly is more pronounced than for other age groups in the population, except the 0-17s (Figure 2.18, Panel A). However, the impact on living standards of this high poverty rate, measured by disposable income, is difficult to

Figure 2.16. **Income sources[1] of the elderly population**

2012[2]



1. Income from work includes both earnings (employment income) and income from self-employment. Capital income includes private pensions as well as income from the returns on non-pension savings. In the case of Israel, the measure of capital income is difficult to measure accurately and to distinguish from work-related income.
2. Or latest year available.

Source: OECD, *Income Distribution Database*.

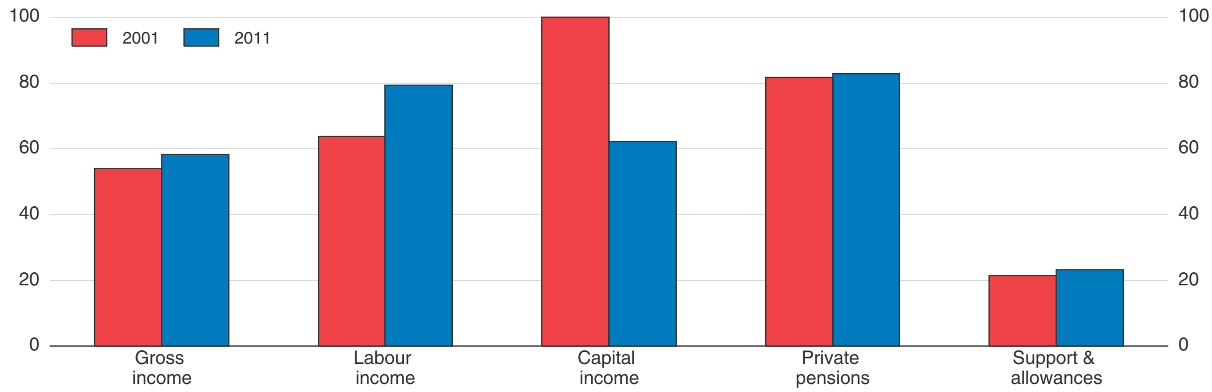
StatLink http://dx.doi.org/10.1787/888933318178

assess because it does not take account of wealth, including housing wealth, which is typically greater for the elderly than younger groups. Relatively low disposable income among the elderly can indeed be compensated by greater consumption out of wealth. Yet, this effect of wealth on the standards of living is probably less pronounced in international comparisons, which show that the poverty rate of 20% among those aged 66-75 and 30% for those 76 and over in Israel remains among the highest in the OECD for these age groups (Figure 2.18, Panel B).

Notwithstanding improving average income of the elderly, their poverty rate has not fallen since the early 2000s. After a steep rise in the first half of the decade, fuelled by budgetary restrictions that curbed welfare spending, it only slipped back gradually up to 2011, mainly as the employment rate increased, to again reach the 2002 level (Figure 2.19). Despite statistical issues that complicate calculations for recent years, it seems that elderly poverty is no longer falling. Recent technical changes in the NII's surveys may explain part of the sharp rise in the poverty rate in 2012-13 (3 percentage points from 2011), but the Institute also stresses that in 2012 and 2013, old-age allowances did not increase in real terms, as they had in previous years (NII, 2014b). Overall, it is likely that poverty remained flat between 2011 and 2012-13, as suggested by OECD data, which

Figure 2.17. **Average income gap between elderly Arabs and non-Arabs**

In per cent of non-Arab population average income

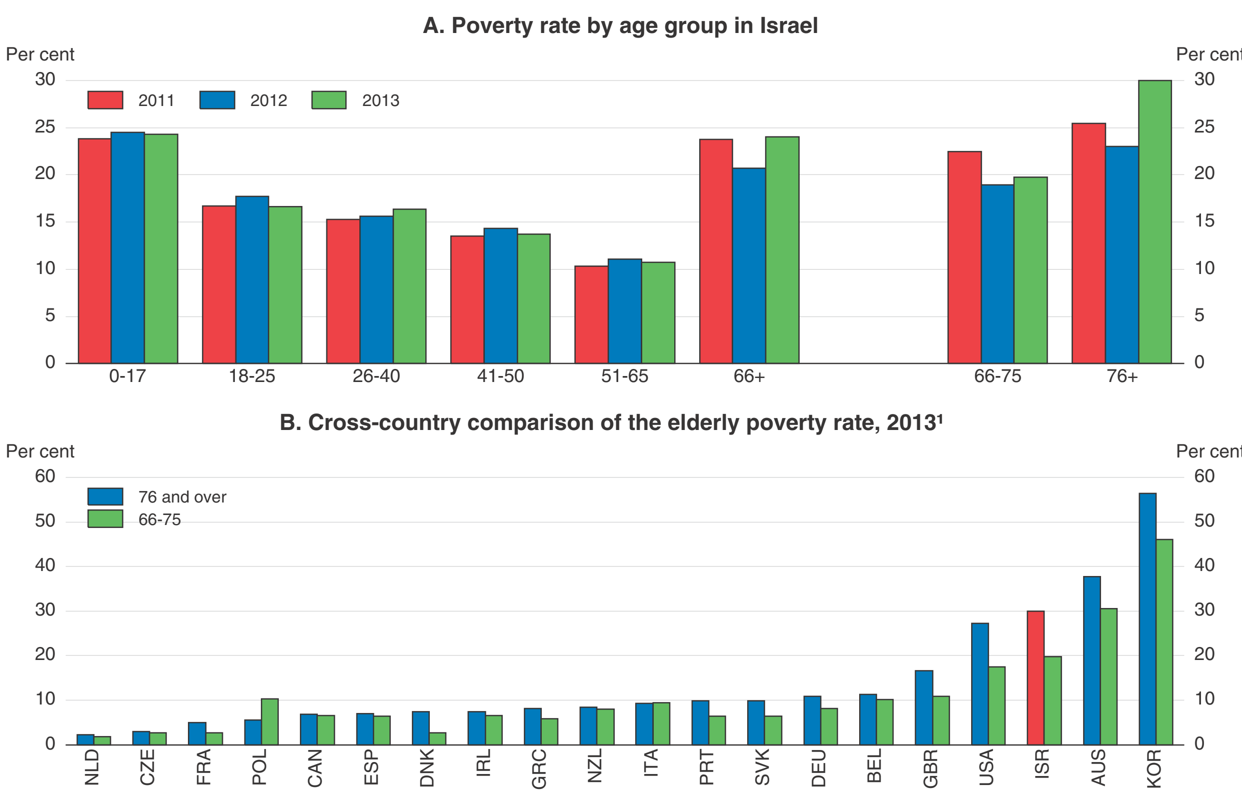


Source: A. Kimhi and K. Shraberman (2013), "Employment and Income Trends Among Older Israelis", in D. Ben-David (ed.), *State of the Nation Report: Society, Economy and Policy in Israel 2013*, Taub Center for Social Policy Studies in Israel.

StatLink http://dx.doi.org/10.1787/888933318187

Figure 2.18. **Relative poverty rates**

After taxes and transfers



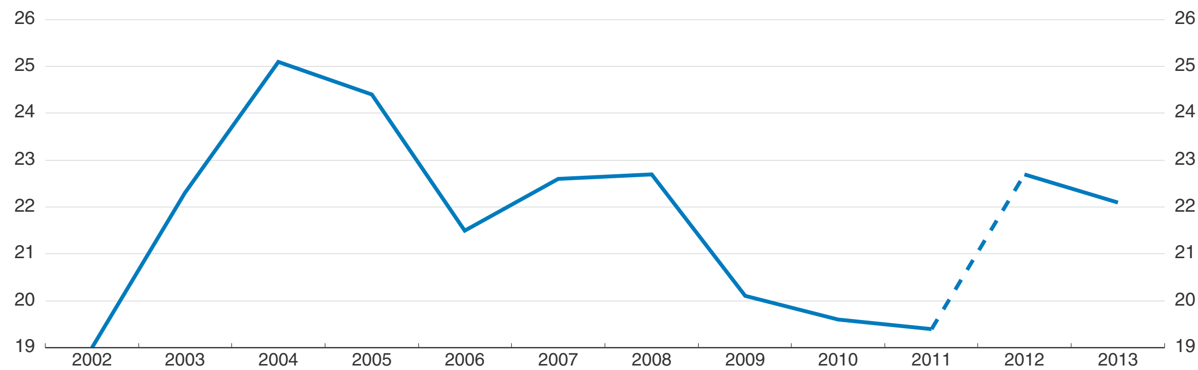
1. Or latest year available.

Source: Calculations from the *OECD Income Distribution Database*, via *www.oecd.org/social/income-distribution-database.htm*.

StatLink http://dx.doi.org/10.1787/888933318194

also reveal a worsening of the position of the over 75s (Figure 2.18, Panel A), a category that represented 42% of the elderly in 2013. This age group is all the more affected by declining public benefits, as they are not offset by increased employment rates, as for the 66-75s.

Figure 2.19. **Poverty rate of the elderly population**[1]



1. NII definition: from 60 years old for women and from 65 years old for men. The dashed line segments indicate the break in the series due to methodology changes.

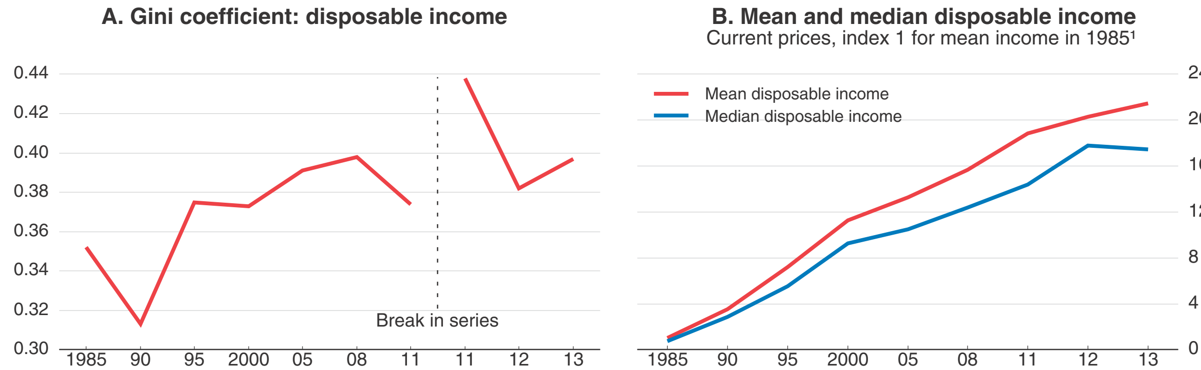
Source: National Insurance Institute.

StatLink http://dx.doi.org/10.1787/888933318200

The paradox of persistent poverty despite rising relative income among the elderly can be explained by two factors. The first concerns income distribution, which is particularly unequal in this age group, and has become far more so since the early 1990s – notwithstanding an improvement since 2008 (Figure 2.20, Panel A) – as evidenced by the growing divide between average income and median income among the over 65s, especially since the early 2000s (Panel B). Average disposable income among the elderly has been driven up by the income of the highest deciles in the age group. It is therefore probable that it was the most highly qualified among the elderly who profited most from the rise in the activity rate and the rise in work-related income. These people are generally near the upper end of the income scale, and for the most part also had private pension schemes prior to 2008. For this category of the elderly, around half their income derives from these pension schemes (Bowers, 2014). They will also have benefited from the rapid expansion in personal pension savings, whose value grew by over 8 percentage points of GDP from 2007 to 2013 (Figure 2.7).

The second reason for a stubbornly high elderly poverty rate concerns the level of first-pillar pensions. Around half of elderly people do not receive income from second-pillar pensions and probably receive little or no capital income, even though many of them have housing wealth; for them achieving an acceptable quality of life is tightly linked to welfare payments, especially NII old-age benefits (Behr et al., 2013). And basic old-age allowances represent between 50% and 60% of income corresponding to the poverty threshold as defined by the NII for a person living alone and a childless couple. If the income supplement – received by just 22% of pensioners – is added to this figure, the old-age allowance for those aged between 70 and 80 just scraped over the poverty threshold in 2010 and 2011, and its non-adjustment in real terms in 2012 and 2013 dragged it again below this level (Figure 2.21). The gap between median income for the population and the poverty threshold is narrower for the elderly than for the working-age population as a whole. The decline in the elderly poverty rate was therefore restricted by initially low old-age benefits that failed to be uprated in line with average trends in other forms of income. The recent decision to increase the income supplement in the 2016 budget aims, however, at addressing this issue (see below).

Figure 2.20. **Inequality among the elderly**



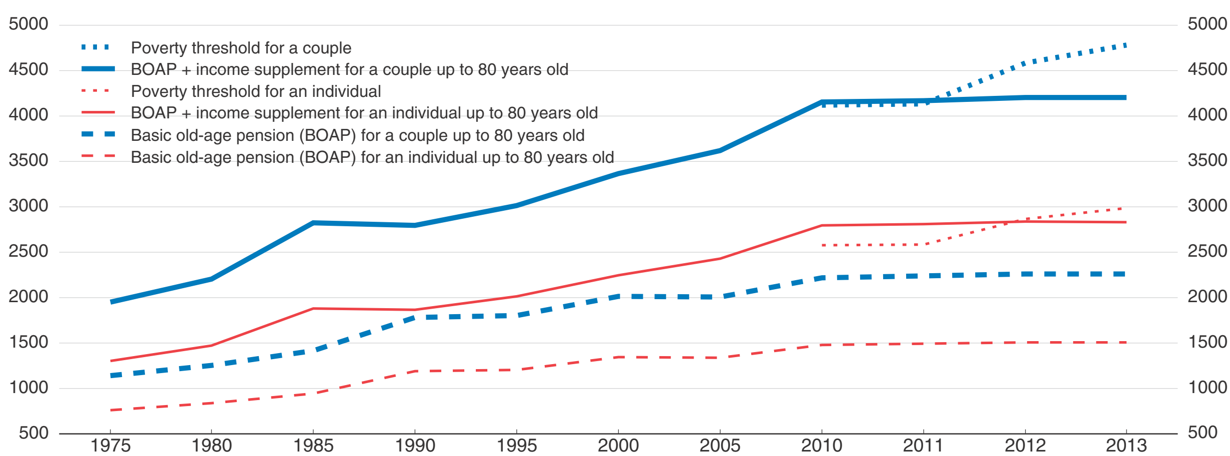
1. There is a break in series in 2011 due to a new income definition. The old definition series were extended using the growth rates of the new ones.

Source: Calculations from the OECD *Income Distribution Database*, via *www.oecd.org/social/income-distribution-database.htm*.

StatLink http://dx.doi.org/10.1787/888933318210

Figure 2.21. **Basic monthly old-age pension and income supplement compared to the poverty threshold**

NIS at constant 2013 prices



Source: National Insurance Institute (2014), *Poverty and Social Gaps – Annual Report 2013*.

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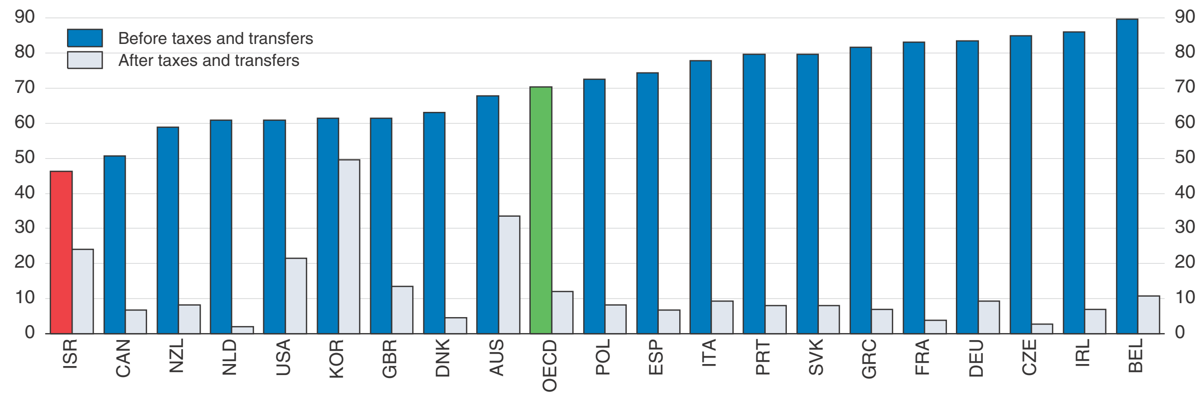
The high poverty rate of the elderly is partly related to the high share of old-age and low-income immigrants, especially from the former Soviet Union. In the future, the decline in the share of this population group is expected to induce some fall in the poverty rate of the elderly. However, poverty among the elderly is also closely related to the lack of redistribution by Israel's tax, social and pension systems, despite redistribution being significantly more concentrated on the elderly than on the rest of the population (Ben-David and Bleikh, 2013; Bowers, 2014; NII, 2014b). This is illustrated by the spectacular reversal of Israel's international ranking in terms of senior poverty rates after taking account of taxes and benefits (Figure 2.22). On the basis of market income, the incidence of poverty among the elderly in Israel is one of the lowest in the OECD, while it ranks among the highest by disposable income. For both the 66-75s and the over 75s, the reduction in the

Figure 2.22. **Poverty rates of the elderly before and after taxes and transfers**

Per cent, 2013



Source: Calculations from the *OECD Income Distribution Database*, via *www.oecd.org/social/income-distribution-database.htm*.

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poverty rate engendered by redistribution mechanisms is far below what is seen in any other OECD country except Korea.

Reforms to reduce the elderly poverty rate

Reducing the elderly poverty rate will require a rebalancing of the pension system and additional budgetary resources for the first pillar. Extending the second pillar to an increasing share of the population led the State to withdraw too hastily from the basic pension system, which stopped poverty falling among the elderly. This strategy of limiting the State's redistributive role in order to change behaviour in some communities is consistent with a particular social rationale. But the impact of extending occupational pensions to all workers on elderly people's revenue is affected by how long people have contributed, and it will therefore be many years before the policy takes full effect. Pending maturity of the second pillar, an alternative would be to increase the income supplement.

Relaxing the strict conditions attached to receiving this supplement, such as owning an expensive vehicle, and adjusting the supplement itself could help to raise basic pensions above the poverty line. For instance, catching-up for the past erosion of generosity (see above) by raising the average basic pension as a proportion of GDP per capita to its 2000-02 average level would cost about NIS 2 billion (0.2% of GDP). The 2015-16 budget makes a step in this direction with and uprating of the income supplement by 5-13% costing NIS 600 million annually, but further measures would be needed to reverse the erosion. The cost of these measures might be partly absorbed by net savings on "budgetary pensions" but also by further policy changes encouraging people to retire later (see below). The fiscal impact of a more generous income supplement would be temporary. Over time, fewer and fewer retirees are likely to benefit from a more generous income supplement, because it is means-tested and a growing number of retirees will receive a second-pillar pension. However, since the income supplement is available even to those who have never worked, further large increases could also weaken work incentives.

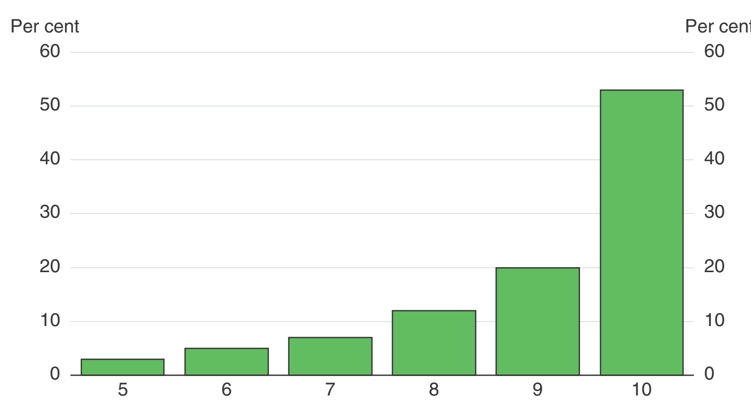
Although the second pillar offers major advantages and lays the groundwork for a pension system that is financially sound, questions may arise about the high level of pension savings required in Israel. The contribution rate for the second-pillar pensions is substantially higher than in other OECD countries that also have mandatory pension savings schemes. Such a high rate, required of all employees regardless of income, family circumstances or tax position will tend to unbalance low-income households' revenue flows over their lifetimes. Thus, while the system offers a high replacement rate in retirement (Table 2.1), it undermines people's living standards when their children are young (and require high education spending) or when they want to buy a house. Young families, who often have low incomes, only rarely chose to join voluntary schemes prior to 2008 (Brender, 2011). Since 2008, the average salary of contributors to private pension schemes has been half that of those who had voluntarily joined one previously (Spivak and Tsemah, 2014).

The tax deduction on the contributions to the second pillar, which amounted to 1.1% of GDP in 2014 (Table 2.3), was left unchanged when this scheme became mandatory in 2008, although this reform made it unnecessary to maintain any such incentive at least for contributions up to the average wage. This tax advantage is also very regressive. More than half of its total value goes to the top decile of the income distribution (Figure 2.23). Around 45% of employees do not pay income tax and are therefore unable to benefit from the tax deductions linked to these contributions (Brender, 2011). The current system thus imposes an unnecessary burden on the most vulnerable people in the workforce, an undesirable impact further heightened by the reduction of rights to the means-tested first-pillar income supplement that the mandatory private pension savings system implies for low-income households (Brender, 2009).

To reduce regressivity and make savings, the authorities plan to reduce the revenue ceiling determining the eligibility for the exemption of employer pension contributions from tax for employees from 4 to 2.5 times the average wage. While welcome, such a move will not prevent the high mandatory contributions required of all employees regardless of their income, family circumstances or tax position from unbalancing low-income households' lifetime revenue flows. There is thus a case for offsetting more of the impact on net current income of relatively high mandatory contributions to pension savings for low-income workers. The tax advantage on mandatory contributions could be made refundable, although this would come at a fiscal cost. Alternatively, it could be abolished for the mandatory contribution up to the average wage and replaced by a lower

Figure 2.23. **Tax benefits on employers' contributions to employee pensions, by deciles**

2014 data



Source: Ministry of Finance.

StatLink http://dx.doi.org/10.1787/888933318243

contribution rate below this threshold. This would make the contribution system simpler and would reduce the burden imposed by pension saving on those on low salaries. It would also be justified by the life expectancy of people on the lowest incomes, which is often shorter, especially among the Arab population. In any case, measures aiming at addressing the regressive nature of tax deductibility on contributions to the second pillar will need to be considered in the light of its implications for the progressivity of the tax-transfer system as a whole.

Some additional measures should also be considered to help workers experiencing poor job security during part of their working lives to access the second pillar. This would include abolishing the contribution continuity condition (of six months minimum) that pointlessly penalises young people between 25 and 29, 20% of whom do not have private pension schemes. Workers who have not contributed for long enough could be offered a chance to make up for missing periods using appropriate tax incentives. This would not only help people with low job security but also immigrants who do not have an occupational pension when they arrive. More than one Israeli in six over 20 has immigrated since 1990.

Improving pension adequacy

Encouraging measures that stimulate financial returns and limit risk

Improving the governance of pension funds and savers' financial education

The supervision and governance of pension funds in Israel are based on a set of robust regulations (OECD, 2011). The body responsible for applying these rules is the Capital Markets, Insurance and Savings Division (CMISD) of the Ministry of Finance, whose powers of investigation and the financial administrative penalties it may impose in the event of regulatory infractions have been extended (OECD, 2013). All pension savings instruments are held and managed by entities that are completely independent of employers. They are run by dedicated managers, selected on the basis of strict skills criteria. Pension funds must also prepare an annual actuarial balance sheet and, if necessary, adjust their members' accounts to guarantee their financial solvency. To ensure the pension system remains stable, the CMISD carries out regular stress tests on the existing vehicles for pension savings (Ionescu and Yermo, 2014), and every quarter the pension scheme managers issue their members with a report on the status of their pension savings status, which is also available online at all times. Generally speaking, the CMISD is keen to improve savers' financial understanding via the Internet. In 2014, it posted online instruments offering decision-making support for people choosing their savings profile according to their age and risk appetite.

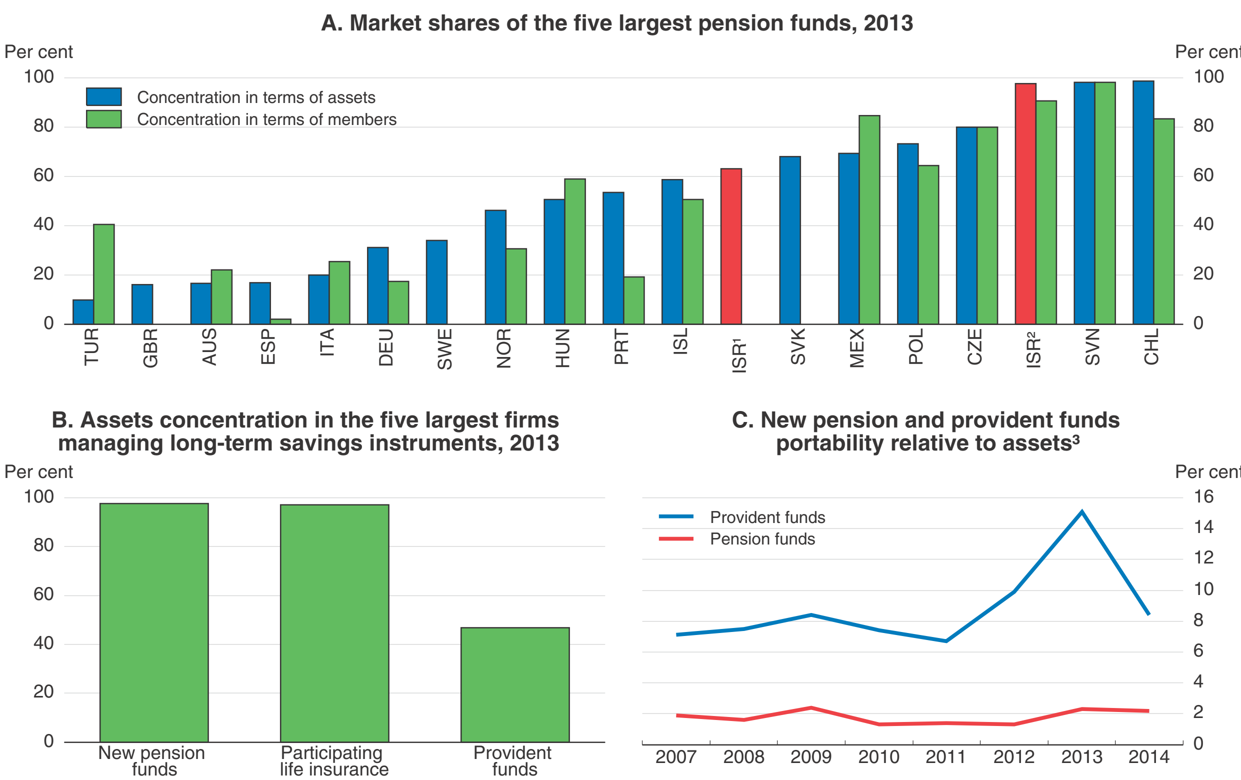
Boosting competition in the pension sector

Optimising the effectiveness of the pension system will also mean stimulating competition in this sector. Competition can stimulate the quality of investment decisions, both in terms of the assets' average gross yields and/or variability, and put downward pressure on asset management costs, a crucial determinant of net returns.

The level of competition among pension fund managers is difficult to measure, however, mainly because of a lack of satisfactory internationally comparable data. Based on the information available, the performance of Israeli second-pillar pensions seems to be relatively good, despite the fact that this sector – like banking – suffers from a high level of concentration relative to other countries (see Chapter 1) (Figure 2.24, Panel A). In the case of new pension funds and life insurance schemes, the markets are controlled by the five largest firms, although this is not the case for provident funds (Panel B). The share of savers who switch managers of their pension savings accounts is also lower for pensions than provident funds (Panel C). Nevertheless, real rates of return of the new Israeli pension funds compare favourably with those in other OECD countries, reaching an average of 4.5% over the last nine years, compared with the OECD average of 2.5% (Figure 2.25, Panel A). Comparing these rates, adjusted for potential growth differences between countries, which normally affect these yield spreads, shows that the performance of Israel's funds is somewhat less impressive (Panel B).

The available data also show that pension schemes' management costs are lower in Israel than on average in the OECD (Figure 2.26, Panel A), although there are problems with international benchmarking in this area. The basis and procedures for billing costs vary from country to country, and the available data often cover only part of the costs that are actually billed to savers, although this seems to be less of a problem in Israel than elsewhere (Ionescu and Robles, 2014). The CMISD is working hard to reduce management costs, and they have indeed been declining for a few years (Panel B). A recent bill came

Figure 2.24. **Indicators of market structure of pension fund markets**[1]



1. Data refer to the five largest companies managing long-term savings instruments.
2. Data refer to the five largest new pension funds. Data about members refer to active members only, i.e. members currently accumulating benefits or who have accrued benefits in the past and have not yet retired.
3. Share of total assets that have changed funds during the corresponding years.

Source: OECD (2015), Global Pension Statistics and CMISD.

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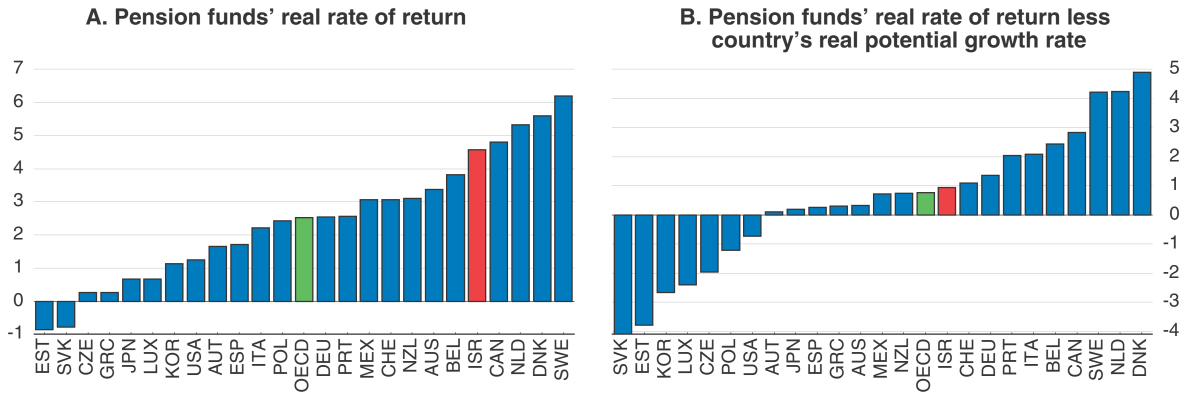
Figure 2.25. **Pension funds' real rate of return**

Annual average rate 2005-14, per cent



Source: OECD (2015), *Global Pension Statistics and Economic Outlook Database*.

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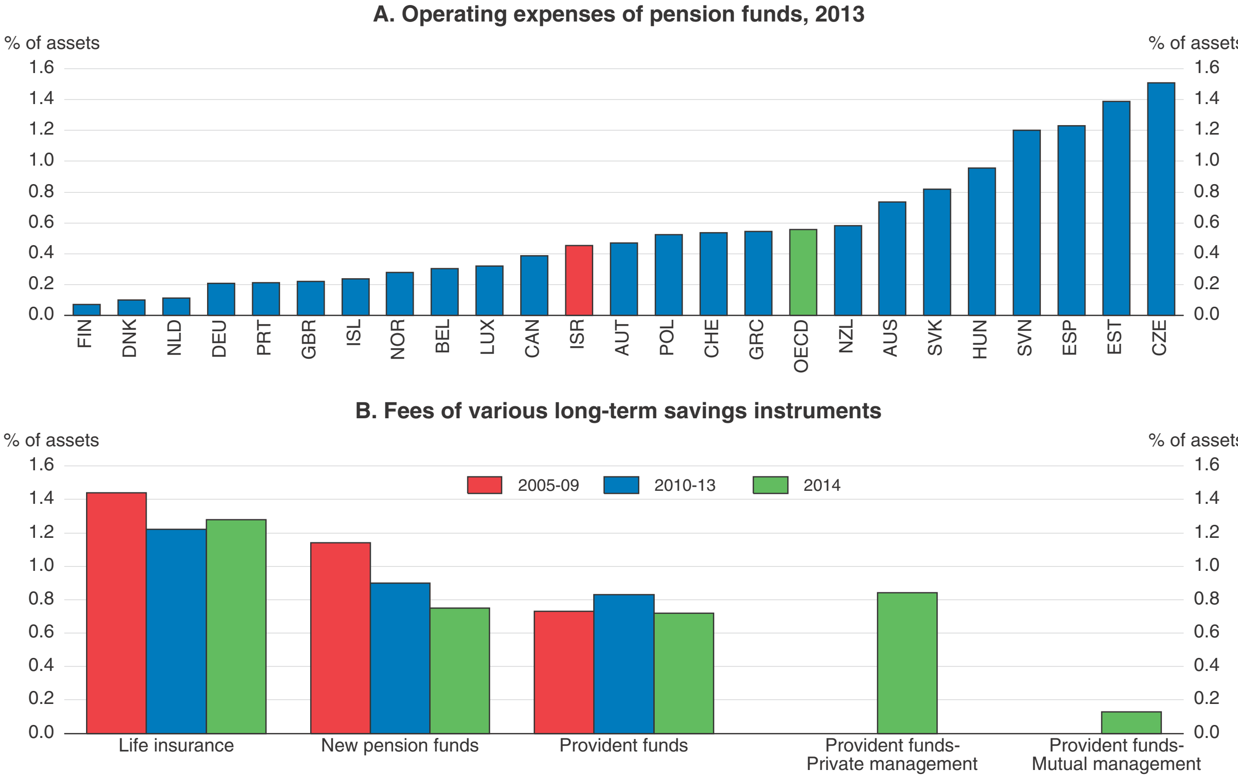
before the Knesset to cap the remuneration of pension fund managers. There exist wide differences between the costs billed for different pension savings instruments, however: those deducted by provident funds, in which competition seems to be stiffer, tend to be lower than for other instruments, although the gaps have narrowed in recent years. Most notable are those funds controlled by private companies, whose charges are far higher than those managed on a mutual (non-profit) basis for members of a single profession (Panel B, right).

There is, therefore, still room to further reduce pension schemes' management costs, and the mutually managed funds could help to do so. In order to reduce these costs, Chile, for example, has introduced an innovative competition stimulus mechanism. All new contracts signed with pension schemes are automatically awarded to the fund with the lowest management costs. This has reduced costs in Chile, and in Mexico, which adopted a similar mechanism, and has encouraged new pension funds to enter the market (Ionescu and Robles, 2014). These efforts to cut management costs are significant, because a reduction that generates an average rise of 1 percentage point in a pension scheme's annual rate of return increases pensioners' assets by 20% after 40 years of contributions (Whitehouse, 2001; Sharpe, 2013).

Another highly promising route to stronger competition and lower management costs that should also increase the average return is to promote the development of passively managed pension funds. These are based on a strategy of replicating average market performance. This reduces management fees considerably, because it does not require traders and highly paid personnel. In the case of the United States, for passive funds managed mutually annual management costs fell to 0.06% of asset value, while total costs for active management are estimated on average at over 2% per annum (Bogle, 2014; Edelen et al., 2013). The relatively efficient operation of the markets, moreover, makes it hard for an active fund manager to beat the market average over a long period of time (Crane and Crotty, 2015).

Israel does have passively managed pension funds, but they have a small market share: first, because of the dominant role played by private insurance companies, which are not interested in this model, and, second, because of savers' poor knowledge of and

Figure 2.26. **Pension funds' fees and management costs**



Source: OECD (2015), Global Pension Statistics; CMISD.

StatLink http://dx.doi.org/10.1787/888933318270

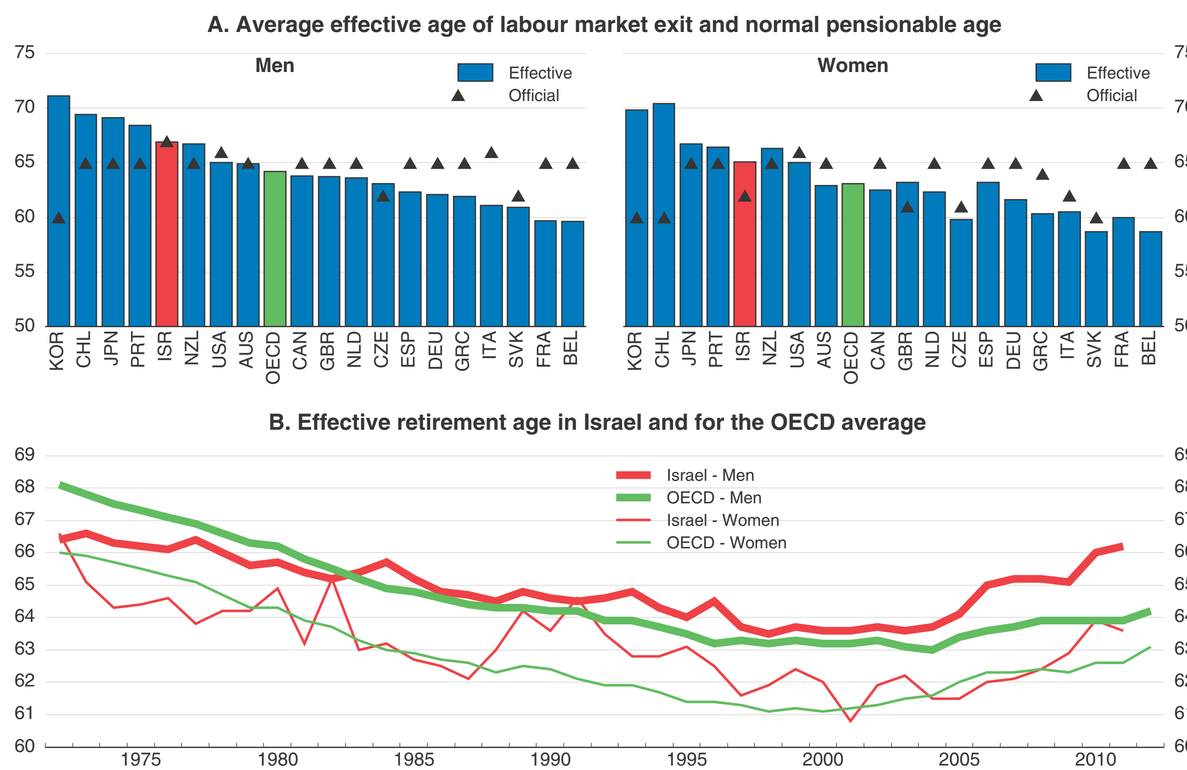
trust in these products. This is probably the case for retirement savings in Israel because of the complexity of both the pension system and the underlying financial products, which makes competition less effective. Research on behavioural economics also suggests that regulation needs to take into account consumers' significant inertia when they face hard choices in domains where informed decisions are difficult (Lunn, 2014). Recourse to passive management is developing rapidly in other countries, however, and recent empirical analysis of international data suggests that the rise of passively managed funds strengthens competition and brings down the management costs billed to savers for both pension schemes and other savings plans (Cremer et al., 2015). In the light of this evidence, the Israeli authorities should actively promote passive pension funds. They could do so by improving the quality of public information on their advantages or by requiring new pension schemes to offer passive management funds as the default option. In any case Israel should follow Sweden's example and start by ensuring that funds whose management of people's pension savings is in fact passive, through investments in market indexes, do not bill for active management costs (Marriage, 2015). The CMISD at the Ministry of Finance is currently working on implementing a model in which a default pension fund will be defined based on low management fees, possibly thanks to the recourse of passive investment strategies. However, the CMISD does not want to directly intervene in structuring the low management fees.

The authorities should also adjust the second-pillar pension system so that it takes account of the saver's age. Some steps have been taken in this direction: from January 2016, all pension savings managers will have to offer three new investment profiles with risk decreasing as contributors age (under 50, 50-60, over 60). Saver contributions will, by default, be channelled into these new kinds of schemes. This welcome measure could be taken further, however, with the allocation of savers' portfolios by age affecting their existing assets and not just future savings.

There is room to increase the senior employment rate

Stimulating senior employment is also important to ensure that pensions are adequate and to protect against the risk of longevity, although the country already performs well in this field. The effective retirement age in Israel is close to or higher than the official age, and there is no substantial recourse to early retirement (Figure 2.27). The increase in the pension age in 2004, combined with the higher level of education of recent cohorts of mature workers, has helped to extend working life in the last decade, and this trend has been more pronounced than in the OECD average. Further progress will be made, however, if future reforms extend working lives for women and eliminate disincentives that prevent workers continuing to work after the age of eligibility for first-pillar pensions.

Figure 2.27. **Retirement age**[1]



1. The effective retirement age shown in Panel A is for the five year period 2007-12; pensionable age is shown for 2012. The effective retirement age is a synthetic calculation of the average retirement age. See Bank of Israel (2014), *Annual Report*, Chapter 1 and M. Keese (2003), "A Method for Calculating the Average Effective Age of Retirement", mimeo, *www.oecd.org/els/emp/39371923.pdf*.

Source: OECD (2013), *Pensions at a Glance 2013*, Figure 3.8; Bank of Israel estimates based on data from the OECD and the Central Bureau of Statistics.

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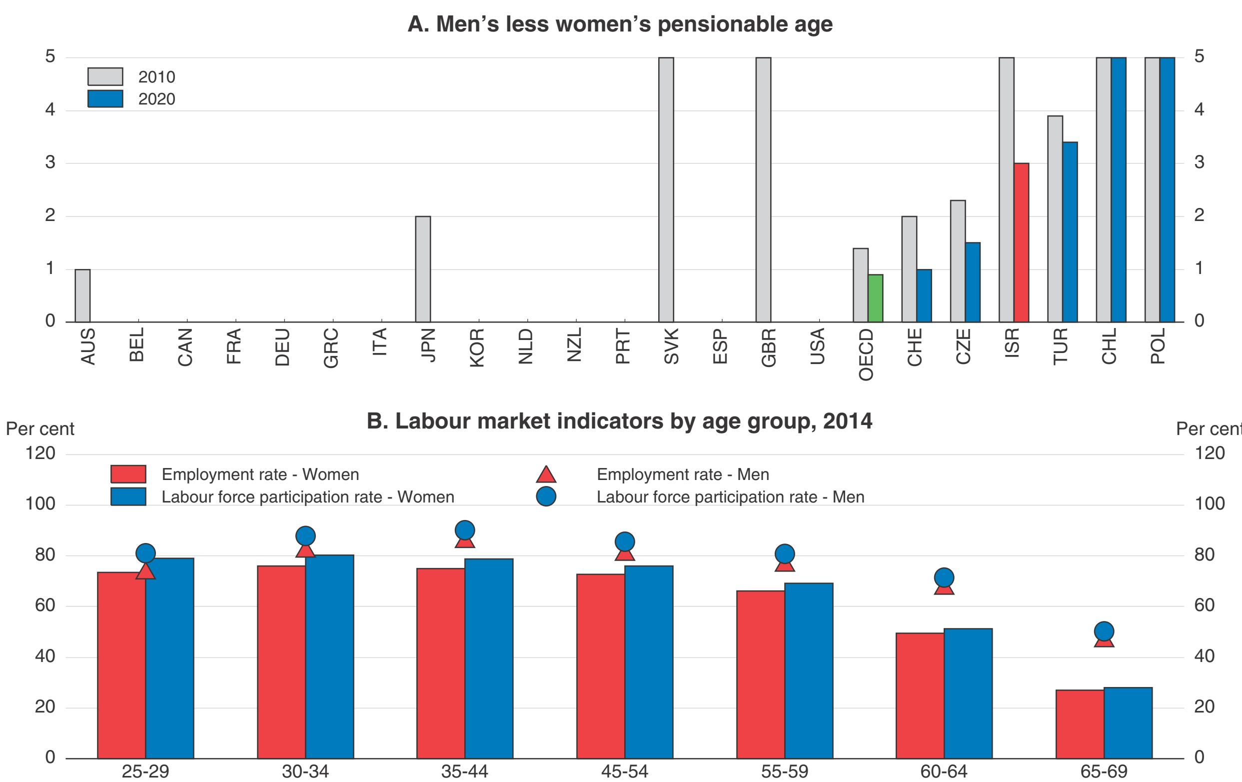
Israel is one of the rare OECD countries in which women still have a lower pension eligibility age than men, and this has opened a wide, persistent gap between male and female employment rates after the age of 60 (Figure 2.28). The pension eligibility age for women, which is set to increase from 62 to 64 by 2017 if approved by the Knesset, should be raised further to gradually align it with its male counterpart. This would reduce the risk of poverty for women, whose gap over corresponding male rates is much higher after the age of 65 than for younger age groups (Figure 2.29, Panel A). By way of example, a woman with a gross monthly salary of NIS 7 500 (0.8 times the average salary) who stops work at 67 instead of 62 after a career of 40 years instead of 35 would increase her replacement rate by 12 or 20 percentage points depending on whether the average actual return on second-pillar savings is 2% or 4% per annum (Panel B) (Flug, 2014). The likelihood that the effects on living standards would be positive is fairly high because of the low unemployment rates for workers close to retirement age – rates that are similar to those for workers aged around 40 (BoI, 2013).

The authorities should also consider indexing the expected time in retirement to life expectancy at 65. Although systems of defined contribution pensions in principle embody incentives for individuals to postpone their retirement decision until they have accumulated sufficient pension capital, this is not the case for the first-pillar system.

Figure 2.28. **Male and female pensionable age and employment rates**



Source: OECD (2012), *Pensions Outlook 2012*; OECD, *Labour Force Statistics Database*.

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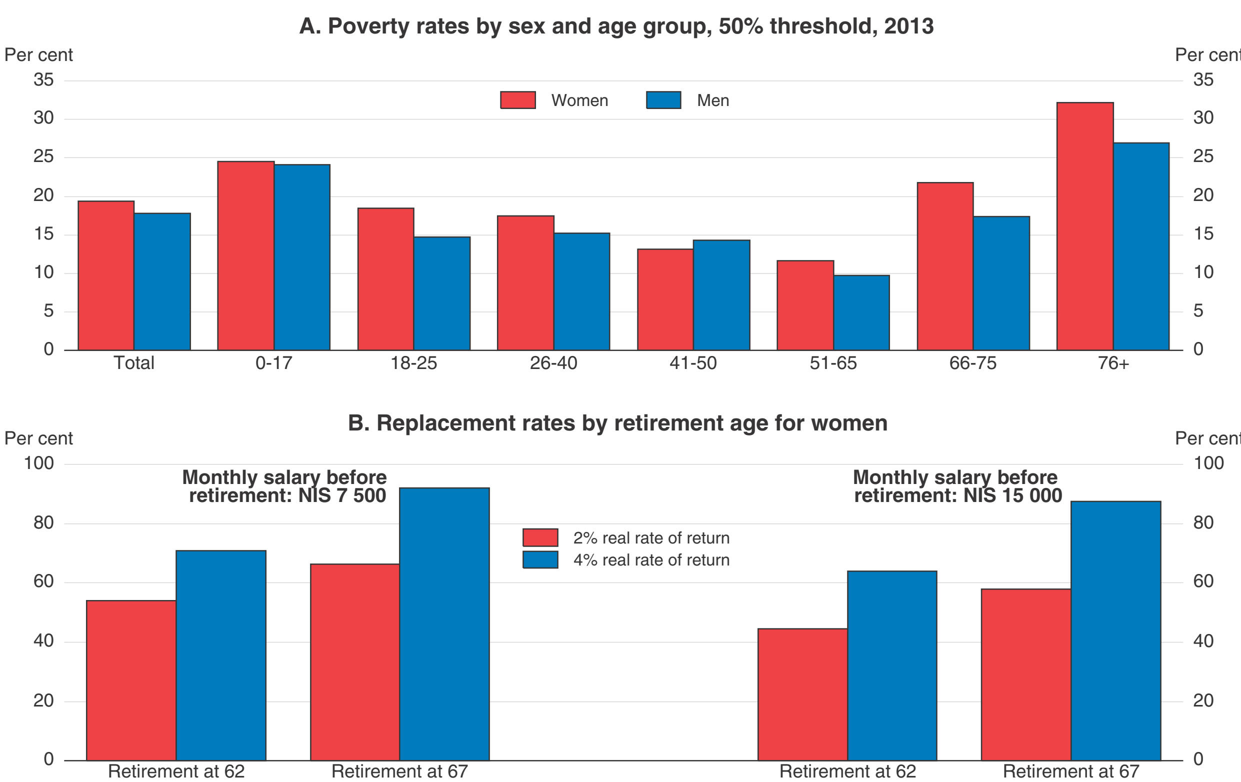
Indexing the basic pension eligibility age to life expectancy at 65 would protect the financial viability of this publicly financed defined benefit system against the risk of longevity.

It would also be advisable to eliminate tax incentives that discourage many workers from continuing to work after the conditional retirement age. Almost 90% take their first-pillar old-age allowance as soon as they reach this age, even though it rises by 5% for each additional year in work (BoI, 2014). According to research by the authorities, the effective marginal tax rate in the case of a worker continuing to work after the age of eligibility jumps to 97% for a gross monthly salary between about NIS 5 000 and NIS 6 000 (i.e. 0.5 to 0.7 times the average salary) and 74% above this amount (Figure 2.30). These high tax rates are the result of the reduction of the basic allowance, 60% of which is means tested, the loss of rights to the earned income tax credit (or negative income tax), and the impact of personal income tax and social contributions (Brill, 2014). The marginal tax rate is even higher, reaching over 100%, for the even lower salaries earned by those who qualify for the income supplement. A substantial reduction of this tax disincentive would be welcome. Its budgetary cost would probably be largely self-financed by the positive effect on employment and the resulting increases in tax revenue.

Figure 2.29. **Poverty and pension replacement rates**

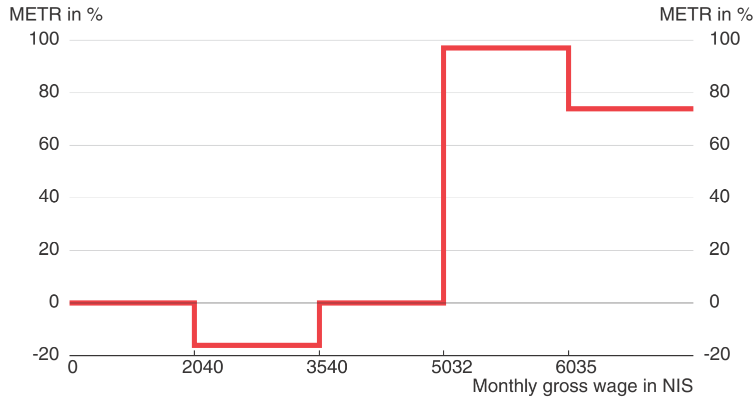


Source: OECD, *Income Distribution Database*, *www.oecd.org/social/income-distribution-database.htm*; Bank of Israel's calculations.

StatLink http://dx.doi.org/10.1787/888933318309

Figure 2.30. **Marginal effective tax rate (METR) between conditional and absolute retirement age[1]**

On gross wage earned by pensioners



1. Case of a worker reaching the conditional eligibility retirement age benefitting only from basic old-age pension allowance.

Source: N. Brill (2014), Commission Report on Integration of the Elderly to the Labour Market (in Hebrew).

StatLink http://dx.doi.org/10.1787/888933318314

Recommendations for improving the pension system

Improving the protective role of first-pillar basic pensions

- To reduce elderly poverty, as the second pillar matures, seek a way to increase first-pillar pensions without creating work disincentives.

Reforming "budgetary pensions" and clarifying the government's contingent liabilities for pensions

- Increase employee pension contributions for public employees recruited before 2002-04.
- Increase transparency of the pension system for defence, police and prison personnel, and transfer its management from the Ministries of Defence and Internal Security to the Ministry of Finance. Increase the transparency of the State's contingent liabilities for those public entities having independent budgets.

Improving the fairness and effectiveness of the second pillar

- Moderate the impact on net current income of relatively high mandatory contributions to pension savings for low-wage workers.
- Allow workers who have not contributed for long enough (immigrants or people with low job security) to catch up missing years using tax incentives.
- 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.

Encouraging people to work longer

- Gradually raise women's eligibility age for the first-pillar pension to equal men's. Index the retirement age to life expectancy at 65, so as to hold constant the share of adult lifetime spent in retirement.
- 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.

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