



# ISRAEL

EDUCATION, TRAINING AND EMPLOYMENT  
DEVELOPMENTS 2017



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# KEY EDUCATION, TRAINING AND EMPLOYMENT DEVELOPMENTS IN ISRAEL

Israel has made significant progress in its strategic planning on human capital development (HCD). The National Economic Council is preparing a long-term strategy to address challenges in education, socio-economic inequality and inefficient regulations. The government's strategic document<sup>1</sup> also focuses on support for economic and social policy (primarily growth, employment and reducing social gap), however the challenges remain mostly in implementation.<sup>2</sup> In accordance with the National Programme for Increasing Skilled High-Tech Personnel<sup>3</sup>, approved at the beginning of 2017, the Innovation Authority is currently formulating programmes aimed at increasing high-tech skills in the workforce. The Innovation Authority is setting out policies to double the number of employees working in technology-oriented firms in the next decade.

Recent education and training is characterised by piloting, experimenting, up-scaling programmes, driven by innovative, bottom-up and participatory approaches at all levels, with a comprehensive "Decision-making Lab" designed to find solutions. In August 2017, the education ministry launched a major reform on teaching English at all levels of education, which is seen as a must for high-tech, innovation and for 21st century skills. The new programme 'Give me five'<sup>4</sup> (of NIS70 million, USD20 million), will deploy 1,000 extra teachers and provide additional English tuition hours. There is also an increase in the education budget, including higher teacher salaries. Recent investments have targeted pre-tertiary education and have been driven by private interests.

Israel has also one of the most educated populations in the OECD and is leading in international innovation rankings thanks in part to university-industry collaboration providing the economy with human capital, scientific aptitude and technological abilities supported by government commercial research and development.<sup>5</sup> Nevertheless, its education system is fragmented and not fully inclusive. Despite improvements in the last years, the quality of the education system, as reflected in international tests, is relatively low especially for two population groups, the ultra-Orthodox and the Arab population, with the lowest rates of participation in education and the labour force. Evidence shows that the education alone does not translate into better employment. The large gap in achievement among Jewish pupils and Arab-Israeli pupils can be explained to a great extent by their socio-economic backgrounds, thus the need for more social policy attention. In addition, Israel is characterised by high poverty and large gaps along many material and non-material dimensions. Poverty is especially high between the ultra-Orthodox and the Arab population, including the elderly. The issue of income inequality is one of the most widely discussed subjects in Israeli public discourse, including youth and adult skilling, reskilling and upskilling. Israel faces high levels of exposure to labour market disruptions, which is not coupled with high levels of adult skills for technology absorption.

The interministerial, political and social rifts continue to undermine the much-needed national consensus on skills anticipation. Every population sub-group has its own approach, reflecting the complexity of the Israeli social fabric (ethnicity, religion, age structure and languages)<sup>6</sup>. There is an urgent need to break with short-term solutions and address the HCD in a comprehensive and long-term manner.

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1 The Israeli policies on HRD are implemented within the framework of the Government's comprehensive and long term strategic document (Resolution 5208)

2 Remarks by the Governor of the Bank of Israel to the Eli Hurwitz (Caesarea) Conference, May 2016- <https://en.idi.org.il/events/4235>

3 Government Resolution No. 2292

4 in a reference to the highest level of English studies available to high-schoolers

5 The Israeli Innovation Authority, State of Israel, Ministry of Industry, Trade & Labour Office of the Chief Scientist have established in 2017 a new "Technological Innovation Labs" program that aims to set up innovation labs to support start-ups

6 At the moment, some of the skills anticipation activities include skills forecasting (e.g. statistical forecasting of education status and the demand and supply of labour in the public and key private sector and employer surveys).

## 1. Key demographic and economic characteristics

Israel is an OECD high-income country with a population of 8.7 million (end of June 2017). As life expectancy is high and infant mortality rates low, further population growth is expected. Over 90% of the population lives in urban areas. Approximately 74.8% of the population is Jewish and most of the remaining 25% are Arabs (about 20.6% of the total population). The rest includes the Druze, non-Arab Christians, those unclassified by religion and large numbers of migrant workers who are defined as 'others'.<sup>7</sup> Since 2012, there has been a noticeable rise in the number of foreign workers (including irregular ones), with a more than 170,000 in 2015.<sup>8</sup> There is a dependency on this foreign workforce (regular and irregular) in key three sectors: caregiving, agriculture and construction.<sup>9</sup>

Israel is one of the most advanced world economies and according to the Global Human Capital Index 2017<sup>10</sup> ranks 18 (out of 20 most advanced). It is an industrialised country with a high concentration of high-tech industries and is active in software, telecommunications, and semiconductor development, based on intensive and sophisticated research and development, processes, tools, and machinery. Israeli industry concentrates mostly on manufacturing products with high added value. The major industrial sectors include high-tech metal products, electronic and biomedical equipment, agricultural products, processed foods, chemicals and transport equipment. There exist approximately 5,000 start-up companies, in a wide range of sectors, characterised by remarkable innovation and dynamism. This is driven by the universities that supply the economy with high quality human capital and create scientific and technological strength, excellent collaboration between academia and industry and a developed venture capital industry. Due to its lack of natural resources and raw materials, Israel's unique advantage is its highly qualified labour force, scientific institutes and R&D centres. There is also a high digital coverage (70.3% of the population), which has a big impact on the improvement of the education and employment services.

GDP is expected to grow 3.4% in 2017 and by 3.3% in 2018 (Bank of Israel). TAUB<sup>11</sup> Report 'A Picture of the Nation' 2017 emphasises a positive macroeconomic perspective with increasing employment, decreasing unemployment and an unexpectedly high GDP growth rate of 4%. Though the Israeli economy has a great potential, an inclusive growth require a comprehensive and persistent policy. What official sources<sup>12</sup> reiterate is that the sources of economic growth do not appear to be sustainable. Analysis shows that a major constraint to more rapid growth in the economy is to the lack of productivity growth in non-high-tech or manufacturing sectors. The recent decrease in productivity stems *inter alia* from low skills of some labour force groups.<sup>13</sup> The Bank of Israel Governor calls for a more cohesive society, better productivity and innovation.<sup>14</sup> Continued product market reforms are needed to stimulate productivity and pay sheltered employment of the lowest-skilled workers (e.g. agricultural and food sectors). Even if Israel's high-tech sector is booming, venture capital investment as a percentage of gross domestic product being the highest in the world and growth among the strongest of the developed economies, poverty outcomes are the highest in the OECD countries.<sup>15</sup>

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<sup>7</sup> 'Others' category includes family members of Jewish immigrants who are not registered at the Ministry of Interior as Jews, non-Arab Christians, non-Arab Muslims and residents who do not have an ethnic or religious classification.

<sup>8</sup> Labour Migration to Israel, 2016

<sup>9</sup> Israel Beuro of Statistics (2017) and Labour Migration Report (2016)

[https://www.gov.il/BlobFolder/reports/foreign\\_workers\\_in\\_israel\\_2016\\_report/he/foreign\\_workers\\_israel\\_review\\_0916.pdf](https://www.gov.il/BlobFolder/reports/foreign_workers_in_israel_2016_report/he/foreign_workers_israel_review_0916.pdf)

<sup>10</sup> [http://www3.weforum.org/docs/WEF\\_Global\\_Human\\_Capital\\_Report\\_2017.pdf](http://www3.weforum.org/docs/WEF_Global_Human_Capital_Report_2017.pdf)

<sup>11</sup> The Taub Center for Social Policy Studies in Israel is an independent, non-partisan, socioeconomic research institute

<sup>12</sup> Bank of Israel Annual Report 2016, March 2017

<http://www.boi.org.il/en/NewsAndPublications/RegularPublications/Pages/DochBankIsrael2016.aspx>

<sup>13</sup> A Picture of the Nation 2017- The Taub Center for Social Policy Studies' new booklet

<sup>14</sup> Remarks by the Governor of the Bank of Israel at the Eli Hurvitz Conference on Economy and Society: "One Society—One Economy", June 2017, <http://www.boi.org.il/en/NewsAndPublications/PressReleases/Pages/19-6-17.aspx>

<sup>15</sup> In terms of relative poverty, according to disposable income. A Picture of the Nation 2017 | Taub Center <http://taubcenter.org.il/pon-2017/>

Income inequality is second lowest in the OECD and 20% of the population contributes to 90% of the income tax revenues.

## 2. Education and training

### 2.1 Trends and challenges

Israel has a highly skilled labour force, with figures of educational attainment in secondary and tertiary levels that are higher than the average for EU and OECD countries (85% of adults aged 25-64 have completed upper secondary education, higher than the OECD average of 76%<sup>16</sup>), and with trends towards a more skilled population. Tertiary education system supports the high-tech industry and global technological leadership, with the highest enrolment in engineering, manufacturing and construction. Almost 41% of students in upper secondary education are enrolled in vocational programmes, with efforts to increase this, which could solve future skill shortages linked to the ageing of the labour force (Education Policy Outlook, OECD 2017). Figures on adult participation in training show a slight improvement in 2016, with 10.2% of adults having participated in lifelong learning, similar to the EU average (10.7%). Youth have a relatively easy transition from education to the labour market. The proportion of Israeli youth (aged 15-24) not in employment, education nor training (NEET) was 14.9% in 2016 (a decrease from 2015), very close to the OECD and EU averages. Israeli NEETs are more likely to be inactive, rather than unemployed.

Despite lingering budget inequality, significant gaps in the level of education between the Jewish and Arab education systems are closing.<sup>17</sup> Among the improvements, there are substantial increases in Arab Israelis enrolling in all levels of schooling and taking high school matriculation exams, as well as improved test scores. 81% of Arab-Israeli pupils, 84% of Jewish students, and 90% of Druze take the exam. Only 50% of Arab students, 62% of Jewish students and 66% of Druze students who qualify for the exam will pass and receive a matriculation certificate, which is necessary to apply for higher education in Israel. Recent years have seen more Arab Israelis going to universities, both in and outside of Israel. The long-term results are clear<sup>18</sup>. However, graduation rates, while important, speak little to the quality of education and training received for equal employability chances for all these groups. The prospects of the Israeli education system in terms of achievement relative to the OECD countries are all the more gloomy in view of the fact that a significant and steadily increasing fraction of its student population i.e. those studying in independent ultra-Orthodox schools do not study mathematics and science.

While recognising the continuous progress and challenges in the education and employability outcomes in Israel, more needs to be done to promote TVET skills from the perspective of inclusiveness. Such an approach would stress on one hand, access to skills for employability for all, young and adults irrespective of their background and on the other hand the interaction between TVET systems, research and innovation and the labour market. Israel's post-secondary technological vocational education and training (TVET) system is diverse<sup>19</sup>, with relatively good labour market outcomes for graduates. However, the focus should not only be on high skills for research and applied science but technical skill if Israel wants to be/remain competitive and respond to the present challenges. To sum up, despite the ambitious government and employer programmes and initiatives, and recent achievements and developments, the Israeli government is aware that TVET is still an area where more investment is needed to meet the current needs of labour market through skills. TVET

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16 OECD Report "Better Life Index", 2017

17 Taub Center report, August 2017

18 The Scholastic Achievements of Arab Israeli Pupils", Nachum Blass, Policy Research, Taub Center for Social Policy Studies Center (30 August 2017) <http://taubcenter.org.il/the-scholastic-achievements-of-arab-israeli-pupils/>

19 For more detailed information refer to Israel Torino Process Report 2016-2017

[http://www.etf.europa.eu/webatt.nsf/0/CCFBCA85B74A4F63C1258109002B304B/\\$file/TRP%202016-17%20Israel.pdf](http://www.etf.europa.eu/webatt.nsf/0/CCFBCA85B74A4F63C1258109002B304B/$file/TRP%202016-17%20Israel.pdf)

could play an important role in combating unemployment, especially among certain minority groups, such as the Haredi and Arab communities.

## 2.2 Education and training policy and institutional setting

Technical and vocational education and training (TVET) governance is centralised under the Ministry of Education (MoE), which serves 90% of TVET students, and the Ministry of Labour, Welfare and Social Services (MoLWSS), in coordination with the Manufacturers Association of Israel (MAI). The national office of each ministry and the district offices oversee district activities. The Israeli Knesset launched an initiative in 2016 to establish a Technological Education Council. Local authorities, the technological-education networks, including AMAL and ORT, training providers, MAI (representing large employers) and its affiliates have significant decentralised authority and all lead initiatives within regulatory frameworks. TVET providers have considerable local autonomy regarding curriculum requirements and partnerships/initiatives. A formal system of social partnership is lacking but employers are represented through the frequent involvement of MAI in TVET policy development/reform activities. Histadrut, the Trade Union federation, is more marginal in TVET. Professional/subject committees are key co-ordination mechanisms between TVET stakeholders. Membership of each committee includes an academic, MoE subject inspector, representatives of the Israeli Defence Forces (IDF), MAI, and the relevant industry professional body, as well as school personnel. There are approximately 19 such committees. Government, local authorities and education networks provide the main funding for MoE-governed TVET. MAI and members contribute directly to initiatives and through the provision of facilities. The IDF contributes to funding where schools operate on their premises. There are joint TVET projects between public and private bodies.

Ministry of Education (MoE) TVET covers two separate paths: a) technological-scientific education and b) vocational (occupational) education. TVET takes place in: i) high schools (ages 16-18 at ISCED 3); ii) schools offering post-secondary studies (ages 18 and above at ISCED 4); and iii) technological colleges. Initial VET is also provided in privately managed schools run by technological-education networks and supervised by key ministries. The MoE also supervises self-paid continuing vocational training (CVT) for adults. Ministry of Labour, Welfare and Social Services (MoLWSS) TVET tracks are: a) apprenticeships; b) pre-VET/Initial VET provision for specific youth populations in education network schools; and c) frameworks for certified technicians/practical engineers through the National Institute for Training in Technology and Science (NITTS); d) continuing vocational training, including training for jobseekers and employer-led training for adults. TVET under MoLWSS is delivered in: i) vocational schools for youth where courses include apprenticeships and one/two-year courses combining study and practical experience; ii) academic colleges (for NITTS-certified courses); and iii) adult training centres and on-the-job training.

A wide range of teaching and learning methodologies are used/being introduced in TVET institutions including online learning, work-based learning, community-linked learning and problem-based learning. Work-based learning (WBL) is an integral part of the curriculum for some programmes and students are placed in companies/factories in which they gain experience of real-life systems/processes. Another initiative that encourages work-based learning is the establishment of advanced technology centres for practical VET. MoE, MoLWSS and the technological-educational networks ORT and AMAL provide programmes for vulnerable groups, including females; youth at risk; people with disabilities and unemployed people and for ultra-Orthodox, Bedouin, Arab and Ethiopian groups. A significant effort is being made to increase the attractiveness of TVET via publicity and marketing.

Major challenges<sup>20</sup> relate to: 1) inter-ministerial collaboration with leading technology education professionals to significantly increase student numbers and raise knowledge and skills levels to respond to the labour market; 2) the creation of a new system of accreditation for students in technology education that translates the structure of technology studies into recognised accreditation model and 3) effective quality assurance provision for TVET, due to the lack of a system capable of making useful labour market information available to education and training planners. The above mentioned technological developments makes it even more imperative the need for integrated and advanced mechanisms for skills forecasting and matching in Israel.

### 3. Labour market and employment

#### 3.1 Trends and challenges

According to the Innovation Authority 2017 report, Israel is aiming to double its tech workforce in a decade. The goal is to boost sector's employees from 270,000 to 500,000 and help start-ups to survive and scale-up into full-fledged companies. However, the focus should not be only on high skills for high-tech jobs, TVET is still an area where more investment is needed to meet the current needs of labour market through skills. TVET could play a big role in combating unemployment, especially among certain minority groups, such as the Haredi and Arab communities. Employers are a strong voice in choosing education and training as a key reform area: investment in education for entrepreneurship from early childhood throughout all the levels of education and training, relevant TVET and continuing training (LLL) over tax breaks.<sup>21</sup> In 2017, efforts are launched by Employers' organisations and Israeli think-tanks to establish a sophisticated model to facilitate the allocation of workers to open positions and by creating a framework in which business representatives take an active part in training both in the schools and in the workplaces. Employers call on public institutions to address the challenges of skills mismatch at technical level by pursuing some of needed reforms to boost education and training reforms including the link between skills and prosperity and equity. There are efforts to narrow skills mismatching and launch work on skills forecasting. The most recent one is the 'Israel Labour Market and Skills Forecast for 2040' report<sup>22</sup>, which identifies disappearing and emerging professions. Some of the measures proposed are not only to increase the overall level of skills of the underperforming groups (e.g. Arab and Haredi population), but also to provide stronger skills development opportunities linked to apprenticeship and on the job training as well as the development of career guidance system, to better link the acquisition of skills to the world of work.

The labour market has experienced positive developments, an increase in labour force participation rates and a decrease in unemployment. The unemployment rate was relatively low 4.8% in 2016 (4.4% as of 2 quarter 2017<sup>23</sup>), the labour force participation rate for the working age population (15+) was 64.1%, and the youth unemployment rate (15-24) only 8.6% in 2016 with a narrow gender gap in favour of female employment. The labour market in Israel is moving from a traditional economy, based on manufacturing and production, to one of information technology and modern services. As a result,

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20 As reported in the Israeli Torino Process Report 2016-2017

21 The Israel's leading economic conference, 18-20 June 2017, under the banner "Two Economies – One Society." presented the biggest ever employers' survey on the roadblocks and opportunities in a new economy versus a renewable economy, the future workforce, improving regulation, doing business, and rethinking the Israeli employment and pension system. The goal of the policy discourse is to improve the government's decision-making processes and the quality of Israel's social and economic policies for the benefit of the entire public.

22 Some key findings of this skills foresight report: 1) professions with low-risk to computerisation require creativity, social intelligence, persuasion and negotiation; 2) professions such as hairdressers, choreographers, artists, athletes- who have uniqueness and creativity, will remain; 3) professions requiring high social skills, as social and psychological workers, are also at low risk for computerisation; 4) professions that are required for an aging population are expected to remain; 5) high-risk professions are mainly those of repetitive and technical activities that can be performed by existing technology/technology that will become possible in the near future; 6) workers who provide about 39% of working hours in the Israeli economy may be replaced by computers and machines in the next two decades. <http://www.macro.org.il/en/fields/?field=250>

23 Economic indicators: Israeli Economic Data- Bank of Israel,

<http://www.boi.org.il/en/DataAndStatistics/Pages/Indicators.aspx?Level=1&IndicatorId=1&sld=0>



some occupations are already at risk of automation. According to the Taub Center research 'Trends in the Labour Market, 2017'<sup>24</sup>, this decline is confirmed although less pronounced among Arab Israelis and immigrants. In general, Israel's labour market is becoming equal from a gender perspective. Women's employment rates continue to rise, and Jewish women have nearly reached the same employment rates as Jewish men. Women are moving from high to low risk jobs to a greater degree than men, primarily due to an increase in the share of female workers in academic professional occupations. In addition, the wage gap has been decreasing. More Arab Israelis are working in service and sales - occupations at lower risk. There is only a small increase in the share of Arab Israeli workers in occupations requiring an academic education, which may be due to the relatively lower skill levels in reading comprehension and maths within the Arab Israeli sector (as evidenced by the OECD 2016 PIACC Survey).

Israel leads in the share of employed people in high tech industries - approximately 9%, more than double the median in OECD countries; in venture capital investment as a share of GDP, and in the value added of IT industries out of GDP - in both, goods and services. However high tech employment is mainly concentrated in the centre of Israel: Tel Aviv Metropolitan Zone, Haifa and to a lesser extent, Jerusalem with 15% of total employees. In terms of industry distribution of workers in high tech and other industries, and the breakdown of wages by the same industry distribution, employees in high tech are concentrated in several fields, in which wages are approximately double the average wage in the economy, but overall they are a small share of employees in the economy. The other 90% is employed in industries with lower salaries, and the relatively large number of employees in the hospitality, food, administration, and support sectors, where the salary is low, is notable.

Analysis shows that Israel has invested a lot in research and development (R&D) that can lead to innovation in a product or production process, which is concentrated in high tech goods and service industries, and only a little is invested in R&D in industries that are not high tech connected also with skills acquired through TVET system.<sup>25</sup> According to the Israeli Labour Federation, there are no established mechanisms to handle the transition from unemployment to employment and the state does not provide sufficient tools to that end. The result is a gap between labour market demand and the TVET system's ability to provide an appropriate response. However, efforts have been stepped up in 2017.

### 3.2 Employment policy and institutional setting

Israel is prioritising Active Labour Market Policies (ALMPs) in an effort to get unemployed people back to work. To this end, the ALMPs include the Welfare to Work programme, a reduction in allowances paid to people of working age, introducing an earned income tax credit for employees, and creating a network of Employment Orientation Centres in Arab communities. However, active labour market policy is underdeveloped and lack resources. Public expenditure on activation policies in 2016 was 0.68% of GDP. The public employment service has a very limited set of tools to promote the reintegration of jobseekers into the labour market, coupled with training programmes. Caseloads are very high and caseworkers can offer vocational training opportunities to a small number of jobseekers. Many launched pilot projects/programmes, such as Employment Circles, which have shown promising results would provide necessary lessons learned for mainstreaming the supportive actions (OECD Economic Surveys Israel, 2016)<sup>26</sup>. In 2016, employment policy was moved from the Ministry of Economy to the Ministry of Welfare (that became Welfare and Employment).

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24 Taub Center 'Trends in the Labor Market', Policy Research, June 28, 2017, <http://taubcenter.org.il/trends-in-the-labor-market/>

25 The Israel Innovation Authority (previously the Office of the Chief Scientist) operates a track of support for R&D in low-tech industries for new developments in the manufacturing industry and to upgrade production processes, but in recent years, the Innovation Authority's grants for low-tech manufacturing have only been about 5 percent of total grants.

26 <https://www.oecd.org/eco/surveys/Israel-Overview-OECD-Economic-Survey-2016.pdf>



Israel continues to have the highest poverty rate in the OECD, when looking at disposable income (i.e. income that is available for spending after taxes and transfer payments) and social gaps have grown substantially over the past few decades. The increase of the minimum wage for all sectors only partially addresses the challenge. In 2014, the Committee to Fight Poverty in Israel (the Elalouf Committee)<sup>27</sup> presented a detailed list of recommendations to cut poverty in Israel through policy in the areas of welfare, social security, employment, housing, health, and education. Many programmes have been launched for the most poor population sections of society (the poorest Haredi, Arab, Bedouin and Yemeni) in education and training. Three years after they were issued, only about half of the recommendations of the Committee to Fight Poverty in Israel have been implemented – largely due to budgetary restrictions for the active labour market measures. On 12 February 2017, the Government approved Resolution 2397 on a new five-year Plan for Socio-Economic Development 2017-21 in the Negev Bedouin Localities. This is the second five-year economic development plan, the largest ever developed for the community. If implemented successfully, the plan stands to be a game changer for society.<sup>28</sup> The five-year economic development plan for Israel's Arab society entered its second year, however efforts need to be stepped up for a more comprehensive active labour market policy for this community. If the Israeli government follows its announced plans for growth priorities, they would need to pursue policy options/actions to accelerate skills changes—driven by technological innovation, demographics, shifting business models and nature of work—which are significantly altering the skills demanded by the Israeli labour market. A multifaceted lifelong learning system which continues to support and develop adult skills over the course of their lifetime, remains imperative.

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27 The Committee, headed by MK Eli Elalouf, was an initiative of the Minister of Social Affairs and Social Services, MK Meir Cohen, in 2013, to recommend ways of dealing with poverty and to strengthen equal opportunity in Israel.

28 The strategic plan is very comprehensive. <http://iataskforce.org/sites/default/files/resource/resource-1500.pdf>. For more details, please refer to the detailed document and the public feedback: <http://iataskforce.org/sites/default/files/event/pdf-343.pdf>.

# ANNEXES

## Statistical annex Israel

This annex reports annual data from 2011 and 2016 or the last available year

Indicator		2012*	2016	
1	Total Population (000)	7,985 <sup>(1)</sup>	8,629 <sup>(1)</sup>	
2	Relative size of youth population (age group 15-24) (%)	24.7 <sup>(1)</sup>	24.9 <sup>(1)</sup>	
3	Youth Dependency ratio (%)	44.1	46.0	
4	Old-age Dependency ratio (%)	17.0	18.9	
5	Global Competitive Index	Rank	22.0	24
		Score	5.1	5.2
6	GDP growth rate (%)	5.1	4.0	
7	GDP per capita (PPP) (current international \$)	30574.3	37901.3	
8	GDP by sector (%)	Agriculture added value	M.D.	M.D.
		Industry added value	M.D.	M.D.
		Services added value	M.D.	M.D.
9	Poverty headcount ratio at \$2 a day (PPP) (%)	M.D.	M.D.	
10	Gini index (%)	38	37 (2015)	
11	Educational attainment of active population (25+) (%)	Low <sup>(2)</sup>	10.9)	9.1
		Medium	37.3	34.9
		High	51.8	56.0
12	Gross enrolment rates in secondary education (%)	101.1	102.5 (2015)	
13	Share of VET students in secondary education (%)	18.9	19.4 (2013)	
14	Gross enrolment rates in upper secondary education (%)	99.3	100.7 (2015)	
15	Share of VET students in upper secondary education (%)	39.1	40.7 (2015)	
16	Low achievement in reading, mathematics and science – PISA (%)	Reading	26.6 (2009)	26.6
		Mathematics	39.5 (2009)	32.1
		Science	33.1 (2009)	31.4
17	Participation in training/lifelong learning (age group 25-64) by sex (%)	Total	9.7	10.2
		Male	11.5	11.8
		Female	8.0	8.6
18	Early leavers from education and training (age group 18-24) by sex (%)	Total	8.5	6.9
		Male	11.4	9.4
		Female	5.6	4.2
19	Activity rates by sex (aged 15+) (%)	Total	63.6	64.1
		Male	69.3	69.1
		Female	58.1	59.4
20	Employment rates by sex (aged 15+) (%)	Total	59.2	61.1
		Male	64.6	65.9
		Female	54.1	56.4

Indicator		2012*	2016	
21	Unemployment rates by sex (aged 15 +) (%)	Total	6.9	4.8
		Male	6.8	4.7
		Female	7.0	4.9
22	Unemployment rates by educational attainment (aged 15+) (%)	Low <sup>(3)</sup>	13.1	8.1
		Medium	7.9	5.6
		High	4.4	3.3
23	Youth unemployment rates by sex (aged 15-24) (%)	Total	12.1	8.6
		Male	11.6	8.2
		Female	12.7	9.1
24	Proportion of long-term unemployed out of the total unemployed (aged 15+) (%)	13.3	11.5 (2015)	
25	Long-term unemployment rate (aged 15+) (%)	1.0	0.6	
26	Incidence of self-employment (%)	12.7	12.8	
27	Share of the employed in a public sector (%)	18.2	18.5 (2014)	
28	Employment by sector (%)	Agriculture	1.2	1.0
		Industry	17.9	17.6
		Services	80.9	81.4
29	Employment in the informal sector	M.D.	M.D.	
30	Proportion of people aged 15–24 not in employment, education or training (NEETs), by sex (%)	Total	16.7	14.9
		Male	15.5	14.1
		Female	17.9	15.8
31	Public expenditure on education (as % of GDP) <sup>(4)</sup>	4.9	4.7 (2014)	
32	Public expenditure on education (as % of total public expenditure)	15.8	16.6 (2015)	
33	Skill gaps (%)	M.D.	12.3 (2013)	
34	The share of SMEs in GDP (%)	M.D.	M.D.	
35	The share of SMEs in employment (%)	57.8 (2008)	M.D.	

**Last update: 05/09/2017**

**Sources:**

Indicators 1, 2, 10, 11, 17, 18, 19, 20, 21, 22, 23, 25, 26, 27, 28, 30 – Israel Central Bureau of Statistics

Indicators 12, 13, 14, 15 - UIS UNESCO

Indicators 16, 24 - OECD

Indicator 5 – World Economic Forum

Indicators 3, 4, 6, 7 – World Bank, World Development Indicators

Indicator 35 – International Financial Corporation

**Legend:**

M.D. = Missing Data

**Notes:**

\* Reference year 2012 instead of 2011 for comparability reasons, due to break in series in 2012 in Labour Force Survey data

<sup>(1)</sup> estimations

<sup>(2)</sup> Includes no schooling

<sup>(3)</sup> ISCED 1

<sup>(4)</sup> Total annual public expenditure in regular education (current and capital) as a percentage of GDP

## Annex: Indicator definitions

	Description	Definition
1	Total population (000)	The total population is estimated as the number of persons having their usual residence in a country on 1 January of the respective year. When information on the usually resident population is not available, legal or registered residents can be considered.
2	Relative size of youth population (age group 15-24) (%)	The ratio of the youth population (aged 15–24) to the working-age population (usually aged 15–64 or 15–74).
3	Youth Dependency ratio (%)	The ratio of younger dependants (people younger than 15) to the working-age population (those in the 15–64 age group).
4	Old-age Dependency ratio (%)	The ratio of older dependants (people older than 64) to the working-age population (those in the 15–64 age group).
5	Global Competitiveness Index	The Global Competitiveness Index assesses the competitiveness landscape providing inside into the drivers of countries' productivity and prosperity. It expressed as scores on a 1 to 7 scale, with 7 being the most desirable outcome.
6	GDP growth rate (%)	The annual percentage growth rate of GDP at market prices based on constant local currency.
7	GDP per capita (PPP) (current international \$)	The market value of all final goods and services produced within a country in a given period of time (GDP), divided by the total population, and converted to international dollars using purchasing power parity (PPP) rates.
8	GDP by sector (%)	The share of value added from Agriculture, Industry and Services.
9	Poverty headcount ratio at \$2 a day (PPP) (%)	The percentage of the population living on less than \$2.00 a day at 2005 international prices.
10	Gini index (%)	Gini index measures the extent to which the distribution of income (or, in some cases, consumption expenditure) among individuals or households within an economy deviates from a perfectly equal distribution. A Gini index of 0 represents perfect equality, while an index of 100 implies perfect inequality.
11	Educational attainment of adult population (25-64 or aged 15+) (%)	Educational attainment refers to the highest educational level achieved by individuals expressed as a percentage of all persons in that age group.
12	Gross enrolment rates in secondary education (%)	Number of students enrolled in a given level of education, regardless of age, expressed as a percentage of the official school-age population corresponding to the same level of education.
13	Share of VET students in secondary education (%)	The proportion of VET students in secondary education out of the total number of pupils and students in secondary education (general + VET)
14	Gross enrolment rates in upper secondary education (%)	Number of students enrolled in a given level of education, regardless of age, expressed as a percentage of the official school-age population corresponding to the same level of education.
15	Share of VET students in upper secondary education (%)	The proportion of VET students in upper secondary education out of the total number of pupils and students in upper secondary education (general education + VET)
16	Low achievement in reading, maths and science – PISA (%)	The share of 15-years-olds falling to reach level 2 in reading, mathematics and science.
17	Participation in training/lifelong learning (age group 25-64) by sex (%)	The share of persons aged 25–64 who stated that they received education or training in the four weeks preceding the (LFS) survey.
18	Early leavers from education and training (age group 18-24) by sex (%)	The percentage of the population aged 18–24 with at most lower secondary education who were not in further education or training during the four weeks preceding the (LFS) survey. Lower secondary education refers to ISCED 1997 level 0–3C short for data up to 2013 and to ISCED 2011 level 0–2 for data from 2014 onwards.
19	Activity rates by sex (aged 15+) (%)	Activity rates represent the labour force as a percentage of the population of working age.
20	Employment rates by sex (aged 15+) (%)	Employment rate represents persons in employment as a percentage of the population of working age.
21	Unemployment rates by sex (aged 15+) (%)	Unemployment rate represents unemployed persons as a percentage of the labour force.
22	Unemployment rates by educational attainment (aged 15+) (%)	Educational levels refer to the highest educational level successfully completed. Three levels are consider: Low (ISCED level 0-2), Medium (ISCED level 3-4) and High (ISCED 1997 level 5–6, and ISCED 2011 level 5–8)

	Description	Definition
23	Youth unemployment rates by sex (aged 15-24) (%)	Youth unemployment rate represents young unemployed persons aged (15-24) as a percentage of the labour force (15-24).
24	Proportion of long-term unemployed out of the total unemployed (aged 15+) (%)	Number of unemployed persons aged 15+ who are long-term unemployed (12 months or more) as a percentage of unemployed persons aged 15+.
25	Long-term unemployment rate (age 15+) (%)	Number of unemployed persons aged 15+ who are long-term unemployed (12 months or more) as a percentage of the labour force aged 15+.
26	Incidence of self-employment (%)	The share of self-employed as a proportion of total employment. Self-employment includes employers, own-account workers, members of producers' cooperatives and contributing family workers.
27	Share of the employed in a public sector (%)	The share of employed in a public sector as a proportion of total employment.
28	Employment by sector (%)	The share of employed in Agriculture, Industry and Services.
29	Employment in the informal sector	Share of persons employed in the informal sector in total non-agricultural employment.
30	Proportion of people aged 15–24 not in employment, education or training (NEETs) (%)	The percentage of the population of a given age group and sex who is not employed and not involved in further education or training.
31	Public expenditure on education (as % of GDP)	Public expenditure on education expressed as a percentage of GDP. Generally, the public sector funds education either by directly bearing the current and capital expenses of educational institutions, or by supporting students and their families with scholarships and public loans as well as by transferring public subsidies for educational activities to private firms or non-profit organisations. Both types of transactions together are reported as total public expenditure on education.
32	Public expenditure on education (as % of total public expenditure)	Public expenditure on education expressed as a of total public expenditure. Generally, the public sector funds education either by directly bearing the current and capital expenses of educational institutions, or by supporting students and their families with scholarships and public loans as well as by transferring public subsidies for educational activities to private firms or non-profit organisations. Both types of transactions together are reported as total public expenditure on education.
33	Skill gaps (%)	The percentage of firms identifying an inadequately educated workforce as a major constraint.
34	The share of SMEs in GDP (%)	The share of value added from small and medium sized businesses (SMEs).
35	The share of SMEs in employment (%)	The share of persons employed in small and medium sized businesses.







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