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ISRAEL

EDUCATION, TRAINING AND EMPLOYMENT DEVELOPMENTS 2021

KEY POLICY DEVELOPMENTS IN EDUCATION, TRAINING AND EMPLOYMENT

Israel's recent progress on structural reforms has been limited due to prolonged political uncertainty in 2019 and the focus on dealing with the consequences of the COVID-19 crisis in 2020-21. According to the Taub Centre 'A Picture of the Nation 2021', this year will continue to be characterised by crises and challenges that impact many facets of life. The government of Israel allocated a high level of resources to dealing with the COVID-19 pandemic; however, the crisis and the response to it had a major impact on the national deficit, GDP, the rate of unemployment, disparities in the education system, and more.

The Israeli economy was performing well before the pandemic. It enjoyed low unemployment and living standards had risen close to the OECD average. It achieved remarkable employment gains, notably by Haredi and Arab-Israelis, owing to reforms that strengthened work incentives. The government had increased the financing for its programmes to boost the number of students in tech-related studies to counteract increasing sectoral shortages. However, the ongoing pandemic is threatening to reverse some of Israel's recent economic achievements, raise poverty and exacerbate wide productivity disparities between its vibrant high-tech sector and lagging sheltered sectors. The OECD 2020 Economic Survey of Israel is the most recent national survey that updates the last such study that was released in 2018. The 2020 Survey indicated that while Israel's economy was strong before the coronavirus, it was expected to shrink by 6 percent in 2020. In November 2021, the Bank of Israel reported that the Israeli economy has bounced back swiftly after shrinking 2.5% in 2020 due to the pandemic. A thriving high-tech scene, relatively low borrowing costs and strong private consumption are all helping to push the economy forward, and the Bank of Israel is predicting that the gross domestic product will grow by 5.5% in 2021. The index for November 2021 reflects the positive effects of increases in the services revenue, the retail trade revenue, the import of consumer good, the import of production inputs and employee posts.

The Israeli Knesset passed Israel's first budget in over three years on 4 November. With the approved state budget, major changes are expected in education and employment, consumer prices, transportation, and healthcare. The spending plan for 2021 in New Israeli Shekel (ILS) is ILS 609 billion or the equivalent of USD 194 billion. The 2022 spending plan stands at ILS 562.9 billion (USD 180 billion). This marks a major reorientation of Israel's allocation of resources and financial priorities in the coming years and is based on key principles such as streamlining government operations, upgrading public services, boosting economic competitiveness, cutting back on regulations to support growth in the private and public sectors, limiting Israel's 'non-observed economy,' or shadow economy, boosting transportation, housing, energy and technology infrastructures, and investing in human capital by training and integrating side-lined populations into the workforce.

The main priority of the government's programme is the macroeconomic policy which has to remain supportive and flexible to adapt to the evolving health situation, the environment, and energy issues. In the programme, issues that had previously received only limited attention are prioritised, such as welfare and labour. More specifically, the government's emphasis is on enhancing training and job search support to help laid-off workers transition to new jobs quickly and avoid long-lasting negative economic effects. The programme includes political and policy commitments to undertake structural reforms and additional public investment to build a resilient and strong recovery, improve educational outcomes with a focus on upskilling and reskilling, boost infrastructures and foster product market competition, all seen as key to strengthening the post-pandemic recovery. Reducing the wide differences in resources between municipalities is another policy area under discussion with the aim of promoting equal opportunities for everyone.

Israel continues to improve its ranking in the Global Innovation Index, reaching 10th position out of 126 countries in 2019 (up from 23rd in 2010). According to the H2020 Israel Participation - ISERD

Statistics, the R&D expenditure per inhabitant is ranked in first position in the OECD. The R&D intensity is 4.25% of the GDP, which is above the OECD average of 2.34%; Israel receives a total EU contribution for research & innovation of EUR 1.16 billion; Israel is a Strong Innovator according to the European Innovation Scoreboard 2020, above the EU average. Israel has 7 877 researchers per million of its population which is above the EU average of 3 974.

With the aim of improving quality and equality in education, training and skills provision, the government has significantly increased its education funding, including funding for day care centres for working parents, financial aid for tech-related studies, and the starting salaries of teachers. There is ongoing work on the new 2030 plan to further boost developing a vocational education and training (VET) system and technological education in a lifelong learning perspective. It will build on the results of the innovative and experimental measures currently being put in place and lessons learned from this period. The results of these new measures and innovative developments provide opportunities for making relevant changes, such as creating broader acceptance of remote teaching and learning models, accelerating digitalisation, and increasing the visibility of alternative/blended forms of teaching and learning. While doing this developmental work, the Israeli counterparts also have to address the other challenges in the system as discussed below.

Another announced policy avenue is tax reforms to further strengthen in-work benefits, cut inefficient tax expenditures, reduce distortions created by the business and property tax system and better align taxes with environmental externalities. These reforms will make the recovery more inclusive and sustainable, while generating additional revenues.

1. KEY DEMOGRAPHIC AND ECONOMIC CHARACTERISTICS

- **Political developments and health situation**

According to the Taub Center 'A Picture of the Nation 2021', the upcoming year/s will continue to be characterised by health crises and challenges and this pandemic will impact many facets of life. The pandemic has interrupted Israel's progress in boosting standards of living. To contain the spread of the pandemic, the government reacted swiftly and introduced stringent confinement measures. Despite coming through the first stages of the pandemic relatively well, the Israeli government, after experiencing additional waves of infection, is being very careful in monitoring the developments. The government and financial authorities have deployed emergency measures to support households' and firms' incomes and liquidity. With the reopening of the economy, further waves of infection will determine the economic scene and shape the priorities of policies, including the policies on human capital development challenges in the country.

It is important to mention that Israel has been active in pandemic-related research in the period 2020-2021. Nine Israeli organisations have been granted EUR 4.5 million from the Horizon programme to take part in collaborative projects in response to the pandemic. In addition, in April 2020, the European Investment Bank signed a collaboration agreement with the Israel Innovation Authority to provide funding of EUR 50 million for Pluri-stem to develop therapies for COVID-19 and other medical needs. Israel was very active in the EUvsVirus Hackathon. Three Israeli companies figure among the top 15 SMEs in receipt of EU funding to fight COVID-19.

- **Demographics**

Israel's demographic profile is unique among developed countries and is characterised by high fertility, low mortality, and net immigration. Consequently, the population is expected to grow to 12.8 million by 2040, according to recent projections by the TAUB Center. Data from 2020 show that the Israeli population has increased to 9.2 million from 7.6 million in 2010. Its society is made up of various communities and religions: Jews represent 74% of the population and are divided, based on self-declaration, into Haredi and non-Haredi; Arabs represent 21% of the population, of which Muslim account for 83%, Christians 9% and Druze 8%. Those unclassified by religion, as well as migrant workers, are defined as 'others' (TAUB Center 2021).

Interestingly, the rising fertility rate among non-religious Jews is driving the increase in the overall Jewish fertility rate. Other interesting data on the demographic growth in Israel are that more education does not lead to lower fertility rates. The relative size of the youth population was 25% in 2020 indicating a very limited increase over time from 24.2% in 2010. This sustained general population growth will pose important challenges to the country in the short- and medium-term in relation to education provision, employment generation, housing, and welfare.

Israel is a country of immigration. According to the OECD (2021), International Migration Outlook 2021, Israeli country analysis, 20.9% of the population are immigrants of whom 49% come from former Soviet Union countries, Morocco 7%, and the United States 6%. Citizens of former Soviet Union countries formed the main group of newcomers in 2019, followed by citizens from the US and France.

No major changes in immigration policies were made during 2019-21, a period which saw multiple elections and the delayed formation of new governments. Israel maintains its longstanding policies to encourage the immigration of Jews around the world to Israel, and to promote their integration in the labour market and society. 2019 was the year with the highest number of new permanent immigrants in the last decade. Temporary foreign workers stood at 98 200 at the end of 2020, down from 102 000 in 2019. The main sectors of employment were care (55 700), agriculture (22 300) and construction

(14 900). Due to COVID-19 restrictions, 80% fewer foreign workers arrived from abroad in 2020 than in 2019 (OECD, 2021).

A reform in December 2020 allowed Palestinian construction workers to receive their work permits directly, rather than granting them through a specific Israeli employer, and to change employers more easily. This reform aims to put an end to illegal trade in work permits and to allow competition between employers for the workers' services (OECD, 2021). Some economic sectors rely on the extra workforce coming from outside of Israel. Israel continues to sign bilateral labour agreements (BLAs) with Thailand in agriculture (2020), Ukraine in construction (2020), Sri Lanka in home-based caregiving (2019), and the Philippines in the hotel sector (2019). In September 2020, agreements were signed with both Georgia and Nepal for auxiliary workers for work in nursing homes and institutions (OECD, 2021).

Following COVID-19 related border closures, Israel adopted measures for resident foreign workers, granting several temporary extensions of work visas beyond the maximum 63-month stay, to facilitate continued employment. The measures modified the practice of deportations and permits for asylum seekers were also extended (OECD, 2021), (www.gov.il; www.knesset.gov.il;www.mfa.gov.il; www.cbs.gov.il.

- **Economic developments, informal economy, remittances**

Israel is an industrialised country with a dichotomous economy: Israel remains a two-speed economy, with its vibrant high-tech sector offset by lagging sheltered sectors, which employ most of the workforce. In addition, a large infrastructure deficit and a lack of domestic and external competition contribute to duality in productivity between sectors. As a result, aggregate productivity gains have been slow and income gaps have remained large. According to the OECD Economic Surveys-Israel, 2020, the COVID-19 crisis may reverse some of the recent labour market gains and aggravate inequality and poverty.

According to the OECD Country statistical profile Israel 2021, the share of real value added to the economic structure as of 2019 is: agriculture, forestry, fishing % 1.2; industry including energy % 13.9; construction % 6.5; trade, repairs, transport, accommodation, food services % 16.2; information, communication % 9.9; finance and insurance % 4.3; real estate % 15.3; professional, scientific, support services % 11.2; public admin., defence, education, health, social work % 18.3; and other services (ISIC Rev.4 R - U) % 3.2.

Most of Israel's manufacturing, including many traditional fields are based on intensive and sophisticated research & development and hi-tech processes, tools, and machinery. This is the outcome of very rapid and intensive development.

According to the OECD Economic Outlook, Volume 2021, Issue 1 (preliminary version Israel country note: OECD Economic Outlook, May 2021 by OECD - issuu), as a result of a very high rate of inoculation and the reopening of the economy in mid-February, the GDP is projected to grow robustly by 5% in 2021 and 4.5% in 2022, while, according to TAUB Center(2021), the GDP is expected to rise by 6.5% in 2021 and by 5.8% in 2022.

Based on the latest data (2019), the agriculture sector is 1.1% of the GDP, industry is 18.5% and the services added value is 71.2%. While the first two sectors have been decreasing since 2016, the services sector has increased. Even if the GDP per capita fell by 4.2% in 2020, it is expected to rise and nearly return to previous levels.

As in other OECD countries, the measures taken to respond to the crisis together with substantially lower tax revenues will lead to a surge in the budget deficit in the short-term in Israel and may raise public debt by around 25% of the GDP by 2021(OECD, 2021). Vaccinating against COVID-19 and the exit from the pandemic will make it possible for Israel to close most of the gaps in the next few years (more selected indicators https://data.oecd.org/israel.htm).

The high-tech sector (combining the industrial sectors – electronics, pharmaceuticals, and aviation – with software and research and development services) is performing very well. The sector highlights the propensity of the Israeli economy for innovation.

Prior to the pandemic, slightly more than half of employed Palestinians were in informal employment. They have been identified by the ILO as among the most vulnerable category of workers during the COVID-19 pandemic (ILO, Report of the Director-General – Appendix 2021)

Remittances in Israel increased to USD 1 466.60 million in the second quarter of 2021 from USD 1 424.90 million in the first quarter of 2021 (Central Bureau of Statistics, Israel).

2. EDUCATION AND TRAINING

On 9 October 2021, the European Commission (EC), represented by the Horizon Europe Chief Negotiator, concluded the formal negotiations with Israel on its association to Horizon Europe (Israel | European Commission (europa.eu). The process to formalise the agreement has been launched and the objective is to sign the agreement before the end of the year.

Israel's potential for growth is constrained by the limited availability of highly skilled professionals. The Israeli GDP per capita is 28% lower than the OECD best performers, productivity is 35% lower than the Economy Gap of the upper half of the OECD best performers. The productivity gaps between sectors are closely intertwined with the broader social gaps in Israel. The Haredim and Arab-Israelis often work in low-productivity sectors with low wages. Poverty is widespread among these groups. The lack of skills among these groups prevents them from getting high-productivity and well-paid jobs. Big efforts are needed to help low-skilled workers to move into higher productivity, high-tech jobs and would represent win-win opportunities for tackling the twin challenges of low productivity and widespread poverty. Upskilling and education are key to building a resilient and strong recovery (OECD 2021).

The education system has expanded significantly in Israel in terms of the overall budget, number of teachers and allocations per class and per student. Apart from the results in the Programme for International Student Assessment (PISA) exams achieved by Arab Israeli students, progress is evident throughout the education system. Israel has a highly educated population. As a result of dedicated policies and investments, levels of education have improved for increasingly larger sections of the population. Between 2010 and 2019 the active population (aged 15+) attained a high level of education reflecting an increase from 51.9% to 56.9%, the percentage of early school-leavers decreased from 8.3% to 5.6%, whereas the percentages of those with a medium or low level of education decreased from 36% to 34.7% and from 12.1% to 9%, respectively.

Even if Israel has high education levels, these high attainments do not always correspond to highly skilled profiles, as evidenced by university graduates in certain disciplines who lack soft skills, such as problem-solving, team-working, or an entrepreneurial spirit and this has negative consequences for access to the labour market (see below the labour market section) (TAUB Center 2021). The education attainments and skills are not achieved across the whole population structure of Israel, and not all the groups benefit proportionally from this big change. The problem is particularly acute in the Arab education system in which over 80% of students are deemed (from the teachers' perspectives) to have some level of deficiency, and for almost 40% these deficiencies are especially severe. In addition, students from low socio-economic backgrounds have a higher level of perceived deficiencies.

The Israeli Vocational Training and Technological Education (TVET) system remains fragmented among ministries/agencies and organisations, with a far from clear division of responsibility among them. The system remains the product of a series of agreements that have been patched together over the years, rather than a product of structured and systematic thinking on the appropriate division of responsibilities and on the optimal structure for achieving national goals in this area.

Most companies indicate that a shortage of skilled workers remains an issue. Companies have responded to shortages mainly through internal training for the existing workforce. They also highlight that the education system produces graduates with knowledge base gaps. Therefore, they increasingly rely on technical and vocational institutions rather than the general education system (e.g. universities) to provide the skills they need. Links with universities and the TVET system are regarded as limited. There are calls for closer dialogue and cooperation between enterprises, academia and the TVET system to enable the design of training programmes that are better matched to the future needs of the labour market (including the provision of practical training).

A major impediment to remote teaching, for large portions of the Israeli population, is the lack of the necessary equipment and infrastructure. In many surveys conducted in the country, it became obvious that there is a sizeable percentage of students in each of the above-mentioned sub-systems of Israeli education and training, whose teachers and students lack the proper infrastructures. The difficulties with remote learning for many of these families and others, however, goes far beyond this, and includes issues such as a lack of sufficient quiet spaces to allow children to learn remotely and parent availability to assist the children (TAUB Center 2021).

The new 2030 plan to further boost technological education in the context of lifelong learning was developed in early 2021. It will build on the results of the new experimental measures currently in place. Reducing differences between educational streams as much as possible is key to raising quality and enhancing the integration of the Haredim and Arab-Israelis into the labour market. Adult skills are relatively weak and vary widely – contributing to severe labour market duality (OECD 2021).

The poor performance of the TVET system hinders workers' entry into the job market. There are good practices in companies which are responding to shortages by providing internal training for the existing workforce. Links with universities and the TVET system are regarded as limited.

2.1 Trends and challenges

- **Education expenditure, access, participation and early leaving**

The country's expenditure on education as a percentage of total public expenditure is second only to defence and, in 2018, amounted to 16.6%. Despite the unusual growth in the number of students, the rate of growth in expenditure per student in Israel has been higher than in the OECD since 2010 (TAUB Center,2021).

After some years with no approved state budget, the new government has approved the 2022 budget which makes education a high priority by increasing public investment and putting in place several new measures and approaches to facilitate 'hybrid learning'. Priority policy areas include fully developing distance learning, training teachers to become more proficient in the use of digital tools, providing emotional support for students, changing the governance of the system by granting greater autonomy at school and municipality levels, and equipping vulnerable groups with the technology needed for online learning. As part of the COVID-19 response, additional funding for distant learning has been made available. Much importance is given to technological education and training. Funding for education has significantly increased and includes new day care centres, financial aid for tech-related studies, and starting salaries of teachers.

The percentage of VET students in upper secondary education (ISCED level 3 is 40.8% (latest data 2018). There is a strong belief in the sector that the substantial shift towards distance learning during the pandemic may trigger a long-lasting revolution in the whole education and training system.

- **PISA results**

The education system has expanded significantly in Israel in terms of the overall budget, number of teachers and allocations per class and per student. Apart from the results in the Programme for International Student Assessment (PISA) exams achieved by Arab-Israeli students, progress is evident throughout the education system. Israel has a highly educated population.

The Israel student performance (PISA 2018) is being addressed with several integrated policy measures. Israel has improved its scores but still more needs to be done to improve some of the remaining PISA results. In reading literacy, the main topic of PISA 2018, 15-year-olds in Israel scored an average of 470 points, compared to the average of 487 points in OECD countries. 15-year-olds scored an average of 463 points in mathematics, compared to the average of 489 points in OECD countries. In Israel, the average performance in science of 15-year-olds is 462 points, compared to the

average of 489 points in OECD countries. Socio-economic status explains the 14% variance in reading performance in Israel (OECD average: 12%). Girls perform better than boys with a statistically significant difference.

The average difference between advantaged and disadvantaged students in reading is 121 points, compared to the average of 89 in OECD countries. However, 8% of disadvantaged students are academically resilient (OECD average: 11%). (OECD, 2021).

- **Young people not in employment, education or training (NEETs)**

The total youth unemployment rate (aged 15–24) is 7.9%, 7.6% for males, and 8.2% for females. The proportion of people aged 15–24 not in employment, education, or training (NEETs) is 17.3%,17.4% for males, and 17.1% for females (ETF,2019). According to the OECD (2021), these figures emphasise the importance of assimilating the use of technology among these weaker groups and among groups that face barriers against integration into the labour market. While doing so the Israeli counterparts need to also address the remaining challenges of the system. The figures show relatively high numbers of NEETs in Israel during the transition from school to the army (17.3% of 18-year-olds are considered NEETs) and in the later transition from army service to work or higher education (20.3% of 21-year-olds are considered NEETs (OECD (2021).

Israel's population is particularly heterogeneous, with various groups differing in both their characteristics and their needs, making it difficult and inefficient to attempt to implement uniform changes on a system-wide level. Groups of young people who do not serve in the army (Arabs, Haredim and people with disabilities) have particularly high numbers of NEETs, with the Arab population presenting the highest numbers of all. The unique obstacles that young Arabs in Israel face result from the fact that they are members of an ethnic and national minority. Their reality is characterised by limited opportunities, discrimination in many spheres, living in peripheral regions, poor access to public transportation between Arab residential communities and employment zones, and a dearth of child-care settings for small children (which would enable more women to go to work).

There have been efforts to address the issues, but frequent political changes make it difficult to promote long-term goals. In the last years, the reforms launched by politically affiliated ministers are often discontinued or are not budgeted by their successors.

- **Education during the COVID-19 pandemic**

In March 2020, the COVID-19 pandemic forced the first school closure across Israel's education system. In one fell swoop and without any chance of prior planning, the education system came to a halt, and over 2 million students were confined to their homes. A process that seemed impossible, a fantasy, became the overnight reality for the education system, with most of the burden falling on those working in the field of education. It is to be commended that the education and training system has reacted quickly to the pandemic by increasing expenditures and putting in place several new measures and approaches towards 'hybrid learning'. This has included impressive efforts to develop distance learning, to train teachers to become more digital, to provide emotional support for students, to change the governance of the system by giving more autonomy at school and municipality level and to equip vulnerable groups with the technology needed for on-line learning.

The survey conducted by the Taub Center and the Histadrut Teachers Union (whereas most secondary school teachers belong) shows that despite a lack of preparation, most teachers successfully moved to remote teaching. The substantial shift to distance learning during the pandemic may trigger a long-lasting revolution in the system, 'changing the roles of digitized instruction, informal education, teachers and how students learn' according to the TAUB Center.

As part of the COVID-19 response, additional funding for distant learning was made available. Policies have been announced to further strengthen participation in high-quality pre-school education, and

expanding of day care centres, particularly in poor and disadvantaged localities, further increase Hebrew courses in the Arab schools and strengthen core subjects ('LIBA') in the curriculum of Haredi schools.

2.2 VET policy and institutional setting

- **Strategic and legal framework for VET and adult learning**

There is no strategic framework for VET and adult learning.

The Vocational education system continues to be divided between vocational training and technological education and there is no clear-cut distinction between them. Both systems are not academic and grant non-academic diplomas. In general, technological education focuses on knowledge-intensive areas and produces practical engineers and technicians, while the vocational education focuses on more 'traditional' economic sectors such as manufacturing, construction, motor vehicle repair, caregiving, and cosmetology.

- **VET governance and financing arrangements**

VET governance is centralised under the Ministry of Education (MoE), which covers 90% of VET students, and the Ministry of Labour, Social Affairs and Social Services (MoL) which is responsible for the Vocational Training branch. It remains a system focussed on providing employment opportunities for the weaker socioeconomic strata of the society. Both ministries work in collaboration with the Manufacturers Association of Israel (MAI). The National Institute for Technology and Science Training (NITET) and the Division of Vocational Training and Human Capital Development are the units in MoL responsible for vocational and technological education and training, and for apprenticeships, which are part of formal education and training programmes. It is the body entrusted with the training of certified practical engineers and technicians in technology. NITET supervises 65 technological institutions nationwide, and Grades 13 and 14 (under the supervision or of the post-secondary technological education branch). The net annual budget for training is ILS 311.5 million (approx. EUR 78.19 million).

Technological education and training in Israel are considered as an important tool for social mobility because of the socio-economic background of a growing percentage of students:13% of NITET students are Haredim, and 24.5% Arab (The Ministry of Welfare and Social Affairs - Gov.il, 2021).

There is evidence that the rate of return for this investment, results in measured future income. The Ministry of Finance's Chief Economist data shows that NITET graduate salaries are 50% higher compared to individuals that did not complete full secondary education (formal compulsory education takes place in Israel to the 12th grade). Technological education has proved to be crucial for maintaining economic competitiveness and there is market demand for graduates of technological studies, particularly for practical engineers. There are efforts to also revise the funding at local levels (ETF, 2020).

The national Technical and Vocational Education and Training (TVET) Committee is a mechanism established in 2010 to improve the governance of education and training. It is a platform for exchanges that involve all stakeholders, such as policy makers, TVET providers and social partners.

Funding for education has significantly increased and includes funding for new day care centres, tech-related studies, and the starting salaries of teachers. There is a strong belief in the sector that the substantial shift to distance learning during the crisis may trigger a long-lasting revolution in the whole education and training system.

Government, through local authorities, provides the main funding for TVET under the Ministry of Education. The state's multi-year budgets for technology education are set out in government decisions through budget agreements with the Ministry of Finance. TVET schools under the Ministry of

Labour have a separate budget. Budget allocations are made in accordance with the principle of equality, but they are also based on each college's results and performance. In addition, increased budgets are earmarked for the training of specific populations, such as Bedouin and Haredi populations.

Recently approved reforms have included significant budget increases. Other recently implemented programmes seek to encourage industry involvement in the training of technicians and practical engineers by giving limited budget incentives. These programmes include budget support for non-governmental organisations.

- **Quality and quality assurance**

There is still no specific legislation on quality assurance in VET. TVET regulatory frameworks and mechanisms include: 1) the MoE and MoL quality standards for providers' learning environments and for their learning outcomes; 2) the MoE's teaching standards established through a uniform curriculum and the required use of authorised textbooks; and 3) the MoE's inspection of technology subjects.

A government Resolution adopted in 2015 provided the legal basis to begin developing a national qualifications framework (NQF). It has not been adopted yet. The Israeli national qualification framework supported by the EU-funded Twinning project has established a working group of EU and Israeli experts and officials. They advise and update an inter-ministerial steering committee, which provides strategic direction, and reports to ministers. No formal decision has been taken yet on the number of levels or the composition of the descriptors (About NQF - משרד החינוך). Israel is not a member of the European Higher Education Area (EHEA) but participates in the Global Policy Dialogue of the EHEA. A formal working group has been established and is operating. The rationale, purpose, and scope of the Israeli NQF have been agreed on. Israel has set up an EU project on NQF and engaged international experts. The drafting and testing of the level descriptors have only just begun so Israel is therefore in an early phase of the design stage of development (ETF, 2021). Priorities for the TVET reforms, include setting up Centres of VET Excellence and reinforcing the implementation and recognition of qualifications generally. The involvement of the private sector will be a key issue in this reform process.

- **Work-based learning arrangements**

Many students channelled into VET programmes come from low socio-economic and diverse ethnic backgrounds. In response to criticism that the system perpetuated socio-economic inequality across ethnic groups and did not match the rising skills demands, the profession-specific content was reduced in most VET programmes and the name changed to 'technological education'.

In 2018, the OECD report 'Apprenticeship and Vocational Education and Training in Israel' was the most comprehensive analysis on the system. Among many recommendations, it argued for the expansion and integration of apprenticeship programmes into the mainstream upper-secondary system; the development of systematic work-based learning in selected school-based VET programmes; the support of employers with the provision of high-quality work-based learning; setting up a national strategic body to plan and guide policy development in VET; and focus on literacy and numeracy in VET programmes for young people and for adults (Apprenticeship and Vocational Education and Training in Israel).

Following the above-mentioned OECD assessment, a National Reform was launched following a government resolution from 2018, and a set of agreements and understandings between the stakeholders involved. Technological education and a training system were put in motion. The ongoing reform focuses on the quality of the qualifications and learning; qualification achievement rates; the attractiveness of practical engineering tracks; and the updating of curricula to better meet market needs and to increase of apprenticeship opportunities.

There are calls for the government to provide incentives for the formation of employers' associations at industry level for their involvement in the training process including its funding, physical infrastructure, internships/work-based learning, and the development and updating of curricula. Creation of a platform or organisation to regulate and formalise the cooperation between the employers and training institutions (consisting of the social partners, business sector representatives, and professional agencies) have been suggested by different institutions and stakeholders.

There are big and innovative programmes/practices on apprenticeships/work-based learning, such as:

1)Industry Partnerships and Pilot Schemes is jointly run by NITET with JDC-Tevet (NGO), the pilot programme implements reforms in technological education institutions by involving employers in planning curricula and training, developing apprenticeships and work-study programmes, and incorporating life skills development.

2) ATIDAIIM (programme duration: 2018–2022) is an accelerated 17-month-long programme that supports outstanding young adults from underprivileged backgrounds to pursue studies in practical engineering and the sciences and receive scholarships, academic counselling and tutoring. The total budget is ILS 16 million (jointly funded by other NGOs (Non-Governmental Organisations) and philanthropic funds). The programme aims at providing at least 500 qualified graduates in practical engineering. All participants should spend 300 hours with an employer as part of the programme**.**

3) On The Job Training provides relevant skills for workers already 'on the job' without any formal training; the **'Starter'** apprenticeship training programme is run in collaboration with JDCTEVET, and is a hybrid training course combining theoretical studies with paid apprenticeships. **4)'Factory Classroom'** is a vocational education programme which takes place either entirely at work or at a designated vocational institution with practical training in a workplace.

Moreover, a partnership agreement was signed in 2020 between the Employer's Directorate of the Ministry of Labour and Social Affairs and Social Services (MoL) and Israel's General Federation of Labour and the Presidium of Israeli Business Organizations. The agreement stipulates the establishment of a separate directorate, an executive body, co-funded by the parties and managed by the Ministry of Labour and Social Affairs and Social Services. This Directorate has a budget of ILS 10 million for two years.

The Ministry of Labour and Social Affairs and Social Services joined the European Alliance for Apprenticeship (EAfA) and signed the EAfA - ISRAEL National Commitment, on 27 May 2021.

- **Digital education and skills**

The percentage of employees working from home was low prior to the crisis although it has more than doubled since 2008 (from 2% to almost 4.5% in 2021). In general, the possibility to work from home increases with the salary level, however often the highest-paid managers have less possibility to work from home whereas lower-paid clerical workers have the greatest possibility to work from home. In Israel, an analysis by population group showed that women and Jews were more likely to work from home (TAUB Center, 2021).

Digital Israel is a national project which strives to harness and leverage the opportunities of the digital revolution and of the progress of ICT to reduce socio-economic gaps, promote accelerated economic growth, and create a smarter, faster, and friendlier government for citizens. The Israeli government is leading this national initiative to use digital learning to bridge socioeconomic gaps and accelerate Israel's economy. The main target groups are under-served communities; students of all kinds of education and training and higher education; civil service employees; and very importantly jobseekers.

Campus-IL, Israel's National On-line Digital Learning Platform is a flagship project of Digital Israel in the field of digital education. It was created to reduce social gaps, increase the equality of opportunities for different segments of the population, and to provide flexible training solutions for an

ever-evolving labour market. This national platform is aimed at changing the Israeli employment system by allowing fast tracking for jobs in high demand and entry level courses for those who wish to be part of the industry. Its aim is to improve and increase the efficiency of training processes and continuing education programmes.

According to the recently published OECD 'Digital Education Outlook', 2021, the Israeli government is pushing the frontiers with AI, blockchain, and robots. The Israel EdTech HolonIQ's lists 50 start-ups based in Israel. Their activities include uses of advanced technology in learning to workforce upskilling, STEAM, assessment, and digital content. The start-ups in the 2021 cohort are delivering value to learners and institutions across the learner journey and making an impact globally.

- **Donor support to education and VET for young people and adults**

EU-funded Twinning project 'Establishment of the Israeli National Qualifications Framework (NQF) as a mechanism to fostering the development of Israeli human capital' (due to close February 2020).

There is a vast array of funding provided by the private sector.

3. LABOUR MARKET AND EMPLOYMENT

3.1 Trends and challenges

- **Labour market and employment challenges in general**

According to the OECD (2021), Economic Policy Reforms, the Israeli labour market has weakened substantially. To cushion income losses, the government acted swiftly and broadened eligibility to unemployment benefits, notably to workers on unpaid leave. At the height of the lockdown in April 2021, unemployment claims surged to more than one million people, around a quarter of the labour force. Many people have returned to work since the economy reopened. This process has also been helped by a new government subsidy to firms that rehire laid-off workers.

However, the severity of the crisis has translated part of the temporary layoffs into permanent ones and unemployment remains high. Analyses by the Ministry of Finance (MoF, 2020) show that both low-skilled workers and workers with tertiary education have been affected by the current crisis. Young people have been the major employment group harmed by COVID-19. Youth, which represents one fifth of the new job seekers, is a particular concern because of scarring effects that may lead to persistent negative labour market outcomes.

This is due to their weak standing in the labour market, their tendency to work in industry sectors particularly hard hit by the crisis, and their lack of a sufficient financial cushion. In April 2020, about half a million young adults under 34 were registered with the employment services as seeking work, out of 1.15 million job seekers. About 44% of all employees who were separated from their jobs were young, while this group constitutes about 38% of the labour force (TAUB Center 2021).

The findings (TAUB Center, 2021) show that the Israeli labour market has suffered a severe shock with more than a million laid down temporarily. Even if many have regained employment, after re-opening the economy, through government subsidies to rehire workers, the severity of the shock and restructuring of the economy has left many looking for jobs. It is estimated that the potential for workers in the Israeli labour market to work from home is characterised by significant differences among different occupational groups, where workers in high-tech industry occupations have greater potential to work from home.

In contrast, workers with a low ability to work from home tend to be the young (aged 16 to 25), those with less education, workers from the Arab Israeli sector, the self-employed, and those living in cities with low socioeconomic rankings and/or in the North. The TAUB Center 2021 indicates that workers in low-paying occupations use digital work to a lesser extent as well as workers aged 16 to 25 and women relative to men. The limited use of digital work is also characteristic of the Arab-Israeli sector and even more so of the Haredi sector.

The issue of low-skilled workers (one of the reasons why Israel has a low productivity rate compared with other OECD countries) has become even more critical because of the crisis, the effect in the medium term being that these workers are at risk of being pushed out of the labour force completely. To avoid this, the Israeli employment services have established measures to reinforce the abilities of the low-skilled through online courses designed in cooperation with enterprises. Several measures have also been put in place to provide financial assistance to the categories most affected by the crisis.

- **Employment**

The fall in employment due to the crisis was especially large for workers with low levels of education. The education-based gaps in the size of the decline in employment was larger during the lockdowns

Integrating the Arab Israeli and Haredim into the labour market remains one of the key challenges for the Israeli economy. This is particularly important in the case of Haredim due to demographic trends. While the fertility rate of Arab-Israelis has fallen and is now only slightly higher than that of the non-Haredi Jewish population (3.1 vs 2.5), Haredi families still have on average seven children. Their share in the population is expected to increase from today's 12% to 32% in 2065(TAUB Center, 2021). Haredi men are encouraged by their communities to engage in life-long religious studies in yeshiva schools rather than work. Men enrolled in religious studies are exempt from military service, which is compulsory for other Jewish citizens. According to the same report, those who seek jobs are often unprepared for the labour market, because Haredi boys study a limited core curriculum of secular subjects. Consequently, almost half of all Haredi men are out of the labour force. Most of those that do work tend to earn close to the minimum wage and therefore pay no or very little income tax. Almost half of the Haredi population lives in material poverty (TAUB Center, 2021).

One of the key initiatives, during the COVID period, was the salary increase for the lowest wage earners which contributed to a gender gap in employment, with more women losing work, according to a new study (August 2021). Minimum wage increases in Israel have benefited men more than women and widened the gender gap in the labour market (according to the Israeli think tank, Shoresh Institution for Socioeconomic Research).

The pay hikes have led to higher salaries overall, but affected people differently, according to the same report of Shoresh Institution for Socioeconomic Research. Wage increases tended to increase job retention for minimum wage-earning men, but decreased job retention for women, compared to a control group that earned slightly more than the minimum. Job retention fell for women by up to 18.4%, relative to the control group, but for men, it increased by up to 13.8%. Men tended to move into and out of jobs less following the minimum wage increases, meaning fewer men stopped working, but fewer also found employment, possibly because there were fewer vacancies in the workforce. Wage hikes did not significantly increase women's chances of finding work.

In short, men were more likely to keep their jobs, while women were more likely to lose them, and neither group was more likely to enter the workforce. Part of the gender disparity could be because people at the lower salary range are employed in different economic sectors.

Israel's minimum wage is currently ILS 5 300 (USD 1 650) per month, or around ILS 29 (USD 9) per hour. The last increase was in April 2018. More minimum wage-earning women are also part-time workers, who are more likely to be fired, the authors said. (Shoresh,2021).

- **Unemployment**

At the height of the first lockdown, which had the most significant effect on employment, the broad unemployment rate stood at 27% among those with higher education, 41% among workers with a bagrut certificate or non-academic higher education, and 48% among workers without a bagrut certificate. In later lockdowns, there was still a large gap between those with an academic education and those without, but there was no longer a difference between those with a bagrut or non-academic higher education and those without a bagrut (ETF, 2020).

Analyses by the Ministry of Finance (MoF,2020) show that both low-skilled workers and workers with tertiary education have been affected by the current crisis. Youth, which represents one fifth of the new job seekers, is a particular concern because of scarring effects that may lead to persistent negative labour market outcomes.

According to forecasting reports on Israel (OECD 2021, World Bank 2021, TAUB Center 2021etc.), the unemployment will fall, but is unlikely to return to its 2019 level soon. There is also a development in how Israel defines 'unemployment' which was redefined in 2020. Until then, the unemployed included only those who did not work during the period in question but actively searched for employment. This was clearly too narrow a definition to encompass what happened during the first

shutdown in Israel, in which over a third of the labour force was not working and not searching. The Israeli Central Bureau of Statistics (CBS) now accounts for all these categories, using the term 'broad unemployment rate'. This new category of unemployed included two groups: those on temporary leave, who are not working and also not job-searching; and those who were laid off or quit and stopped looking, some of whom chose to invest in some form of education or training and others who just gave up.

The unemployment rate was particularly high at the end of 2020, at over 16%. This rate is expected to decline over the next two years, but it will take a long time to return to the historic low reached in 2019 (3.8%). According to the CBS figures[1], the broad unemployment rate at the end of 2020 was 16.2%. This will fall significantly in 2021 and 2022, According to CBS and other data analysis institutions (e.g. A Picture of the Nation 'Israel's Society and Economy in Figures', TAUB Center, 2021), the broad unemployment rate among labour force participants includes the standard unemployed and those on unpaid leave, but not those who left the labour force.

The variation in the impact on employment according to education level and age was amplified during the lockdowns. According to the Israeli TAUB Center (2021), the rate of unemployment at the height of the first lockdown was 27% among university graduates as opposed to 41% among the rest of the labour force. The younger groups (aged 18–29) were also particularly affected since they tend to be employed in temporary jobs or in industries that experienced the greatest impact (such as wait staff). Older workers (over 65) were also affected to a greater extent, presumably because they belong to a high-risk group (TAUB Center, 2021).

Haredi workers were particularly affected by the crisis. While Haredi men were dealt a strong blow, Haredi women were also greatly affected, despite their higher level of education, because a large share of them are employed in part-time positions. In contrast, since June, the unemployment rate among Arabs has been lower than among non-Haredi Jews, due to the recovery in the construction industry in the case of Arab men, and the elevated level of education and high level of employment in the public sector in the case of Arab women. Data on the uptake of unemployment benefits show an increasing need among young adults. Almost half of those receiving unemployment benefit during the crisis period were aged 34 and under, compared to about 30% over the preceding decade. In numbers, in April 2020, about 400 000 young adults received unemployment benefits, and with the recovery of the economy, and the return to normalcy, those numbers dropped to about 200 000 in July 2021, although the percentage of those receiving the benefit remained unchanged (TAUB Center, 2021).

A possible explanation for the severe impact on the employment of older workers during the first shutdown is that this population belongs to a high health-risk group from COVID, and, therefore, some older employees may have preferred to remove themselves from risk and some employers may have preferred not to put their older workers at risk. These differences did not persist in the later shutdowns.

People continue to work after age 60 primarily for financial reasons, yet more than one-quarter of the employees in this age group continue working for personal and social reasons. Those who decide to retire do so because they have sufficient income, for health-related reasons, or because they have difficulty finding work in their own profession. The latter factor can be mitigated by employment programmes to assist this population.

Women were disproportionately placed on leave of absence during the lockdowns. Before the pandemic began, women comprised 49% of the workforce, while during the first lockdowns in March and April, they comprised 57% of those on leave. At its apex, 30% of working men and 38% of working women were unemployed. During the second and third lockdowns this gap fell, but women

[1] This is the Israeli definition. It is an additional specific indicator calculated by the CBS in the context of crisis and used for policy-making i.e. it is not comparable to the ILO definition indicator of unemployment rate that reached 4.3% in 2020.

were still disproportionately at a disadvantage. The gap early on stemmed from the predominance of women in the education system and other affected industries, and the fact that lower income workers were at more of a disadvantage than those with higher incomes, and women have lower salaries on average. Interestingly, during the recovery periods the unemployment rate for women fell below that of men. Haredi workers were most affected, while for non-Haredim, early on, women were affected more than men. Young and old workers were most at a disadvantage, although for various reasons (TAUB Center,2021).

During the early months of the crisis, the growth in the broad unemployment rate was slightly steeper among young people aged 18–29 and far greater among older workers aged 65–74 than among workers aged 30–64. One reason for the significant disadvantage among younger workers is that many of them have not yet settled into their eventual occupations but are temporarily employed in the types of jobs most affected by the shutdowns, such as waiting tables in restaurants. (TAUB Center,2021).

- **Statistical data collection and labour market information**

The Central Bureau of Statistics (CBS), is the central body of the government whose role is to collect, process and publicise statistical information on the population, the economy, and society in Israel. The CBS Chief Statistician reports to the Prime Minister's Office. The CBS itself determines its work plan, within the framework of its budget. The work plan does not have to be approved by an external body or agency. The work programme of the CBS comprises three main components:1) Ongoing activities which are repeated on a regular basis (such as the LFS (Labour Force Survey), or the annual publication of statistics on higher education);2) Special, one-off projects;3) Development work.

Its main work focuses on preparing statistical data - current, monthly, quarterly, and annually

The Bank of Israel Research Department is another institution that disseminates research on many fields: https://www.boi.org.il/en/Research/Pages/About.aspx

- **Poverty**

The productivity gaps between sectors are closely intertwined with the broader social gaps in Israel. The Haredim and Arab-Israelis often work in low-productivity sectors with low wages. Poverty is widely spread among these groups. This reflects a lack of skills needed for them to get high-productivity and well-paid jobs. The government’s impressive technological capacity is not promoted and utilised fully for all/by all. Big efforts are needed to help low-skilled workers to move to higher productivity, high-tech jobs are win-win opportunities for tackling the twin challenges of low productivity and widespread poverty.

In 2020, the welfare budget grew by 42% and the number of recipients of unemployment benefits grew thirteen-fold. When the period of eligibility for unemployment benefits for those not working due to the pandemic ends, it is expected that poverty and inequality will worsen, at least in the coming years. The long-term effects of the crisis are dependent to a considerable extent on the social policies adopted by the government following the crisis.

The expenditure on social protection has grown and the expenditure on social investment is expected to grow: The expenditure on social protection as part of the assistance program for dealing with the COVID crisis in 2020 totalled about ILS 42 billion out of an allocation of ILS 49 billion while the expenditure on social investment stood at only ILS 2.5 billion out of the ILS 4 billion allocated. In 2021, the expenditure on social investment is expected to grow with the adoption of new employment programs and the expansion of investment in vocational training programs financed by the Ministry of Labour, Social Affairs and Social Services. However, while there is strong emphasis on social investment in Israel, the level of the expenditure as a percentage of GDP is relatively low (less than 8% versus 11% in those countries (TAUB Center, 2021).

3.2 Employment policy and institutional setting

- **Strategy and legal framework in the employment policy field**

The Ministry of Labour, Social Affairs and Social Services (MoL) is responsible for ensuring the welfare of the public through overseeing the supply of social services and through oversight on matters relating to labour and employment. In their studies they confirm that the pandemic is likely to accelerate a restructuring of the economy, from sectors facing extended weak demand to expanding sectors, forcing laid-off workers to find new jobs in different sectors and requiring different skills.

Israel's parliament approved the 2021 national budget on 4 November 2021. It will roll out all the sectorial financial allocations. After three years budget deadlock, this will indicate the budgeted sector priorities. The government/MOL are working on reviewing all the developments with the aim of extending and strengthening the active labour market policies and increasing public expenditure on active labour market policies. There are ongoing policy discussions on strengthening existing in-work benefits to support the households most in need, reduce poverty and strengthen work incentives for low-skilled workers.

In May 2021, the ILO published the Report of the Director-General 'The situation of workers of the occupied Arab territories. The analysis provides some policy pointers on the benefits for both parties to benefit from the interlinked and Palestinian labour markets. According to the report, the Palestinian and Israeli labour markets continue to be interlinked. Israel needs Palestinian workers and Palestinians need jobs in Israel. Israel has put announced reforms of the permit regime for Palestinian workers in motion, and this is important and welcome. But key problems such as continuous exploitation by permit brokers remain unresolved. Effectively addressing these issues, and many others, will require dialogue and coordination between the two sides. Unilateral action is less likely to work well.

There have been a number of experts discussions on how to prioritise the policy pointers of the above-mentioned reports/analysis in order to increase the resources for public employment services and active labour market policies, especially training, etc., and how they can be increased side by side with the expanding use and strengthening of the assessment of training programmes, focusing on low-skilled workers, especially from disadvantaged groups who are less likely to receive training.

Various financial and non-financial measures have been put in place to offset the negative effects of the pandemic on employment. The Ministry of Labour, Social Affairs and Social Services has put in place programmes to reskill and upskill the unemployed and those not in receipt of any payment. Unlike in the past, training is now taking place much more within industry, with the involvement of employers, and is much more related to employment needs.

Israel is prioritising active labour market policies to improve social inclusion. To this end, a network of Employment Orientation Centres has been created in Arab and Haredi communities. The Ministry of Labour, Social Affairs and Social Services has published an analysis of Israel's Social Services Best Practices During the COVID-19 Outbreak and after: https://bit.ly/3lyvY49.

- **Initiatives to boost employment**

Israel lacks a 'universal' active labour market policy and specifically ALMPs (Active Labour Market Policies) towards youth. The Ministry of Defence applies a few programmes, but these are restricted to discharged soldiers. Moreover, most ALMPs are developed and implemented outside the government ministries, with TEVET and private contractors playing a significant role in the design and implementation of new ALMPs. According to the OECD, public spending on ALMPs in Israel is particularly low compared to international standards, at a rate that is the second lowest in the OECD after Mexico (OECD, 2021).

Even if ALMPs are under-developed and the resources invested are below the OECD average, the Israeli government has taken some firm policy measures. One of the key initiatives was salary increases for the lowest wage earners which contributed to a gender gap in employment, with more women losing work, according to a new study Shoresh Institution for Socioeconomic Research (August 2021).

Minimum wage increases in Israel have benefited men more than women and widened the gender gap in the labour market. Part of the gender disparity could be since men and women at the lower salary range are employed in different economic sectors (TAUB Center,2021). Israel's minimum wage is currently ILS 5 300 (USD 1 650) per month, or around ILS 29 ($9) per hour. The last increase was in April 2018. More minimum wage-earning women are also part-time workers, who are more likely to be fired, the authors of the same study state in their report.

- **Initiatives to increase the capacity of the public employment services**

The Israeli Public Employment Service is under the supervision of the Minister of the Economy and Industry and the ministry's management. According to their website, it handles about 400 000 job seekers every year, using 71 bureaus across the country. Employment service roles: helping job seekers find jobs, performing an employment test, referring job seekers to vocational training, helping employers find employees, research of the Israeli employment market and the concentration of information about it, including the publication of periodic data and reports, the 'gatekeeper' of unemployment benefits and income support: the transfer of regular reports to the national insurance institute regarding the eligibility of job seekers to unemployment benefits or income support fees if and when no suitable work has been found for them. It is important to note that in accordance with section 3 of the Employment Service Law, labour relations and working conditions are not within the authority of the service and it is prohibited from interfering with them.

It is cooperating with many countries in the EU to better understand and learn from other countries' experiences. They have been active in the peer learning activities organised by the Commission on the European Pillar of Social Rights Action Plan, all with the aim of getting inspiring experiences from organisations around the world and to improve their capacities in providing their services for skills and employment. Within the Israeli context, they are interested in green and digital transitions.

The Israeli Public Employment Service is cooperating with the team managing the European Classification of Occupations, Skills and Qualifications (ESCO) and EU Member States because they are interested in using the taxonomy to help people showcase their skills and connect them with jobs and training opportunities. One of the areas of their interest is job-matching, career guidance and labour market analysis to support the public employment service of Israel in better understanding how ESCO can be used in their system.

The Commission organised in April 2021 an ESCO peer learning activity to support the Israeli Public Employment Service in adopting ESCO.

The Israeli Public Employment Service is cooperating with the EURES network, peering with the German Public Employment Service and Irish public employment services (Jobs Ireland) to deliver services to employers and job seekers. The private ESCO implementer Certif-Id and the non-profit implementer Nesta have joint the discussions. They are using the guide (user guide) to make recommendations on career transitions to more secure jobs as well as key findings from mapping the impact of automation risk on workers' career transition opportunities https://ec.europa.eu/esco/portal/news/977c15c7-fe9c-4848-b23d-ea99f9b65010.

For further information, please contact Lida Kita, European Training Foundation, email: Lida.Kita@etf.europa.eu

ISRAEL: STATISTICAL ANNEX

Annex includes annual data from 2010, 2015, 2019 and 2020 or the last available year.

	Indicator		2010	2015	2019	2020
1	Total Population (000) (1)		7,624	8,380	9,053	9,217
2	Relative size of youth population (age group 15–24 %) (1) (2) (c)		24.2	24.3	24.9	25.0
3	GDP growth rate (%)		5.6	2.3	3.5	-2.4
4	GDP by sector (%)	Agriculture added value	1.5	1.2	1.1	M.D.
		Industry added value	21.1	20.2	18.5	M.D.
		Services added value	66.6	68.2	71.2	M.D.
5	Public expenditure on education (as % of GDP)		5.5	5.9	6.1 (2017)	M.D.
6	Public expenditure on education (as % of total public expenditure)		13.7	15.5	15.7 (2017)	M.D.
7	Adult literacy (%)		M.D	M.D	M.D	M.D.
8	Educational attainment of adult population (aged 25–64 or 15+) (%) (3)	Low	12.1	9.8	9.0	8.3
		Medium	36.0	35.3	34.7	35.2
		High	51.9	54.8	56.3	56.5
9	Early leavers from education and training (aged 18–24) (%)	Total	8.3	7.6	6.1	5.6
		Male	10.9	10.2	8.4	7.2
		Female	5.6	4.8	3.7	4.0
10	Gross enrolment rates in upper secondary education (ISCED level 3) (%)		102.7	101.8	104.4 (2018)	M.D
11	Share of VET students in upper secondary education (ISCED level 3) (%)		38.2	40.7	40.8 (2018)	M.D
12	Tertiary education attainment (aged 30–34) (%)		50.6	52.8	54.1 (2018)	M.D.
13	Participation in training/lifelong learning (aged 25–64) (%)	Total	8.2	10.0	9.2	8.6
		Male	8.9	11.6	11.3	10.8
		Female	7.5	8.4	7.1	6.5
14		Reading	23.6 (2012)	26.6	31.1 (2018)	N.A.

	Low achievement in reading, mathematics and science – PISA (%)	Mathematics	33.5 (2012)	32.1	34.1 (2018)	N.A.
		Science	28.9 (2012)	31.4	33.1 (2018)	N.A.
15	Activity rate (aged 15+) (%)	Total	57.3	64.1	63.5	61.8
		Male	62.2	69.3	67.6	65.5
		Female	52.8	59.1	59.6	58.2
16	Inactivity rate (aged 15+) (%)	Total	42.7	35.9	36.5	38.2
		Male	37.8	30.7	32.4	34.5
		Female	47.3	40.9	40.4	41.8
17	Employment rate (aged 15+) (%)	Total	53.5	60.7	61.1	59.1
		Male	58.0	65.7	65.1	62.6
		Female	49.3	55.9	57.2	55.8
18	Employment rate by educational attainment (% aged 15+)	Low	24.8	26.7	26.6	24.0
		Medium	54.6	65.4	64.5	61.4
		High	73.7	76.5	76.5	75.1
19	Employment by sector (%)	Agriculture	1.6	1.0	1.0	0.9
		Industry	20.2	17.7	16.5	15.9
		Services	78.1	81.2	82.5	83.1
20	Incidence of self-employment (%)		12.8	12.6	12.3	12.4
21	Incidence of vulnerable employment (%)		8.6	8.7	9.1	9.3
22	Unemployment rate (aged 15+) (%)	Total	6.6	5.3	3.8	4.3
		Male	6.8	5.1	3.7	4.5
		Female	6.5	5.4	3.9	4.1
23	Unemployment rate by educational attainment (aged 15+) (%)	Low	11.6	9.7	6.2	7.2
		Medium	8.0	6.0	4.5	5.3
		High	4.4	3.8	2.9	3.3
24	Long-term unemployment rate (aged 15+) (%)		1.6	0.7	0.3 (2018)	M.D.
25	Youth unemployment rate (aged 15–24) (%)	Total	13.7	9.3	6.7	7.9
		Male	14.5	8.9	6.1	7.6
		Female	12.9	9.7	7.2	8.2
26		Total	30.4	15.5	15.5	17.3

	Proportion of people aged 15–24 not in employment, education or training (NEETs) (%)	Male	32.7	14.3	15.4	17.4
		Female	28.0	16.7	15.6	17.1

Last update: 22 October 2021

Sources:

Indicators: 8, 9, 12, 13, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26 – Israel Central Bureau of Statistics.
Indicators: 1, 2, 3, 4 – World Bank, World Development Indicators
Indicators: 5, 6, 10, 11 – UIS UNESCO
Indicators: 14 – OECD

Notes:

As of 2012, data refer to the entire labour force (including compulsory or permanent military service) and are based on a monthly labour force survey. As of 2012, data by industry are according to Standard Industrial Classification of All Economic Activities 2011.

(1) The values shown are mid-year estimates.

(2) Age in the denominator is 15–64.

(3) Active population aged 25+

Legend:

c = ETF calculations
N.A. = Not Applicable
M.D. = Missing Data

ANNEX: INDICATORS' 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, countries may report legal or registered residents.
2	Relative size of youth population (age group 15–24) (%)	This is the ratio of the youth population (aged 15–24) to the working-age population, usually aged 15–64 (74)/15+.
3	GDP growth rate (%)	Annual percentage growth rate of GDP at market prices based on constant local currency. Aggregates are based on constant 2010 U.S. dollars. GDP is the sum of gross value added by all resident producers in the economy plus any product taxes and minus any subsidies not included in the value of the products. It is calculated without making deductions for depreciation of fabricated assets or for depletion and degradation of natural resources.
4	GDP by sector (%)	The share of value added from Agriculture, Industry and Services. Agriculture corresponds to ISIC divisions 1–5 and includes forestry, hunting, and fishing, as well as cultivation of crops and livestock production. Value added is the net output of a sector after adding up all outputs and subtracting intermediate inputs. It is calculated without making deductions for depreciation of fabricated assets or depletion and degradation of natural resources. The origin of value added is determined by the International Standard Industrial Classification (ISIC), revision 3 or 4.
5	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 (transfer to private households and enterprises). Both types of transactions together are reported as total public expenditure on education.
6	Public expenditure on education (as % of total public expenditure)	Public expenditure on education expressed as a percentage 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 (transfer to private households and enterprises). Both types of transactions together are reported as total public expenditure on education.
7	Adult literacy (%)	Adult literacy is the percentage of the population aged 15 years and over who can both read and write a short simple statement on his/her everyday life, and understand it. Generally, 'literacy'

	Description	Definition
		also encompasses 'numeracy', the ability to make simple arithmetic calculations.
8	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. This is usually measured in terms of the highest educational programme successfully completed which is typically certified by a recognised qualification. Recognised intermediate qualifications are classified at a lower level than the programme itself.
9	Early leavers from education and training (age group 18–24) (%)	Early leavers from education and training are defined as the percentage of the population aged 18–24 with at lower secondary education who were not in further education or training during the four weeks preceding the survey. Lower secondary education refers to ISCED 1997 levels 0–2 and 3C short (i.e. programmes lasting under two years) for data up to 2013 and to ISCED 2011 levels 0–2 for data from 2014 onwards.
10	Gross enrolment rates in upper secondary education (ISCED level 3) (%)	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.
11	Share of VET students in upper secondary education (ISCED level 3) (%)	Total number of students enrolled in vocational programmes at a given level of education (in this case upper secondary), expressed as a percentage of the total number of students enrolled in all programmes (vocational and general) at that level.
12	Tertiary education attainment (aged 30–34) (%)	Tertiary attainment is calculated as the percentage of the population aged 30–34 who have successfully completed tertiary studies (e.g. university, higher technical institution). Educational attainment refers to ISCED 1997 level 5–6 up to 2013 and ISCED 2011 level 5–8 from 2014 onwards.
13	Participation in training/lifelong learning (age group 25–64) by sex (%)	Participants in lifelong learning refers to persons aged 25–64 who stated that they received education or training in the four weeks preceding the survey (numerator). The denominator is the total population of the same age group, excluding those who did not answer the question on participation in education and training. The information collected relates to all education or training, whether or not it is relevant to the respondent's current or possible future job. If a different reference period is used, this should be indicated.
14	Low achievement in reading, maths and science – PISA (%)	Low achievers are the 15-year-olds who are failing to reach level 2 on the PISA scale for reading, mathematics and science.
15	Activity rate (aged 15+) (%)	The activity rate is calculated by dividing the active population by the population of the same age group. The active population (also called 'labour force') is defined as the sum of employed and unemployed persons. The inactive population consists of all persons who are classified as neither employed nor unemployed.
16	Inactivity rate (aged 15+) (%)	The inactivity/out of the labour force rate is calculated by dividing the inactive population by the population of the same age group. The inactive population consists of all persons who are classified as neither employed nor unemployed.

	Description	Definition
17	Employment rate (aged 15+) (%)	The employment rate is calculated by dividing the number of employed persons by the population of the same age group. Employed persons are all persons who worked at least one hour for pay or profit during the reference period or were temporarily absent from such work. If a different age group is used, this should be indicated.
18	Employment rate by educational attainment (% aged 15+)	The employment rate is calculated by dividing the number of employed persons by the population of the same age group. Employed persons are all persons who worked at least one hour for pay or profit during the reference period or were temporarily absent from such work. If a different age group is used, this should be indicated. Educational levels refer to the highest educational level successfully completed. Three levels are considered: Low (ISCED level 0–2), Medium (ISCED level 3–4) and High (ISCED 1997 level 5–6, and ISCED 2011 level 5–8)
19	Employment by sector (%)	This indicator provides information on the relative importance of different economic activities with regard to employment. Data are presented by broad branches of economic activity (i.e. Agriculture/Industry/Services) based on the International Standard Industrial Classification of All Economic Activities (ISIC). In Europe, the NACE classification is consistent with ISIC.
20	Incidence of self-employment (%)	The incidence of self-employment is expressed by the self-employed (i.e. employers + own-account workers + contributing family workers) as a proportion of the total employed.
21	Incidence of vulnerable employment (%)	The incidence of vulnerable employment is expressed by the own-account workers and contributing family workers as a proportion of the total employed.
22	Unemployment rate (aged 15+) (%)	The unemployment rate represents unemployed persons as a percentage of the labour force. The labour force is the total number of people who are employed or unemployed. Unemployed persons comprise those aged 15–64 or 15+ who were without work during the reference week; are currently available for work (were available for paid employment or self-employment before the end of the two weeks following the reference week); are actively seeking work, i.e. had taken specific steps in the four-week period ending with the reference week to seek paid employment or self-employment, or had found a job to start later (within a period of, at most, three months).
23	Unemployment rate by educational attainment (aged 15+) (%)	The unemployment rate represents unemployed persons as a percentage of the labour force. The labour force is the total number of people who are employed or unemployed. Unemployed persons comprise those aged 15–64 or 15+ who were without work during the reference week; are currently available for work (were available for paid employment or self-employment before the end of the two weeks following the reference week); are actively seeking work (had taken specific steps in the four-week period ending with the reference week to seek paid employment or self-employment, or had found a job to start later (within a period of, at most, three months)). Educational levels refer to the highest educational level successfully completed. Three levels are considered: 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
24	Long-term unemployment rate (aged 15+) (%)	The long-term unemployment rate is the share of people in the total active population who have been unemployed for 12 months or more, expressed as a percentage. The duration of unemployment is defined as the duration of a search for a job or as the period of time since the last job was held (if this period is shorter than the duration of the search for a job).
25	Youth unemployment rate (aged 15–24) (%)	The youth unemployment ratio is calculated by dividing the number of unemployed persons aged 15–24 by the total population of the same age group.
26	Proportion of people aged 15–24 not in employment, education or training (NEETs) (%)	The indicator provides information on young people aged 15–24 who meet the following two conditions: first, they are not employed (i.e. unemployed or inactive according to the ILO definition); and second, they have not received any education or training in the four weeks preceding the survey. Data are expressed as a percentage of the total population of the same age group and gender, excluding the respondents who have not answered the question on participation in education and training.

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LIST OF ACRONYMS

ALMP- Active labour market policy

CVT- Continuing vocational training

ETF -European Training Foundation

GDP- Gross domestic product

IDF- Israeli Defence Forces

ILS -Shekel (Israeli currency)

ICBS- Israeli Central Bureau of Statistics

ISCED- International Standard Classification of Education

IVET- Initial vocational education and training

MAI- Manufacturers' Association of Israel

MoE Ministry of Education

MoL- Ministry of Labour, Social Affairs and Social Services

NEET- Not in employment, education, or training

NITTS- National Institute for Training in Technology and Science

NIS – New Israeli Shekel

ESCO Occupations, Skills and Qualifications

OECD- Organisation for Economic Co-operation and Development

PIAAC- Programme for the International Assessment of Adult Competencies

PISA- Programme for International Student Assessment

TVET- Technical and vocational education and training

VET- Vocational education and training

WBL -Work-based learning

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