

### **Press Release**

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New Shoresh Institution study:

# Leaving the Promised Land A look at Israel's emigration challenge

A new study by Prof. Dan Ben-David highlights some of the emigration consequences of Israel falling further and further behind the leading developed world countries. Some of the main findings (all appear in graphs below) include:

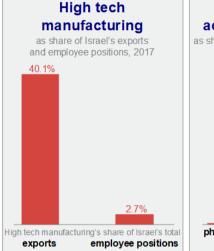
- Between the decades 1995-2005 and 2006-2016, the number of Israelis receiving American citizenship or Green Cards exceeded Israel's population growth by a third.
- For every Israeli with an academic degree who returned in 2014, 2.6 Israeli academics emigrated. By 2017, this increased to 4.5 emigrants per returnee.
- While only 40.1% of Israel's entire exports are in high tech manufacturing fields, just 2.7% of all Israel employee positions were in these fields. Not inconsequentially, there is a huge demand abroad for Israelis with degrees in the exact sciences and engineering from Israel's top institutions of higher learning and this is the group of Israeli graduates with the highest emigration rates.
- The total number of Israeli physicians practicing in OECD countries (other than Israel) was 9.8% of all physicians in Israel in 2006. This share rose to 14% by 2016.
- The number of Israelis in the top U.S. economics and computer science departments could fill nearly two additional Israeli departments in each field while the number of Israelis in just the top American business schools equals nearly three and a half Israeli business schools.

to download the complete policy paper to download the press release

Election after election has culminated in national priorities that are driving away an increasing share of the most highly educated Israelis. Bonuses and other stopgap measures are not going to turn the tide in a country that is pulling farther and farther behind the developed world. The Shoresh Institution's new policy research paper "Leaving the Promised Land — A look at Israel's emigration challenge," by Professor Dan Ben-David, focuses on one of the primary consequences of national policies that favor sectoral and personal interests above national ones.



- 1. The Shoresh study finds that while 9 million people live in Israel, it is an exceptionally small number of Israelis – less than 130,000 persons – that is keeping the economy, the healthcare system and their underlying university bedrock near the pinnacle of the developed world. Not inconsequentially, these are also at the base of the qualitative edge that enables Israel to physically defend itself.
  - While only 2.7% of all employee positions in Israel are in high tech manufacturing fields. these nonetheless accounted for 40.1% of Israel's entire exports in 2015.
  - The total number of research faculty in the eight universities (regardless of research fields) is just 0.1% of Israel's population 25 years old and up.
  - The physicians entrusted for ensuring the health of the country's entire population account for just 0.6% of all persons ages 25 and up - with





Senior faculty in Israel's research universities

Source: Dan Ben-David, Shoresh Institution and Tel Aviv University Data: Israel's Central Bureau of Statistics

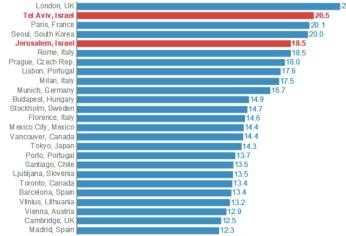
the majority of these physicians graduating from Israel's universities.

Prof. Dan Ben-David: "The fragile size of this group means that emigration by a critical mass out of the total – even if only numbering several tens of thousands – could generate catastrophic consequences for the entire country."

- 2. The emigration incentives resulting from Israel's labor productivity and its
  - accompanying effect on wages that is falling further and further behind (in relative terms) the leading developed world countries are compounded by the country's relatively high consumer prices.
    - The Shoresh study shows that household final consumption prices in Israel are 28% higher than in the U.S. and 66% greater than the OECD average.
    - The number of years that an Israeli needs to work to purchase a home is extraordinarily high in comparison with other developed countries. Two Israeli cities, Tel-Aviv and Jerusalem, are among the five most expensive cities in the developed world.

# Twenty-five most expensive cities in the OECD

Number of years of work needed to buy a home\*, 2019



\*ratio of median apartment prices to median familial disposable income, expressed as years of income

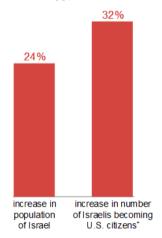
Source: Dan Ben-David, Shoresh Institution and Tel Aviv University Data: Numbeo



3. While Israel's population increased by 24% between the decades 1995-2005 and 2006-2016, the number of Israelis receiving American citizenship or Green Cards increased by 32%. In other words, Prof. Ben-David finds that the growth in the number of Israelis emigrating to the United States from the first decade to the second exceeded Israel's population growth by a third.

#### Changes in population and emigration to U.S.

increases from 1995-2005 to 2006-2016



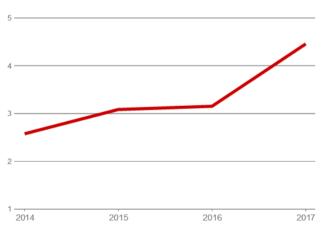
\* U.S. citizens or legalized permanent residents

Source: Dan Ben-David, Shoresh Institution and Tel Aviv University Data: Israel's Central Bureau of Statistics and the U.S. Department of Homeland Security (Newsweek, 2018)

## Ratio of academic emigrants to returnees\*

2014-2017

4. The ratio of academic emigrants to academic returnees has been rising in recent years. In 2014, 2.6 persons with an academic degree left Israel for each one who returned. By 2017, this ratio rose to 4.5 emigrants per returnee.



<sup>\*</sup>Ratio of persons graduating between 1980 and 2010 and living abroad at least three most recent years to past graduates returning to Israel and living in the country at least two most recent years.

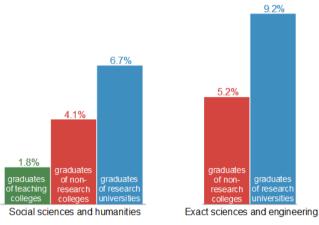
Source: Dan Ben-David, Shoresh Institution and Tel-Aviv University Data: Israel's Central Bureau of Statistics



- 5. Not only are the net flows increasingly outward, a closer examination by the Shoresh Institution of the highest academic emigration rates suggests an even more serious predicament. The better the institution of higher learning, the greater the emigration rate of its graduates.
  - Among the academic graduates in the social sciences and humanities fields, 1.8% of teaching college graduates have emigrated from Israel. The emigration rate rises to 4.1% among graduates of non-research colleges, and to 6.7% of all university graduates in social sciences and humanities.
  - Israel's economic engine is fueled by the technical fields, which highlights the challenge created by emigration rates among graduates in the exact sciences and engineering. Prof. Ben-David finds that a greater share of graduates with degrees in sciences and engineering from the non-research colleges have emigrated from Israel

#### Academic emigrants from Israel\*

Share of Israeli graduates living abroad in three most recent years at least, by type of degree-granting institution, 2017



Persons graduating between 1980 and 2010 and living abroad in 2017 for the past three or more years.

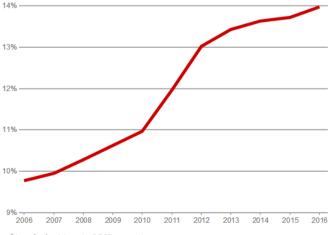
Source: Dan Ben-David, Shoresh Institution and Tel-Aviv University Data: Israel's Central Bureau of Statistics

(5.2%) than among graduates in social sciences and humanities fields (4.1%). The highest rate of emigration (9.2%) is by graduates from Israel's top institutions of higher learning, in the technical fields most vital for the country's economy.

# 6. As the Shoresh Institution study shows, the total number of Israeli physicians practicing in OECD countries (other than Israel) was 9.8% of all physicians in Israel in 2006. This share rose to 14% by 2016.

#### Israeli physicians abroad\*

as share of total physicians in Israel, 2006-2016



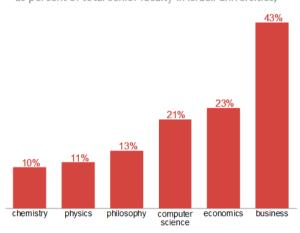
\* Israeli physicians in OECD countries.

Source: Dan Ben-David, Shoresh Institution and Tel-Aviv University Data: OECD



- 7. Providing the foundations for Israel's high-tech and medical capabilities are the country's research universities. Concentrating only on the top 40 American universities with a caliber of academic researchers that Israeli universities would welcome in six key academic fields, Prof. Ben-David examined the number of tenured or tenure track Israelis in each.
  - The Shoresh study found that the number of Israelis in the top forty chemistry departments in the United States is equal to 10% of all chemistry faculty in Israel's research universities.
  - In physics, this share rises to 11% and in philosophy, to 13%.
  - There is a considerable jump in the next two fields, computer science and economics, with the number of Israelis in just the top forty American departments equaling just over a fifth of the total computer science faculty in Israeli universities and nearly a quarter of the economics faculty in Israeli universities. In some of the leading

Israelis\* in top 40 American departments as percent of total senior faculty in Israeli universities,



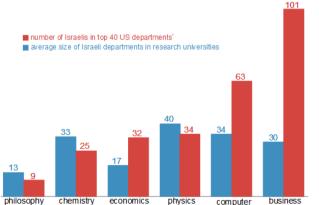
\* Only tenured or tenure-track Israelis. Not including emeritus professors, those who have an additional position in an Israeli university or those born in Israel who grew up abroad.

Source: Dan Ben-David, Shoresh Institution and Tel-Aviv University

American departments, there are multiple Israeli researchers.

- The situation in the business schools is at a different level entirely, with the number of Israelis in the top forty American business schools equaling 43% of the entire business school faculties in Israel's universities. Some of the top U.S. business schools have a double digit number of Israeli faculty members.
- 8. To get an idea of the scale of the Israeli emigration in these fields, the Shoresh study provides a comparison of the total number of Israelis in the leading American universities to the average size of the Israeli departments in each field.
  - In the case of philosophy, chemistry and physics, the number of Israelis in the top forty American departments equals 67%, 77% and 86% (respectively) of an average department size in Israel.
  - In economics and computer science, the number of Israelis in the top U.S. departments could fill nearly two additional Israeli departments.
  - The number of Israelis in the top American business schools equals nearly three and a half Israeli business schools.

#### Size of academic departments in Israel and number of Israelis in top American universities by field, 2019



\*Only tenured or tenure-track Israelis. Not including emeritus professors, those who have an additional position in an Israeli university or those born in Israel who grew up abroad.

Source: Dan Ben-David, Shoresh Institution and Tel-Aviv University



Professor Dan Ben-David summarizes: "While the overall emigration numbers are still relatively small when compared to Israel's total population, the bite that they take out of the most educated segments of society – those that keep Israel a part of the developed world – is not inconsequential. In light of the breadth, depth and the direction of the emigration from Israel, a serious solution to the problem requires much more than the ineffectual symptomatic assistance at individual levels that has been implemented until now. A sharp pivot in national budgetary priorities is needed."

As this – and previous – Shoresh Institution studies show, provision of the necessary tools (e.g. education) and conditions (e.g. infrastructures) to much wider swathes of the population will not only bring down one of the highest poverty rates in the developed world, it will also raise the country's economic growth rate. Including a much larger share of Israel's best and brightest – from all of its various population sub-groups – in the economy at levels of productivity that they are capable of is akin to having the national economic engine running on more of its cylinders, raising the entire economy to a whole new level and to a much steeper growth path. That will not only help keep Israelis at home, it may also begin attracting some of those who have left.

Professor Ben-David's warning to the heads of Israel's new government: "The extent of emigration, the direction of the trend, and the direction that all of Israel – a country that needs to remain sufficiently attractive to those who are very sought after by other countries – is headed should ring alarm bells in all of the corridors that determine Israel's national priorities."

The Shoresh Institution for Socioeconomic Research, headed by Professor Dan Ben-David, is an independent, non-partisan policy research center providing evidence-based analyses of Israel's economy and civil society. The Shoresh Institution informs Israel's leading policymakers and the general public, both inside and outside the country, through briefings and accessible publications on the source, nature and scope of core issues facing the country, providing policy options that ensure and improve the well-being of all segments of Israeli society and create more equitable opportunities for its citizens.

For details, or to arrange an interview, please contact Prof. Dan Ben-David (054-4287443)