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Israeli-born emigrants: Size, destinations and selectivity

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Abstract

This article addresses two issues regarding Israeli emigrants. First, it focuses on their number and distribution in various destination countries; second, it deals with patterns of self-selection among emigrants, namely, the skill level of Israelis who select themselves to leave Israel for various destination countries. The findings suggest that Israeli emigration has increased in the past two decades, but that most of the increase was in the 1990s, and was due to the emigration of foreign-born Israelis, rather than the emigration of native-born Israelis. Based on the DIOC (Database on immigrants in OECD countries) about 164,000 Israeli-born emigrants, aged 15 years and over, resided in 25 OECD countries in 2000, suggesting that relative to other countries, the share of Israeli-born residing outside Israel is not high. Two-thirds of Israeli-born emigrants were in the US, and 85 percent in the Anglo-Saxon countries. The selectivity of Israeli emigrants, measured by education and occupation, is most positive in the Anglo-Saxon countries, especially the US, where the returns on skills are the highest. By contrast, the least skilled Israeli emigrants choose Scandinavian countries, where the labor markets are relatively rigid, and returns on skills tend to be the lowest. These findings are consistent with migration selectivity theory, which anticipates that high-skilled immigrants will choose destinations where their skills will be generously compensated. Finally, the results suggests that the educational selectivity of Israeli emigrants to the Anglo-Saxon countries (but not to Scandinavian countries) has improved in the late 1990s compared to the early 1990s.

Keywords

educational selectivity, emigration, immigration, Israel, self-selection

Introduction

In contrast to most countries, which have at some point restricted the inflow of new immigrants, Israel has continuously encouraged unlimited Jewish immigration since the days of its independence. In keeping with the goal of increasing the Jewish population, Israel has persistently discouraged the emigration (of Jews), primarily by exerting moral and ideological pressures. Even the demographically neutral terms – immigration and emigration – have been replaced with value-laden ones which carry positive connotations for immigrants (*olim*, literally ascending) and negative ones for emigrants (*yordim*, literally descending). It is, therefore, not surprising that, in Israel, emigration has been viewed as a social problem, generating a vast research literature.

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Until the 1980s, this body of literature focused on the 'severity of the problem', and on trying to understand why Israeli Jews, and especially the native born, left the country.[1] As the country matured and Israeli researchers increasingly applied scientific standards to the study of such demographic phenomena, a growing body of literature concluded that emigration rates and the stock of Israelis abroad were not unusually high relative to other immigration countries (Lamdany, 1982) , especially given Israeli circumstances – high share of foreign-born residents, no option for short-term migration to adjacent countries, high rates of return migration, and a protracted conflict with the Arab world (e.g. Cohen, 1988; Cohen and Haberfeld, 1997; Yaar, 1988). Moreover, the influx of over one million immigrants since 1990 dwarfed emigration rates which were coming to be viewed as a normal phenomenon that no longer endangered Israel (Cohen, 2009). However, since the outbreak of the second Palestinian *intifada* in 2000, which was followed both by a sharp decline in Russian immigration, and by a steep rise in emigration in 2001–2002, the 'emigration problem' has surfaced once again.

Unlike the 1970s and 1980s, when the main concern regarding emigration was the loss of Jews – any Jews – to the Jewish state, currently both the number of emigrants as well as their type are viewed as problematic. The worry is that recent emigrants were disproportionately drawn from the ranks of highly educated and highly skilled Israelis. The argument, voiced by scholars, popular writers, politicians and government officials, is that not only have highly educated Israelis been emigrating in ever larger numbers, but that the share of the best and the brightest among them has been growing, thereby robbing Israel of its most precious resource, human capital (Ben-David, 2008, forthcoming; Gould and Moav, 2007; *Yediot Aharonot*, 2003). A close examination of the research which supports this brain-drain argument suggests, however, that the research has neglected to address some crucial empirical issues, most notably the hypothesized intensification of the brain drain over time, both with respect to the number of emigrants and their selectivity. This article attempts to contribute to some of these issues by estimating the size of the stock of Israeli-born emigrants during the past three decades, as well as their selectivity patterns to 25 OECD countries in the year 2000.

The article has three sections. The first focuses on the number of Israeli emigrants residing abroad. I will, first, present estimates for emigrant flows and stocks published by various sources including the Israeli Central Bureau of Statistics (CBS). Next, I will present estimates based on my analysis of the Database on Immigrants in OECD countries (DIOC) for 2000–2001, as well as on an analysis of the 2000 5 percent Public Use Micro Data Samples (PUMS) of the US census. Finally, I will compare the Israeli emigration rate to the respective rates in other rich countries. The second section of the article focuses on selectivity. It begins with a brief review of past research on emigrants' selectivity from Israel and the theory guiding the analysis, which expects highly skilled Israelis to emigrate and reside where the economic returns to skills are the highest. Based on this theory, I expect that the skill level of Israelis residing in Anglo-Saxon countries, where the returns to skills are the greatest, to be higher than the skill levels of Israeli emigrants in continental Europe – especially the Scandinavian countries – where the returns to skills are lower. Next, I will present the data set, the methodology to be used for detecting selectivity and changes in selectivity in emigrants' skills over time, and the results. The final section of the article discusses the findings – emigration rates and selectivity – and their implications.

1. Emigration estimations

Estimates based on Israeli data

The CBS defines emigrants as those leaving Israel for at least a year (not including visits for up to three months). The annual emigration balance of Israeli residents is calculated as the number of

residents (excluding labor migrants) who have left Israel for at least one year, minus the number of returning Israelis who spend over one year abroad. Annual figures suggest that the economic and security situation in Israel accounts for much of the variance in the emigration and return migration of Israelis (Cohen, 1988; Lamdany, 1982). In the post-1995 period the highest emigration rates and the lowest return rates were in 2001–2002, the peak years of the second *intifada* when the number of terrorist attacks in Israel was highest and the Israeli economy showed signs of distress. In those years (2001–2002), the annual emigration balance of Israelis (emigrants minus returnees) was approximately 20,000 (up from the average of about 14,000 per year during 1990–2000). The latest figures available from the Israeli CBS suggest that with the relative decline in terrorist attacks inside Israel in 2003, as well as the improved Israeli economy, emigration rates have been declining, and, by 2004–2007, had returned to their pre-*intifada* levels (Central Bureau of Statistics, 2007, 2008, 2009). In short, there is no evidence in CBS data for rising emigration rates in recent years. Notwithstanding the spike in annual emigration rates during 2001–2002, it appears that since 1996 rates have been relatively stable.

Estimates for the stock of Israeli emigrants are based on the number of Israeli residents who left Israel since 1948 and who have been residing abroad for over a year, excluding visits of less than 90 days in Israel and adjusting for mortality abroad. The CBS estimates for the number of Israelis residing abroad in 1989, 1999 and 2006 were 300,000 (Central Bureau of Statistics, 2007),[2] 480,000 (Hleihel and Ben Moshe, 2002), and 544,000 (Central Bureau of Statistics, 2008), respectively.[3] These estimates show a sizable increase in emigration stock relative to the population in the 1990s, but most of the growth took place in the 1990s, rather than in the 2000s. In 1989, emigrants comprised only 6.17 percent of the Israeli population. Ten years later, in 1999, the respective figure increased to 7.00 percent and by 2006 it had reached 7.10 percent.[4] Ironically, in the 1990s there was hardly any discussion in Israel of emigration or the brain drain, while during 2003–2007, when emigration hardly increased (in fact it declined), there was an outcry about emigration. The most likely explanation for this is that when Israel receives many immigrants, as was the case in the 1990s, emigration is less of a concern. But when Jewish immigration rates are low, as has been the case since 2001, attention focuses on emigrants (e.g. Lustick, 2010). Thus, the recent anxiety about Israeli emigration rates is most likely the product of a decline in immigration rather than the slight rise in emigration during the 2000s.

Moreover, much of the surge in the emigrant population since 1990 is due to the emigration of post-1989 immigrants. During the 1990s about 1.2 million Jewish immigrants and their non-Jewish family members immigrated to Israel, mostly from the Former Soviet Union (FSU). Their emigration rate has been higher than the rate among the native born. Between 1990 and 2005 nearly half (48%) of the 230,000 Israeli emigrants were post-1989 immigrants (Central Bureau of Statistics, 2007), while their share of the Israeli population in 2005 was less than 20 percent.

In sum, CBS provides credible estimates for the total number of Israelis abroad, as well as for the emigration rates of post-1989 immigrants. These estimates indicate a surge in emigration in the 1990s, but not in the last decade, with the exception of 2001–2002. Less information is provided by the CBS regarding the stock of Israeli-born abroad, as well as regarding the emigration of foreign-born Israelis who immigrated to Israel before 1990. It is, therefore, necessary to turn to other sources in order to estimate recent emigration trends and the stocks of these groups.

Stock estimates based on data from the main destination countries

Data from the main destination countries suggests a possible rise in emigration rates in the first years of the 21st century (Lustick, 2004). While the stock of Israelis born in the US increased by about 23 percent between 2000 and 2006 (MPI, 2010), the annual number of Israeli-born persons

obtaining legal immigrant status in the US (i.e. 'green card') increased by 93 percent between 1997–2000 and 2001–2006 (US Department of Homeland Security, 2008). Furthermore, at the turn of this century, for the first time, many foreign-born Israelis and their Israeli-born offspring were applying for citizenship in European countries which are already part of, or soon to be part of, the European Union. Between 2000 and 2006, an estimated 53,000 new European passports were issued to Israeli Jews by Austria, Germany, Poland, Hungary, Romania, Greece and the Czech Republic (Harpaz, 2009). The total number is most likely greater as some countries not listed above also issued new passports to Israeli nationals (Harpaz, 2009). To be sure, many of these dual Israeli-European citizens have not emigrated nor do they voice any intention of emigrating to any of these countries. Rather, according to reports in the popular press they are seeking 'insurance' for themselves and for their children in case the political and economic situation in Israel deteriorates, as well as leaving the door open for their children to study and work in Europe (Harpaz, 2009). However, their intentions notwithstanding, it is possible that at least some of them have emigrated in recent years. Evidently, there is a need to supplement the estimates for the stock of Israeli-born emigrants with data from the main destination countries in Europe and America. Fortunately, new aggregate data for OECD countries, as well as micro-census data for the US, are available to perform this task.

In early 2008 the OECD office in Paris published a report titled 'A profile of immigrant populations in the 21st century' (OECD, 2008). The report was based on the 'Database on immigrants in OECD countries' (DIOC, 2008). This aggregated data set includes information on the demographic and socio-economic characteristics of the foreign-born, 15 years and older, in 28 OECD countries and is available online. For most variables, the data were taken from country censuses conducted in 1999–2001, or, in the case of the Scandinavian countries, from population registers. It is thus possible to use the DIOC to estimate the number and characteristics of Israeli-born immigrants in OECD countries.

The total number of Israeli-born emigrants, 15 years old and over, in 25 OECD countries is 164,140 (see Table 1). Fully two-thirds of all emigrants reside in the US, 75 percent in North America, and 84.4 percent are in the four major Anglo-Saxon countries (US, Canada, UK, and Australia). Only 14.6% (24,014) of Israeli-born emigrants reside in continental Europe. These figures exclude three OECD countries – Japan, Germany, the Netherlands (where Israelis are not identifiable)[5] – as well as the European republics of the Former Soviet Union and all countries in Asia, Africa, and Central and South America. Therefore, to reach an estimate of the total number of Israeli-born emigrants we need an estimate for their number in countries not listed in Table 1.

There is no readily available data for providing precise estimates for Israeli-born emigrants in these countries. The best that we can do is rely on the available data and knowledge of Israeli society and its migration patterns so as to speculate on the number of Israelis in countries not listed in Table 1. For example, assuming that the total number of Israeli-born in Germany and the Netherlands is approximately the same as their total number in France and Belgium, then there are about additional 9000 Israeli emigrants in continental Europe.[6] The number of Israeli-born in the former Soviet Republics is probably smaller. Although close to 100,000 FSU-born Israelis have emigrated since 1990 (Central Bureau of Statistics, 2008), and many of them returned to the FSU, very few Israeli-*born* emigrants did so. Assuming that native-born Israelis emigrated to the FSU at about the same rate that they emigrated to the four countries in Eastern Europe listed in Table 1, then there are, at most, 5000 Israeli-born emigrants in all the republics of the FSU. As for Africa and Asia, very few Israelis reside there, with the possible exception of South Africa: and, in any case, since the abolishment of apartheid the country has experienced Jewish emigration and has therefore become less attractive to Israelis. Given that the total number of Israeli-born emigrants

Table 1. Number of emigrants by destination, citizenship, gender and age groups

	Number	% of total	% Citizens	% Men	Age groups (%)		
					15–24	25–54	55+
	(1)	(2)	(3)	(4)	(5)	(6)	(7)
Country of residence							
United States	107,744	65.6	64.6	55.8	13.0	71.2	15.8
Canada	14,785	9.0	84.3	52.6	19.3	63.6	17.1
United Kingdom	10,260	6.3	–	51.6	18.7	58.4	23.0
Australia	5,794	3.5	85.9	55.3	14.0	64.6	21.5
Mexico	850	0.5	–	60.1	11.8	65.6	22.6
New Zealand	480	0.3	–	57.9	34.9	55.3	9.9
Ireland	213	0.1	50.7	56.3	23.9	63.4	12.7
Total, Anglo-Saxon	140,126	85.4	67.8	55.1	14.2	69.1	16.7
France	6,601	4.0	78.9	52.1	19.5	70.9	9.5
Switzerland	3,000	1.8	64.2	56.1	24.5	65.1	10.3
Belgium	2,281	1.4	50.4	55.1	15.7	69.6	14.6
Austria	1,376	0.8	51.5	56.3	27.5	58.5	14.0
Luxembourg	68	0.0	22.1	55.9	13.2	75.0	11.8
Total, Western Europe	13,326	8.1	68.0	53.8	20.8	68.3	10.9
Turkey	2,334	1.4	28.5	51.7	19.8	61.1	19.1
Italy	2,088	1.3	42.0	58.9	12.7	73.7	13.6
Spain	900	0.5	31.1	68.9	17.8	71.1	11.1
Greece	650	0.4	64.9	56.6	11.4	58.3	30.3
Portugal	64	0.0	32.8	54.7	18.8	65.6	15.6
Total, Southern Europe	6,036	3.7	37.6	57.3	16.1	66.7	17.2
Sweden	1,635	1.0	61.3	64.5	15.9	73.4	10.7
Denmark	1,313	0.8	51.5	66.2	10.8	68.2	21.0
Finland	410	0.2	52.6	73.1	17.9	76.9	5.1
Norway	380	0.2	72.6	60.8	7.0	84.4	8.6
Total, Scandinavia	3,738	2.3	57.8	65.7	13.5	72.8	13.6
Hungary	478	0.3	24.9	67.6	27.0	66.1	6.9
Poland	282	0.2	77.2	72.3	5.3	52.1	42.6
Czech Republic	113	0.1	41.1	68.1	13.3	67.3	19.5
Slovak Republic	41	0.0	41.5	65.9	26.8	58.5	14.6
Total, Eastern Europe	914	0.6	43.6	69.0	18.6	61.6	19.8
OECD – Total	164,140	100.0	66.2	55.4	14.8	69.0	16.2
Israeli-born in Israel				51.5	34.0	55.2	10.8

Sources: DIOC (2008). For the Israeli-born in Israel (bottom row): analysis of Israeli Labor Force Survey, 2001.

in Oceania is only about 6000, it is reasonable to assume that the total number of Israelis in Asia and Africa is below that. Finally, if the number of Israelis born in Mexico is any indication for the size of Israeli emigrants in a large Spanish-speaking country in the Americas, then the total of Israeli-born emigrants residing in South and Central America is no more than 5000. Taken together, the number of Israeli-born emigrants in all countries not listed in Table 1 is around 25,000.[7] Of course, the above estimate is neither accurate nor precise, but given all available information, it is an upper limit for the number of Israelis residing in the destinations not listed in Table 1. This being the case, it is safe to conclude that the number of Israeli-born emigrants aged 15 and over, in all destinations circa 2000, was below 190,000 (164,000 + 25,000 = 189,000).

The number of native-born and foreign-born Israelis abroad (all ages, all destinations)

We need to take one more step to reach an estimate for the stock of *all* Israeli-born in *all* destinations. Specifically, we need to estimate the number of Israeli-born children younger than 15 who emigrated (most likely with their parents). The estimation of Israeli-born emigrant children can be derived from US census data. The 2000 PUMS provides the age distribution of all Israeli-born emigrants. In 2000, 87.54 percent of Israelis born in the US were 15 years old and over and the rest were younger children. Applying this age distribution to all other countries, we reach a figure of about 187,000 for the countries listed in Table 1 (164,140 x 1.142), and 217,000 (190,000 x 1.142) for an upper end estimate of the population of Israeli-born emigrants in all destinations in 2000.

Estimating the stock of foreign-born Israeli emigrants is the most challenging task. Emigrants returning to their country of birth, as is the case with many European and American born Israelis, are not listed as immigrants in their countries of birth. In addition, many foreign-born Israelis spent only a short time in Israel, and it is not clear that they should be labeled as emigrants. In some cases – the emigration of Iranian refugees following the Iranian revolution is perhaps the best-known example – many emigrants used Israel as a stopover before continuing on their way to the UK or to the US. In another recent case, about 6000 Argentinean Jews immigrated to Israel in 2002, following the financial crisis in Argentina. A few years later, when the economic situation in Argentina had stabilized, many of them had returned to Argentina. Should such people be considered *Israeli* emigrants? The Israeli CBS includes them in the emigration statistics. I therefore follow below the CBS rule, and try to estimate the stock of all foreign-born Israeli citizens who reside outside Israel.

While there is no direct method for estimating the stock of foreign-born Israeli emigrants, it is possible to derive it as a residual category, given that we know the total number of Israelis abroad (544,000 in 2006 according to the CBS), as well as the total number of the Israeli-born (217,000 in 2000 according to the adjusted DIOC data). We also know from the CBS (2007, 2008) that the emigration balance of post-1989 foreign-born Jews (and their non-Jewish family members) between 1990 and 2006 is 117,000, and that the emigration balance of Israeli-born between 2001 and 2006 is about 27,000.[8] Adding 27,000 to the estimated 217,000 Israeli-born emigrants residing abroad in 2000 according to the DIOC and the US PUMS, we get the following breakdown for the estimated 544,000 Israelis residing abroad at the end of 2006: 244,000 are Israeli-born (Jews and Arabs), 117,000 are post-1989 immigrants (Jews and their non-Jewish family members), and the remaining 183,000 are, by definition, Jewish immigrants who arrived in Israel before 1990 and left sometime between 1948 and 2006. In short, of the 544,000 Israelis of all ages who resided abroad at the end of 2006, 244,000 were born in Israel and 300,000 were foreign-born Israelis.

Emigration rate from Israel in a comparative perspective

We have seen that Israeli emigrants, both native and foreign-born, in all ages and in all destinations, comprise 7.10 percent of the Israeli population in 2006. Unfortunately, there are no comparable data for the stock of emigrants abroad that includes the foreign-born (namely, foreign-born who immigrated to a country and then left it). What is available for 199 countries, including Israel, is the number of native-born residing in 26 OECD countries (which is not their country of birth) in 2000 (OECD, 2008: Table 9.1, pp. 177–180). The data are provided for persons 15 years and older, and in addition to the number of emigrants, it provides the emigration rate for each source country, as a percentage of the total population of the source country (15 years and over). Israel is listed with 166,200 emigrants[9] and an emigration rate of only 3.7 percent, lower than the rate for most countries, and below the median even if we consider OECD countries as the relevant benchmark.

The OECD report (2008), however, underestimates the emigration rate of the native-born because it is calculated as a proportion of the entire population of the source country rather than as a proportion of the native-born in each source country. For countries where the foreign-born comprise only a small fraction of the population, this bias is small. But in Israel, where 40 percent of the population 15 years and over is foreign-born, the bias is substantial.

Fortunately, it is possible to correct this bias not only for Israel, where the size of the native-born population 15 years and over is readily available from the Israeli Statistical Abstracts (Central Bureau of Statistics, 2001), but also for other OECD countries. The corrected figures, based on adjusting the rates in Table 9.1 in the OECD (2008) report according to the information available in Table 0.1 (OECD, 2008, p. 16) are presented in Figure 1. The adjusted emigration rate for native-born Israelis in 2000 is 5.85 percent,[10] slightly above the median for OECD countries (4.90%), but lower than 11 OECD countries, including Ireland, New Zealand, Switzerland Austria, Finland, Greece, and the UK. Evidently, the stock of Israeli-born residing outside Israel is not exceptionally high relative to developed countries in the West.

What about the emigration rates of foreign-born Israelis? Data for systematic comparisons are not readily available. The CBS estimates that about 10 percent of the immigrants arriving Israel since 1990, left it by the end of 2005 (Central Bureau of Statistics, 2007). This rate is far below the rate reported for the UK, where nearly four million immigrants arrived during 1997–2006, but 1.6 million (40%) foreign nationals left the country during that same period (*The Telegraph*, 2008). Emigration

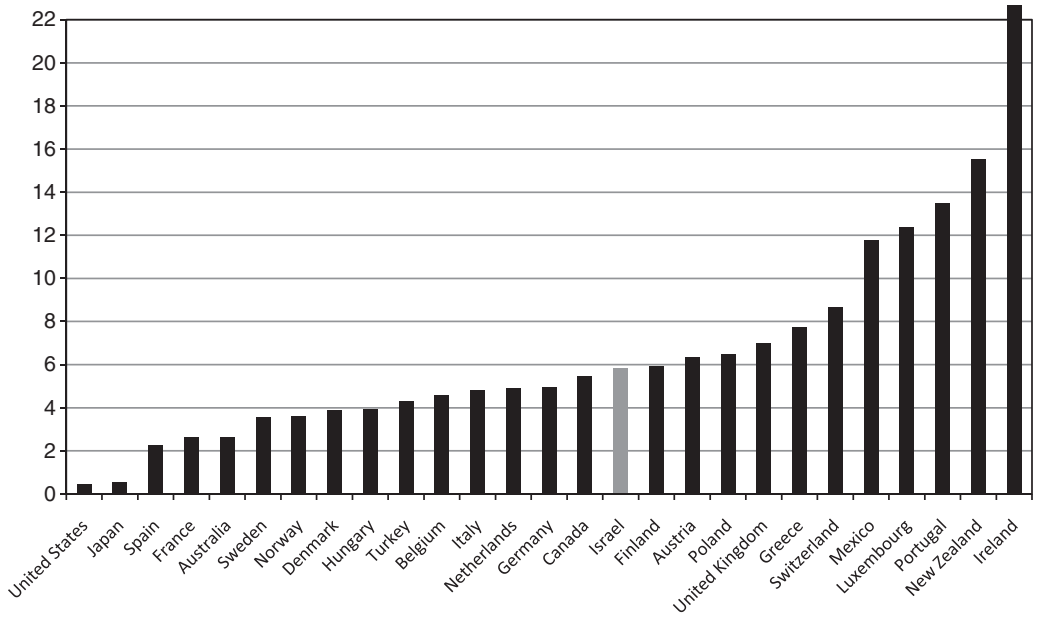

Figure 1. Percent native-born emigrants, 15 years and over, in OECD countries, 2000.
Sources: Tables 9.1 and 0.1 (OECD, 2008).
Emigration percentage from each country = [EMIG/(POP − FB + EMIG)] × 100.
EMIG = Number of emigrants 15 years and over, Table 9.1.
POP = Total population 15 years and over, Table 0.1.
FB = Foreign-born population 15 years and over, Table 0.1.
For Israel the population of the native born (POP-FB) was taken from the CBS. See note 10.

of the foreign-born from the US is estimated to be between about 25 percent to over 40 percent of arriving immigrants (Borjas and Bratsberg, 1996; Jasso and Rosenzweig, 1990; Shelach, 2002).

Taken together, these comparisons suggest that the emigration rates of Israelis are similar to the rates in most OECD countries. Indeed, considering Israel's population composition (high rates of foreign-born), security situation, and grim prospects for a lasting political settlement with the Palestinians, Israeli emigration rates are surprisingly low.

2. Selectivity of Israeli emigrants

Previous research reported that the skill selectivity of Israeli emigrants has been very positive. Gould and Moav (2007) used a special file of the 1995 Israeli census, containing an indication of whether the person is abroad in 2002, and reported that the emigration propensities of Israelis to all destinations were higher among the young, the highly educated, those with above average earnings (but not those in the top earnings quintile), and among members of high-status occupations. Ben David (forthcoming) focused on the emigration of scientists and professors and presented evidence that the number of Israeli professors in the US is the highest in the world relative to the sizes of Israel's population and senior faculty in Israel's universities. Using Israeli and US census data from the 1980s, 1990s, and 2000 earlier studies (Cohen, 1996; Cohen and Haberfeld, 2001, 2003) as well as more recent studies (Lev Ari, 2008; Rebhun and Lev Ari, forthcoming), showed that Israeli immigrants in the US were younger and of higher educational level than the Israeli population that they had left behind. Indeed, their educational level was higher than the levels of non-Hispanic white US natives, and their earnings surpassed that of demographically comparable natives (namely, natives of the same education, age and other productivity related characteristics) a few years after arriving in the US (Cohen, 1996). This implies that Israeli emigrants were positively selected from the Israeli population not only on their observed skills (i.e. education), but also on their unobserved skills. This might include motivation, willingness to take risks or some other dimension of 'ability', however defined, that cannot be measured properly and which is probably responsible for their extraordinary success in the US labor market. Unfortunately, there are no studies which estimate the selectivity and economic assimilation of Israelis in European countries or in Oceania. Likewise, no studies have attempted to estimate if the most recent emigrants are indeed more positively selected than their predecessors. The following pages will present relevant theories and analysis aimed at addressing these issues.

That Israeli immigrants were positively selected from their country of origin is consistent not only with previous empirical research, but also with the dominant theory of immigrant self-selection. The theory maintains that only those who believe they can 'make it' in the new country take the costly, risky step of starting over elsewhere (Chiswick, 1978). Not all economic immigrants, however, are positively selected. Immigrants' (labor market) skills depend, in part, on the returns to skills offered in both countries of origin and destination (Borjas, 1994; Chiswick, 2000). From countries of high income inequality, where skills are generously compensated, the selection of immigrants is negative: the unskilled are those seeking to improve their economic lot by migrating to a more egalitarian country, where they expect to be protected by a net of social services. In contrast, the selection of immigrants from relatively egalitarian countries, where skills are poorly compensated, is positive, as highly skilled workers seek to migrate to labor markets that will reward their skills.

Since earnings and returns on skills in Israel have been lower than in the US, one would expect that immigrants from Israel to high-income, high-inequality countries – such as the US and the other Anglo-Saxon countries – would be positively selected. Indeed, the intensity of positive

selectivity depends on the gaps in earnings levels and in returns on skills between the destination and origin countries. The greater the gaps in returns (destination to origin), the more intense is the positive selectivity.

Continental Europe, however, is very different from the US and the other Anglo-Saxon countries. Levels of earnings inequality (a proxy for returns to skills) in most European countries, in Scandinavia in particular, are appreciably lower than in the Anglo-Saxon countries (Kristal, 2010; OECD, 2004). We should therefore expect the selectivity of Israeli emigrants to be most positive in those countries where both the level of earnings and the returns on skills are the highest, namely, the Anglo-Saxon countries, and especially the US. The least positive selectivity should be observed in the Scandinavian countries where levels of earnings inequality are the lowest of all Europe. Other high-income countries in continental Europe should be somewhere in the middle.

Finally, there remains the question of dynamics. Has the brain drain from Israel become more severe over time? In other words, has the selectivity of the emigrants been more positive in recent years than in the past? Theoretically, the answer to this question should depend on trends in returns on skills in the source and destination countries. To the extent that returns on skills in the destination countries have increased more than in Israel, we should expect more positive selectivity of Israelis to these destinations. Conversely, selectivity should be less positive to countries where the returns on skills have decreased in recent years (or increased less than in Israel). Since 1980 earnings inequality increased at a faster rate in Israel than in most European countries, perhaps as much as in the Anglo-Saxon countries including the US (Gottschalk and Smeeding, 1997; Kristal and Cohen, 2007; Kristal et al., 2006; OECD, 2004, 2010). We should, therefore, not expect greater selectivity of Israeli immigrants to most European destinations, especially not to the Scandinavian countries. Improved selectivity of recent immigrant cohorts would be expected especially in the US, where returns to the most highly paid (the top 1% of income receivers) have increased more than in Israel (Kristal, 2010; Piketty and Saez, 2006).

Data and methods

The DIOC will be used to estimate the characteristics of recent Israeli-born emigrants to the 25 OECD countries. Ideally, the focus should be on Israeli-born emigrants, 25–54 years of age, who arrived in their destination countries during the five-year period prior to the survey year (circa 2000). Their educational and labor force characteristics represent the characteristics with which they came to their destination countries, before any meaningful assimilation had occurred. Thus, comparing the educational level of these groups of recent emigrants in various destinations, to their counterparts who stayed in Israel (based on my analysis of the 2001 Israeli labor force survey), will enable us to test the main hypothesis of this study: that selectivity of Israeli emigrants is more positive to high-inequality countries, where the returns to skills are higher.

While educational level is no doubt the best measured indicator for skill level, occupation is also suggestive of immigrants' skills (unfortunately there is no earnings information in the DIOC). I will, therefore, consider occupation in assessing the selectivity of Israeli emigrants. In the case of occupation the relevant benchmark is not the Israeli population (as is the case with educational level), but rather the native populations of the destination countries.

Unfortunately, because of the way the DIOC is structured, in some cases I will not be able to limit the analysis of education and occupation to recent immigrants; moreover, most analyses will include all immigrants aged 15 and over, rather than persons of prime working age (25–54). Finally, the aggregated data are included in different panels, thereby not enabling the presentation of all characteristics by duration and/or age groups. For example, while it is possible to construct a table

of educational level by duration, as well as a table of educational level by age, it is not possible to construct a three-way table of education/by-duration/by-age. Likewise the occupations of immigrants are available for employed persons by gender, but not by duration or age.

Results

Demographic characteristics. Before discussing the education and occupation of Israeli emigrants, Table 1 presents the distribution of all Israeli-born immigrants in the 25 countries by gender, age groups, and citizenship status. The bottom row of the table, presents the characteristics of the Israeli-born population in Israeli in the same ages (15+) in 2001. Like all immigrant groups, Israeli immigrants are selected on the basis of age and gender. The proportion of men among all immigrants (55.4%) is higher than among the Israeli population (51.5%), but it differs by destination. While in most countries the proportion of men is between 52% and 58%, it is higher in Scandinavian countries (65.7%) and Eastern Europe (69%). The high proportion of Israeli men in the Scandinavian countries may reflect marriage patterns of Israeli men with Scandinavian women who have spent time in Israel as volunteers and/or the migration of Arab Israeli men.

Age selectivity is also evident. Among immigrants, the proportion of persons 25–54 years old is 14 points higher than among the native-born population of Israel. Likewise, very young adults are less likely to emigrate. This, in large part, reflects compulsory military service in Israel that prevents Israeli Jews from emigrating until they are 21 or 22 years old. It also reflects the fact that emigrants appear to have fewer children than Israeli natives. Interestingly, the proportion of old persons (55+) is greater among immigrants than among Israeli natives. Since the table is not limited to recent immigrants, this does not mean that older Israelis emigrate more than young Israelis; rather, it reflects past emigration patterns.[11]

Information about citizenship status is available for most countries. Citizenship depends on duration in the destination, which is missing for many countries, but also on immigration and citizenship laws. In general, the higher the proportion of immigrants staying in a country over 10 years, the higher the citizenship rates. Thus, citizenship rates are highest in Canada and Australia, where the proportion of veteran immigrants is the highest, and lower in Belgium, Spain, and the Scandinavian countries, where a larger proportion of the Israeli immigrant population has arrived in the 10-year period before the survey year (duration data not shown). However, it is also possible that restrictive citizenship laws in these countries account for the difference as they make naturalization more difficult.

Education. Education is the main observed indicator for skills. The DIOC codes education according to the International Standard Classification of Education (ISCED). Table 2 presents three levels of education by country of destination among persons 25–54 years of age. Because PhD level is grouped with other academic degrees in some countries, the BA+ category also includes PhD, which is presented separately in column 3 for the countries providing this information. Since there are no appreciable differences between men and women, the data are presented for both gender groups combined.

Based on an analysis of the Israeli labor force survey for 2001, 23.5 percent of those Israeli-born and 25–54 years of age had at least a BA degree (bottom row of Table 2), and approximately the same proportion (24.3%) had an educational level that was lower than a full high-school education. In general, emigrants are of higher educational level than the Israeli-born population from which they were drawn. This is especially true with respect to the higher educational levels, where in all countries except for Austria and Finland (not shown in the table), Israeli emigrants have higher rates of university education than their counterparts who stayed in Israel. Of particular importance

for understanding the brain drain is the proportion of emigrants with a PhD degree. The rate of PhD holders in Israel (0.7%) is relatively high. But emigrants are much more likely to hold a PhD – 3.7 percent of emigrants hold this educational level – which implies that the propensity of those Israeli-born to emigrate is higher among PhD holders (or those planning to obtain their PhD degree in the country of destination).

As expected, the educational selectivity of Israelis differs across destinations. The most positive educational selectivity is observed in the Anglo-Saxon counties, especially the US and Canada, and the least positive in the Scandinavian countries and France. In Anglo-Saxon countries the proportion of university graduates is around 50 percent, while in Scandinavia and France the respective figures are 32 percent and 36 percent. Likewise, while only about 13 percent of emigrants in the Anglo-Saxon countries are high-school dropouts, the respective proportions are higher in Scandinavia (20.7%) and France (27.2%). Emigrants to Eastern European countries are highly educated, a finding which is consistent with rising earnings inequality in these countries in recent years (OECD, 2004). Finally, with the exception of low education emigrants in France (and Austria, data not shown), the educational levels of Israelis in other countries in Western and Southern Europe are somewhere between the high levels in the Anglo-Saxon countries and the low levels in Scandinavia.

Table 2. Education and occupation: Percent in selected educational level among emigrants, 25–54 years old, and percent of employed emigrants in Professional, Technical and Managerial occupations

	Education level			Occupation	
	Less than High School	BA+	PhD	% in PTM Occup.	Gap with Natives
	(1)	(2)	(3)	(4)	(5)
Country of residence					
United States	12.5	50.4	4.0	47.3	17.6
Canada	9.6	56.9	1.3	61.6	18.1
United Kingdom	21.5	55.7	–	63.9	20.4
Australia	14.8	45.4	1.1	60.2	16.3
Total, Anglo-Saxon	12.8	51.2	3.6	50.7	20.1
France	27.2	35.8	–	59.4	16.0
Switzerland	14.7	46.4	35.5	68.5	17.2
Belgium	23.5	40.9	2.0	–	–
Total, Western Europe	26.1	36.9	19.0	58.9	14.5
Turkey	19.5	41.5	2.7	40.5	30.7
Italy	11.6	40.9	12.3	72.2	36.4
Total, Southern Europe	16.5	45.3	8.6	61.7	37.3
Sweden	15.5	32.4	1.8	37.6	–10.1
Denmark	18.5	38.7	0.3	34.9	–11.9
Total, Scandinavia	20.7	32.2	1.1	35.4	–9.5
Total, Eastern Europe	9.0	48.7	10.4	74.1	38.9
OECD – Total	14.1	49.5	3.7	51.2	20.0
Israeli-born in Israel	24.3	23.5	0.7	34.1	–

Sources: DIOC (2008). For the Israeli-born in Israel (bottom row): analysis of Israeli Labor Force Survey, 2001.
Totals for each group includes all countries in the group (see Table 1 for all 25 countries by groups).
Data for PhDs missing for the UK and France. Data for occupations missing for Belgium and Norway.
Gap with native = % Israeli emigrants in PTM occupations – % native-born in PTM occupations.

It is possible that part of the emigrants' education was obtained in the destination country and not in Israel, in which case it may represent not only selectivity in the strict sense, but also educational assimilation in the destination country. Table 3, showing educational levels by duration, suggests that, for the most part, this is not the case. Of particular interest are emigrants who arrived in their destinations during the five-year period before the survey date, for whom we can assume that their schooling was obtained in Israel. Unfortunately, the data in Table 3 are reported for all persons aged 15 years and over. Therefore, it does not report the percentage of those with less than a high-school education, but only those with academic degrees.

Recall that one untested hypotheses in the literature is that the brain drain intensifies with time, so recent cohorts of Israeli emigrants are expected to have a higher educational level than earlier cohorts. By comparing columns 1 to 2, and 5 to 6, we can test the empirical status of this claim. The comparisons suggest that it is certainly true for the US, Canada (and also France, but over 20% of the cases in France are missing). Over half of recent emigrants (those arriving in the late 1990s) in the US and Canada are university graduates, compared to about 38 percent among those arriving in the early 1990s. Likewise, proportion of PhD holders is higher among the most recent immigrants in the US and Canada (4.3% and 2.0% respectively) than among emigrants of the early 1990s (3.17% and 0).

To be sure, the higher percentage of university graduates among the emigrant cohort of 1995–2000 may reflect not only improved selectivity, but also the growth of university graduates in Israel since the expansion of the higher education system in 1995. Indeed, the percentage of university graduates in Israel increased by six percentage points between 1990 and 2000 (data not shown).

Table 3. Percentage of emigrants, 15 years old, with academic degrees by duration

Academic degrees:	BA+				PhD			
Duration:	Up to 5 years	6 to 10 years	More than 10 years	All durations of stay	Up to 5 years	6 to 10 years	More than 10 years	All durations of stay
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Country of residence								
United States	50.0	38.2	45.2	45.1	4.25	3.17	3.97	3.92
Canada	52.6	37.8	49.2	48.4	1.98	0.00	1.56	1.42
Australia	41.5	37.5	36.4	37.0	–	–	–	–
Total, Anglo-Saxon	49.9	38.1	45.4	45.2	4.14	2.84	3.67	3.63
France	49.6	32.1	31.9	32.1	–	–	–	–
Belgium	40.9	38.2	30.9	34.2	1.63	2.07	1.25	1.45
Total, Western Europe	50.4	42.4	30.5	33.1	1.63	2.07	1.25	1.45
Italy (N = 2088)	33.7	29.8	37.9	35.2	6.27	3.95	10.02	10.39
Total, Southern Europe	42.3	38.4	40.9	38.9	9.01	9.38	7.79	9.18
Sweden	37.3	36.1	22.3	26.9	1.96	2.78	1.12	1.49
Denmark	33.5	38.0	31.9	33.0	–	–	–	–
Total, Scandinavia	35.8	37.2	28.5	30.6	1.96	2.78	1.12	1.49
OECD – Total (N=145,463)	49.4	38.3	44.1	43.8	3.81	2.75	3.33	3.32

Source: DIOC (2008).

Duration data are missing for Mexico, UK, Austria, Greece, Turkey, Portugal and Eastern Europe. For France, duration data are missing for 22% of the cases. Total number of cases is related to all durations of stay.

This six-point rise is only about half of the 12–15 points rise in the proportion of university graduates emigrating to the US and Canada in the late 1990s compared with the early 1990s. Hence at least half of the rise in the US and Canada is due to improved educational selectivity of the cohort leaving Israel during 1996–2000.

In sum, the educational selectivity of Israeli-born emigrants in most destinations has been positive, and has improved in the late 1990s in the destinations where the returns on skills are the highest, namely the Anglo-Saxon countries. By contrast, the selectivity to the Scandinavian countries where skills are poorly compensated, has not improved. The improved educational selectivity to the Anglo-Saxon countries suggests that the brain drain has indeed intensified in the late 1990s compared to the early 1990s.

Occupation. Occupation serves as a proxy for permanent income. As such, it is a measure of immigrants' labor market assimilation, which is affected, among other things, by selectivity on both observed and unobserved characteristics. Column 4 of Table 2 presents the proportion of Israeli emigrants employed in Professional, Technical, and Managerial (PTM) occupations. The occupational coding is uniform across all countries, with the exception of the US, where the coding is based on the US census's occupational codes. This is not a prohibitive problem, because the relevant comparisons are within countries of destinations. The proportion of Israeli immigrants in PTM occupations is higher than the proportion among natives, and the gap between immigrants and natives in most countries, presented in column 5 of Table 2, is substantial. In the Anglo-Saxon and Western European countries the gap is about 15–18 percentage points (there are only minor differences between men and women, not shown). In Southern and Eastern Europe the gaps are larger, 27 points and 39 points respectively. By contrast, in Scandinavia, Israelis are less likely to hold PTM occupations than natives.

These findings are consistent with the educational levels of Israelis in the various destinations. Israeli-born immigrants in most Anglo-Saxon and European countries are often college graduates, enabling them to enter PTM occupations. The lowest educational level of Israelis are to be found in the Scandinavian countries, which are the only countries where Israeli-born immigrants fail to converge or surpass the occupational standing of natives.

In short, Israeli immigrants to Anglo-Saxon countries, as well as to Eastern Europe and Southern Europe are the most successful (and selective), followed by immigrants to France, Switzerland, Belgium, and Austria. The least successful (and least selective) are those immigrating to the four Scandinavian countries.

Emigrants with a PhD or equivalent degree

Table 4 presents the number and available characteristics of very high skilled Israelis, those coded as level 6 in the ISCED, which designates persons holding a PhD or an equivalent degree. There are at least 5568 such persons in the DIOC, and this does not include the UK and France, which means that the total number is around 6000. The share of the US among very high skilled immigrants (75.8%) is about 10 percentage points higher than its share among all emigrants (65.6%, Table 1). Other countries attracting large numbers of Israeli PhDs are Canada (200), Switzerland (560) and Italy (217). While the figures for Italy and Canada are reasonable (Italy is a popular destination for medical students, and many of them probably stay there after obtaining their MD degrees and practice medicine), the number of PhDs in Switzerland is surprisingly high.

Over two-thirds (36%) of PhD holders are in the educational sector, which means that they are professors in colleges and universities. But this figure is largely due to the Anglo-Saxon countries,

Table 4. Number of emigrants 15 years and over with PhD, by destination, sector of employment, field of study and employment status

	Number	% of total PhDs	% in educ. sector	% degree in soc science, humanities & business	% degree in sciences, eng. & health	% not working	% over 65 years old
	(1)	(2)	(3)	(4)	(5)	(6)	(7)
Country of residence							
United States	4,220	75.8	41.0	–	–	14.7	7.0
Canada	200	3.6	33.3	46.7	53.3	16.3	20.0
Australia	55	1.0	44.0	34.8	65.2	7.9	0
Mexico	20	0.4	35.7	58.8	41.2	15.0	0.5
New Zealand	36	0.6	11.1	44.4	55.6	33.3	0
Total, Anglo-Saxon	4,534	81.4	40.5	45.3	54.7	14.0	7.0
Switzerland	560	10.1	15.0	–	–	23.0	7.0
Belgium	24	0.4	–	–	–	16.7	0
Total, Western Europe	584	10.5	15.0	–	–	17.3	6.3
Turkey	50	0.9	0.0	–	–	54.0	14.0
Italy	217	3.9	5.1	–	–	10.1	3.7
Spain	100	1.8	0.0	40.0	60.0	60.0	0
Total, Southern Europe	386	6.6	5.6	38.1	61.9	27.5	3.9
Sweden	25	0.4	0.0	14.3	85.7	33.3	0
Total, Scandinavia	32	0.6	11.5	18.6	81.4	19.4	0
Poland	24	0.4	37.5	–	–	0.0	0
Total, Eastern Europe	32	0.6	26.7	25.0	75.0	3.8	0
OECD – Total	5,568	100	36.2	41.0	59.0	16.8	7.1

Source: DIOC (2008).

where 40.5 percent of all PhD holders are employed in the educational sector. In Western Europe only 5–15% of Israeli-born PhDs are employed by educational institutions, while Eastern Europe is closer to the Anglo-Saxon pattern. About 60 percent of PhDs received their degrees in sciences, engineering, and health. The remaining 40 percent are graduates of the social sciences, business, and the humanities.

The figures regarding disciplines, however, are based on fewer than 500 Israelis, mainly because the US distribution on this variable is missing. For the US, the DIOC provides broad occupational distribution for 3616 employed PhDs, suggesting that 72.3 percent of them work in scientific occupations, broadly defined (30.7% in life, physical, and social science occupations; 26% in education; 7.3% in healthcare, 4.8% in computer, math, and science occupations; and 3.5% in engineering), and additional 13.6 percent are in various management occupations.

Not all PhD holders are employed. This is, in part, because 7 percent of them are over the age of 64. However, in total 16.8 percent are not working, which means that at least one in ten Israeli-born PhD emigrants, younger than 65 years old, is not working. This proportion varies by country. In the US, Canada, and Italy the respective figure is only about 7 percent, but in Western Europe it ranges from about 15 percent in Switzerland and Belgium, to 60 percent in Spain. Surely, these non-working, relatively young emigrants, are not as highly skilled as their degrees suggest, at least not with respect to their unobserved characteristics. Put differently, to the extent that employment ratio is an indicator for unobserved skills, we can conclude that the US attracts the best and the brightest Israeli-born PhDs, while Europe tends to get less skilled PhD graduates.

3. Discussion and conclusions

Some recent studies view emigration rates from Israel to be exceptionally high (Gould and Moav, 2007; Lustick, 2010).[12] The analyses presented in the first part of this article do not lend support to this view. The emigration rate of native-born Israelis – measured as the share of Israeli-born, 15 years and over, residing in other OECD countries in 2000 – is only slightly above the median rate of 26 OECD countries. Although Israel experienced a rise in emigration during the 1990s and in 2001–2002, emigration declined after 2002 with the improved economic and security situation. Much of the rise in emigration in the 1990s is due to the emigration of foreign-born Israelis, whose rate of emigration is lower than the emigration rates of the foreign-born in other migration countries as well as the UK. Indeed, the puzzle about Israeli emigration rates – both among Israeli-born and foreign-born – is why they are so low, given Israel's population composition and security situation.

Previous research in the 1980s (Paltiel, 1986) estimated that the US accounts for about 50–60% of Israeli emigrants. The analysis of the DIOC suggests that this estimate is valid for 2000 as well. Fully two-thirds of emigrants to the 25 OECD countries were in the US, which implies that 66 percent is the upper range for the proportion of Israeli-born emigrants in the US, while the lower range would be around 55 percent. The other major destinations for Israeli-born emigrants are the large Anglo-Saxon countries: Canada, the UK, and Australia. Together with the US, these countries account for 85 percent of emigrants to the 25 OECD countries, and if we adjust this figure for countries not included in the DIOC, the proportion is probably between 75 and 80 percent. Other than the Anglo-Saxon countries, France is the only major destination country for Israeli-born emigrants. These figures imply that for estimating migration stock and analyzing patterns of selectivity among Israeli emigrants, it is important to focus on the large Anglo-Saxon countries and France.

Although this study is not intended to explain why Israeli emigrants flock to the US and other Anglo-Saxon countries (and France), other factors, in addition to economic opportunities, appear to be particularly important. English (which skilled Israelis mastered at school) and social networks are probably two powerful factors attracting Israelis, including the highly skilled, to these five countries (US, Canada, UK, Australia and France), where there are large Jewish communities and relatively large communities of established Israeli emigrants.

The main hypothesis guiding this study expected more positive selectivity of immigrants to destinations that rewards skills more generously, that is, the US and other high inequality countries. The results with respect to differential selectivity lend support to the hypothesis: the most skilled Israelis are drawn to the labor markets of the Anglo-Saxon countries where the returns on their high skills are the greatest and the labor markets are relatively flexible. By contrast, the least skilled are choosing the relatively egalitarian Scandinavian countries as their new destination. Selectivity to other European countries is somewhere in the middle, but the emerging unregulated and unequal economies of Eastern Europe appear to attract very few, albeit highly skilled Israelis, thereby providing further support to the main hypothesis of this study. Finally, the relationships between selectivity and returns on skills are also demonstrated in relatively high correlations between a measure for inequality (the 90/10 ratio available in OECD, 2004) and the two measures for emigrants' skills. The Pearson correlation between inequality in the destination and emigrants' occupational success relative to natives in each country (.500) is in the expected direction and statistically significant. The correlation between the 90/10 ratio and the percentage of emigrants with a BA or higher degree (0.349) is also in the expected direction, but it is not statistically significant. Admittedly, the correlations are based on a small sample of countries, and cannot serve for much more than description. Yet, the general pattern of results supports the hypotheses advanced in this article: that skilled Israeli immigrants prefer countries where the labor markets are less equal and more flexible, and where, consequently, the returns on their high skills are higher.

Additional support for the hypothesis is evident from an analysis of nearly 5600 emigrants with a PhD degree or its equivalent residing in OECD countries (about 75% of them reside in the US). While only about 7 percent of those in the Anglo-Saxon countries do not work, the respective proportion in Europe is much higher, implying that the unobserved skills of many Israeli PhDs in Europe are not as high as their (observed) high degree. Put differently, the unobserved skills of highly educated Israeli emigrants are more positive in the US and Anglo-Saxon countries than in Europe.

Unfortunately, the cross-sectional DIOC does not enable rigorous analysis of changes in selectivity over time. The educational results suggest, however, a rise in the proportion of highly educated Israelis in the US, Canada and France in the late 1990s, compared to the earlier emigrant cohort of the early 1990s. This implies that the positive educational selectivity of Israelis have been enhanced during the 1990s and provides some support for the argument of the intensification of the brain drain from Israel (Gould and Moav, 2007). Whether or not this trend has continued into the 2000s – the period where the brain drain is said to have intensified the most – we do not know, as the DIOC data are based on 2000 data. This being the case, we must wait for more longitudinal research before a conclusion on the intensification of the Israeli brain drain in the 2000s can be reached.

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Notes

1. See Sald Institute (1989) for an annotated bibliography of nearly 100 such studies.
2. This figure for 1989 is derived from CBS estimate (Central Bureau of Statistics, 2007) stating that during 1990–2005 the emigration balance was 230,000 (emigrants minus returnees) and that the total number of emigrants in 2005 was 530,000. This is a lower figure than 335,000 reported by Hleihel and Ben Moshe for 1989 (2002, Table 1). I rely on the lower figure because it is more recent and more consistent with Cohen and Haberfeld's (1997) estimate for the number of Israelis in the US in 1990.
3. Hleihel and Ben Moshe (2002, Table 1) as well as other CBS publications (Central Bureau of Statistics, 2007, 2008) provide relatively narrow ranges for stock estimates, based on the range of estimated mortality among emigrants. In the interest of brevity, I used the midpoints of their estimates.
4. Emigration percentage = [emigrants/(Israelis in Israel + emigrants)] x 100. The total size of the Israelis in Israel (i.e. total population) in 1989, 1999, and 2006 was 4,560,000, 6,209,000 and 7,117,000, respectively.
5. This is due to coding of immigrants' country of birth in some OECD countries. In Germany, for example, Israelis are not identifiable in the 1 percent micro-census, as they are grouped together with other Middle Eastern immigrants.
6. The number of the Israeli-born emigrants in Germany is most likely smaller than their number in France, with its large community of North African Jews. Belgium, too, is a popular destination for orthodox Israeli Jews. But the Netherlands probably draws a larger number of young and secular Israeli-born emigrants.
7. 25,000 = 9000 (Germany and Netherlands) + 5000 (FSU) + 6000 (Asia and Africa) + 5000 (South and Central America).
8. During 2001–2006 the emigration balance of 'veteran' Israelis (native-born and pre-1990 immigrants) was about 39,000 (Central Bureau of Statistics, 2007, 2008). The share of Israeli-born among them is not known. Assuming that the share was the same as it was in 2007, 69.8 percent (Central Bureau of Statistics, 2009), then the emigration balance of the Israeli-born during 2001–2006 is about 27,000 (39,000 x 0.698).

9. It is not clear how the OECD reached this figure (166,200) while I detected only 164,140 Israeli emigrants. To be consistent with data provided in the OECD report (2008) for other countries, Figures 1 uses the higher number in the calculation of the emigration rate of Israeli-born.
10. The population of Israeli-born, 15 years and over, in 2000 was 2,672,600 (Central Bureau of Statistics, 2001, Tables 2.10 and 2.21). Hence Israel's emigration rate is: 166.2 / [2672.6 + 166.2] × 100 = 5.85%.
11. Analysis of the 2000 US census (not shown) reveals that Arabs are overrepresented among Israeli-born over 55 years old in the US. It is likely that this reflects past emigration patterns of Arab Israelis.
12. In most cases inappropriate data are used to support this view. Gould and Moav (2007), to take one recent example, used US census data from 2000 to compare the emigration rates of Israeli-born to the rate of other nationals, implicitly assuming that the share of the US in the expatriate population of most European countries is as high as the share among Israeli emigrants. Their findings – they reported that Israeli emigration rate is three times as high as the average of their benchmark list of the top 28 exporters of US immigrants (yet their list fails to include Mexico, Cuba, Canada, and the Philippines, all among the top 10 sending countries to the US) – were used by them as well as by others (Lustick, 2010) as evidence for the exceptionally high emigration rate from Israel.

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