

**Self-employment in Jewish communities:
a comparative examination across time and places**

by

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Modern-time self-employment has been intensely studied in recent years by social scientists of various disciplinary origins and practices (primarily by sociologists, economists, economic historians, and geographers). Their scholarly endeavors have covered a wide historical and spatial terrain, encompassing the broad spectrum of free non-wage labor and its underlying factors.¹

On one end of the spectrum are the self-employed entrepreneurs of the managerial and professional type, who are endowed with sufficient educational capital, experience, and financial resources (which they either possess or have easy access to) to facilitate their entrepreneurial activity. On the other end, we find individuals with traditional skills or without any specific skills at all, who have been led to self-employment not by a particular entrepreneurial zeal but by the limited opportunities, if any, offered to them in the market for wage-labor. These limited opportunities may be related not only to the labor force attributes of the would be suppliers of wage-labor, but may reflect in addition structural characteristics, for instance small sized firms in low income economies constraining the demand for wage-labor and driving a large segment of the economically active population into self-employment.

Between these two ends, a variety of “mixed types” with different endowments of human and social capital and with various “tastes” for entrepreneurship and risk taking could be found. The endowment and taste factors are in many instances complementary. But in various other cases strong entrepreneurial tendencies could compensate for the lack of specific skills and/or sufficient education, inducing the concerned individuals to prefer self-employment, particularly in such industries as construction, real-estate and personal services, to lesser opportunities in the wage-labor market.

In view of the heterogeneous nature of self-employment, it is not surprising that the empirical literature has generated varied and mixed findings on its determinants. Thus, besides the largely undisputed results of cross-country analyses, pointing to a negative association between economic development (and income) and self-employment, inconclusive and even contradictory

¹ The literature on entrepreneurship and self-employment is vast and any attempt to short list it would be rather arbitrary. I will therefore refer here only to three items: One is the comprehensive study by Simon Parker (2004) *The economics of self-employment and entrepreneurship*, which contains an exhaustive bibliography of the social science literature on the topic. The other items are two edited volumes covering a wide range of issues concerning entrepreneurship and non-wage labor in various contexts: *Entrepreneurship: The Social Science View* edited by Richard Swedberg (2000) and *The Oxford Handbook of Entrepreneurship* edited by Casson et. al (2006).

findings have been produced on the effects of specific factors (for example education) on the tendency to become self-employed.²

Within the broad spectrum of self-employment, special attention has been paid in the scholarly literature to its manifestations and dynamics in racial and ethnic minorities, focusing particularly on communities of immigrants and their descendants in (mostly) Western countries. In dealing with the expressions of self-employment within these groups, a number of factors that could be associated with their specific characteristics and with the constraints and opportunities they were facing, have been considered.

In the host countries' labor markets, the immigrants would typically be identified as a disadvantaged group, often lacking sufficient language proficiencies and other environment-specific traits of human and social capital. Under such conditions, even the positively self-selected immigrants, let alone the negatively-selected ones, may have only limited and poorly paid options for wage-employment. Possible discrimination, statistical or otherwise, may aggravate the situation, making entry into self-employment a rational choice for the new-comers to make.

The self-employment route may have proven to be particularly attractive for entrepreneurial members of ethnically cohesive communities, making use of ethno-specific social capital and networks in securing needed financial resources and supply of hired labor, and in exploiting the opportunities to cater to the demand for ethnic-goods. In parts of the literature, ethnic-specific cultural traditions and tastes, inducing, other things equal, preferences for self-employment have also been suggested as a possible contributor to the ethnic self-employment nexus.

As for the intergenerational aspects of employment in immigration-originated ethnic groups, questions might be asked, if and how has self-employment changed from the first to subsequent generations. Specifically, have the small family businesses of newcomers locked-in their offspring? Or, have they served as a springboard for upward socio-economic mobility of the immigrants' descendants by allowing for substantial investments in their education and for their accumulation of capital and useful market experience.³

² Studies which report on the variety of empirical findings on self-employment include, among others, the following: Blanchflower and Oswald (1998), Blanchflower (2000, 2004), Blanchflower, Oswald and Stutzer (2001), Arum and Müller (2004), Parker (2004), Pietrobelli, Rabellotti and Aquilina (2004), Woodruff (2007).

³ Some ideas of the various issues, approaches and empirical findings related to ethnic and immigrant self-employment can be obtained from the following studies: Borjas (1986), Waldinger, Aldrich, and Ward (1990), Bates (1997), Yoon (1997), Light and Gold (2000), Minns and Rizov (2005), Robinson and Valeny (2005), Nakhaie, Lin, and Guan (2009).

Among the ethnic populations characterized by high rates of self-employment, the Jews have occupied a noticeable place, particularly since their massive movement from Eastern Europe westward in the late 19th and early 20th Centuries. Moreover, their different economic and labor histories in the Diaspora, British-ruled Palestine and Israel, could shed light on many of the issues concerning self-employment and its dynamics. This makes the diverse Jewish experience across time and places a useful panorama for comparatively addressing the issues listed above and other related questions.

This paper intends to do just that. It documents and analyses the extent, composition, and patterns of Jewish non-wage labor, utilizing estimates (both existing and new) of self-employment rates in Diaspora Jewry and among the Jewish inhabitants of Mandatory Palestine and Israel. To put the Jewish numbers in appropriate perspective they are subjected in the course of the paper to comparative investigations, drawing on a variety of local and international data.⁴ The first section of the paper deals with Diaspora Jewry, the second concentrates on the Jewish community in post WWI Palestine and (since the mid 20th Century) in Israel, and the third section provides a concluding discussion.

Self-employment in Diaspora Jewry in comparative perspective

For presentation and analysis it is useful to divide this section into two parts. In the first part, Jewish self-employment in the Non-US Diasporas, for which only a few and scattered data are available, is dealt with. In the second part, the record of non-wage labor in the US – the largest and relatively data-abundant Jewish Diaspora – is examined.

The Non-US Diasporas. Thanks to the self-employment figures compiled by Jacob Lestchinsky, the renowned demographer of the Jewish people, and to Simon Kuznets (1960) who used them among other sources in his famous essay on the "Economic Structure and Life of the Jews," we are able to present in Table 1 a few comparative estimates of the industrial composition and employment status of the Jews in their five main European countries of residence in the interwar years.⁵

[Table 1]

⁴ Unless otherwise stated, all the self-employment rates reported in the paper are percentages of all the employed persons in the relevant categories. Due to rounding not all the percentage distributions presented in the tables below sum up to 100.

⁵ Since the Soviet New Economic Policy (NEP), allowing for a private sector to operate within a market economy, was still in place in 1926, the Soviet Union is also included in Tables 1 and 2.

The numbers in the table show, not surprisingly, that while agriculture had played a relatively minor role in the industrial make-up of the Jewish labor force in all five countries compared to Non-Jews, the concentration of the Jews in trade and finance was highly noticeable, both absolutely and relatively, and so was their extent of non-agricultural self-employment. It could thus be inferred that a substantial number of the self-employed Jews were engaged in the trade and finance industry, unlike the Non-Jewish self-employed for whom agriculture was a major industry of concentration at the time.

The figures of Table 1 become all the more significant since almost half of the entire Diaspora Jewry lived in the five recorded countries on the eve of WWII (see Table 2). Moreover, in addition to their substantial weight in the world's Jewish population prior to the holocaust, these countries were united also by a common historical attribute of being the habitat (albeit not necessarily a very hospitable one) of their Jewish populations at least since the late middle ages. It therefore follows that the profiles recorded in Table 1, besides being representative of Diaspora Jewry at large, do specifically represent the employment make-up of Jews who constituted an "old" non-immigrating ethnic minority. Furthermore, even if we assumed that most of the Jews in Asian and African countries and a good part of West European Jewry were also "old" minorities in 1939 (unlike the US Jews to be dealt with below) and should be included in the overall non-migratory Jewish population, the Jews of the five East European countries would still account for no less than three quarters of the world population of "old" Jewish communities (Table 2).

[Table 2]

The picture of substantial Jewish self-employment in comparative terms remained unchanged in the post WWII period as well, as demonstrated in Table 3.⁶ Although the table compares the Jews only with the general population (or with the white population in the case of South Africa), I am prepared to conjecture that the Jewish self-employment level was also higher than that of other religious or ethnic groups in the considered countries. Such a superiority has been demonstrated for the UK in 2004 ("UK national Statistics on line, 2006) and for Canada in 2002 (see Nakhaie, Lin, and Guan, 2009).

⁶ It should be noted that for the UK, scattered references in the literature point to distinctly high rates of self-employment among Jews in the second half of the 20th Century, besides the rates quoted in Table 3 for 2004. See Lipman (1960) and the studies he cites. Likewise, for Canadian Jews, relatively high self-employment rates have been found by Minns and Rizov (2005) also for the early 20th Century. They report on the basis of a 5% sample of the 1901 Census of Canada that over 50% of the Jews in urban Canada were self-employed compared to 28% and 32% among white the non-whiteh respectively.

The numbers reported in Table 3, few as they may be, are quite representative. Note that in 1970 the largest Jewish Diaspora communities outside the US (and excluding the Soviet Union which was hardly relevant for considerations of self-employment after the period of the NEP), were found in the five countries recorded in Table 3 (See Schmelz and DellaPergola, 2007, Table 6). The same holds true for 2005 except for one change; the replacement of South Africa by Russia in the group of the five largest Non-US Diaspora Jewish communities (see Table 4).

[Table 3]

[Table 4]

It should be noted, though, that unlike the pre WWII "old" Jewish communities of Table 1, those of the five countries recorded in Table 3 are relatively "new." They were by and large composed of second and third generations of Jewish immigrants who reached the UK, Canada, Argentina and South Africa during the years of the pre WWI mass international migration. These 4 countries received about 15% of the total flow – 2.4 million – of the massive Jewish migration of 1881-1914, (Della Pergola, 2007, Table 1). In France, the dynamics was somewhat different with a substantial number of the Jews having been recent emigrants from North Africa who left their home countries in the 1950s and 1960s following the decolonization of the French Maghreb.⁷

While the overall rates provide us with an idea of the extent of Jewish self-employment in the post WWII Diasporas, an appreciation of the labor-force attributes of the self-employed would require information on their socio-economic profiles, which unfortunately is not available. What we do have are only scattered estimates of educational attainment and occupational structure pertaining to the entire Jewish labor force in Canada, Argentina, South Africa, and France (for occupations only); these are reported in Tables 5 and 6.

[Table 5]

[Table 6]

The data in Table 5 point to a Jewish advantage in educational attainment for both men and women in all three countries, and those of Table 6 show a relative concentration of the Jewish labor force, men and women alike, in three occupational categories: professions (including teaching), managerial and sales. On the basis of these figures it seems reasonable to conjecture that a significant proportion of the self-employed Jews in the Non-US Diaspora may have been engaged in education-intensive occupations.

⁷ It follows that the self employment rates reported for the French Jews represent the employment status of a good number of Eastern (Asian and African) Jews which is revealed to be similar to that of their Western brethren.

The age breakdown of the Argentine figures for 1960 in Tables 3, 5 and 6 allows for additional insights on the inter-generational dynamics of Jewish self-employment, education and occupational distribution. It is seen that self-employment grew substantially with age, and that the level of schooling was inversely related to age and so was the proportion of professionals in the occupational distributions, with the share of sales rising with age. This suggests that self-employment may have been positively associated with experience and with personal and financial build-up,⁸ and that the more traditional pursuits of self-employment such as sales may have been on the decline, and the more advanced education-intensive ones on the rise, with duration in the country (approximated by age).

To summarize, the presented data indicate that high rates of self-employment have been a persistent attribute of Jewish employment status in the Non-US Diasporas of the 20th Century, characterizing both "old" and "new" Jewish communities, with possible shifts over time from traditional toward more skill and education intensive occupations. It remains to examine now whether the same picture holds also for the US – the major Jewish Diaspora of modern times.

The US. About 85% of the massive International Jewish migration between the early 1880s and WWI had been destined for the US (Della Pergola, 2007, Table 1). And since the late 1930s the Jews of the US have constituted the largest Jewish community of any single country, with their dominant place in world Jewry growing much stronger after the Holocaust. In 1970 the US Jewish population of 5.4 million (2.6 % of the entire US population) made for 53.7% of all Diaspora Jewry, and for 70% of the Diaspora Jews outside the Soviet block countries. After the massive exodus of Jews from the Former Soviet Union in the 1990s, mostly to Israel, the share of the 5.3 million American Jews in 2005 (1.8% of the entire US population) constituted no less than 72.5% of overall Diaspora Jewry (see Tables 2 and 4, above).

The centrality of American Jewry has motivated a substantial body of research, among others, by social scientists that produced useful data and analyses on its multifaceted characteristics. Particularly valuable for our purposes are the studies conducted in the last three decades by Barry Chiswick (1983, 1985, 1988a, 1992, 1999, 2007), which contain comparative findings and analyses of the occupational structure, employment status and educational attainment of American Jews (mostly, though, limited to men) over the entire 20th Century. The following

⁸ The very high self-employment rates within the 65+ age group may reflect in addition some lock-in effects of the immigrant generation's resort to non-wage labor, as well as incentives by retirees to become self-employed.

account of the overall self employment patterns of American Jewry and their correlates draws heavily on these findings.

A summary picture of self-employment in the US is presented in Table 7. It reproduces the rates estimated by Chiswick (1999, 2007) for Jews and white Non-Jews between 1910 and 2000, with a foreign and native born breakdown for the first half of the 20th Century to account for the pre WWI mass immigration. In addition to Chiswick's data, the table also presents agricultural and non-agricultural self-employment rates for the entire American adult population in the considered years.

[Table 7]

Examining the numbers in Table 7, it is seen that self-employment among Jews was persistently higher than among Non-Jews, and it remained so (for both men and women) even during its substantial decline in the later part of the period. Note though, that in the category of foreign born men the Jewish self-employment superiority holds for all the reported years (1910-1960), whereas in the native born category it starts to show only in the second half of the 20th Century. However, given the minuscule share of agriculture in Jewish employment (not exceeding 0.7% in any single year) on the one hand, and the relatively high rates of agricultural self-employment in the entire population on the other hand, it would seem more appropriate to compare the self-employment rates of the native born Jews with those of non-agricultural self-employment overall. Such a comparison reveals that self-employment among the native born (second generation of immigrants) Jewish men was higher than non-agricultural self-employment in all the recorded years (1920-1960) except for 1910.

Another noticeable observation relates to the differences in the extent of self-employment between the foreign and the native born. Among Non-Jewish white men, self employment of the native born exceeded that of the foreign born, albeit at a declining pace, since 1920 up to full convergence in 1960. Among the Jews, however, it was the group of the foreign born that exhibited higher rates of self-employment compared to the immigrants' second generation native born over the first half of the 20th Century.

The higher self-employment rate of the native born in the Non-Jewish population may reflect, primarily, the relatively large share of farming (where most of Non-Jewish self-employment was concentrated) among the native born that was more than twice as large as among the foreign born in most years (*Historical Statistics of the United States*, 2006). Apart from that, the self-employment difference seems to have been consistent also with some of the literature's

findings, positively associating the extent of self employment with the accumulation of experience and capital as well as with wide-spread business connections (see Parker, 2004). The convergence of self-employment between the two Non-Jewish groups may be explained by the continuously declining proportion of agricultural employment on the one hand, and by the increasing duration of stay in the US of the foreign born since the end of the massive immigration on the eve of WWI, on the other hand.

Concerning the Jews, the opposite picture may suggest that for a substantial number of the immigrating generations, self-employment may have been the alternative of choice given the limited opportunities that they were facing in the American labor market (due partly to their lack of relevant qualifications and partly to intended or statistical discrimination), and given their own attributes of self-imported skills and intra-ethnic connections. The lower level of self-employment in the subsequent generations may have reflected the widening range of available opportunities in the wage labor market, thanks not the least to their adaptation to the American scene, particularly in so far as the command of English, familiarity with the general market, and high levels of investment in education were concerned.⁹ This conjecture may get some support from the different patterns of occupations of the foreign born vs. the second generation native born Jewish men (self-employed and employees alike) during the first half of the 20th Century. To illustrate this point, the occupational employment shares of skilled (blue-collar) labor and of the professions, which were derived from Chiswick (1999), are exhibited in Figure 1 for the two generational groups.

[Figure 1]

It is seen that the proportion of skilled labor which was rather substantial among the foreign born became much smaller in the second generations, while the opposite is true for the professions, indicating an upward shift of occupations from the immigrants to their offspring.¹⁰

Adding to the second generation of native born Jewish men in 1910-1940 all the Jewish employed men in the second half of the century who were mostly native born, an approximation of the occupational dynamics among non-immigrating Jewish men can be generated for the entire

⁹ On the Jewish intergenerational dynamics of overcoming the market barriers and moving ahead socially and economically see also Goldstein and Goldscheider (1968). Note, however, that Goldcheider's micro studies of Rhode Island and Boston have found a stronger intergenerational persistence of self-employment among Jews than among Non-Jews, see Goldscheider and Kobrin (1980) and Goldscheider (1986).

¹⁰ Interestingly, though, Chiswick's estimates show that low as the shares of the professions among the foreign born Jewish men may have been between 1910 and 1940, they were still higher than the analogous shares among the foreign born Non-Jewish white men. The relevant shares were in 1910, 1920, and 1940, 3.6%, 4.1%, and 6.0%, respectively for Jews, and 2.6%, 2.6% and 3.9% for Non-Jews (Chiswick, 1999, Table 2).

20th Century. This is shown in Figure 2 for skilled labor, and for the professions and managerial occupations.

[Figure 2]

The revealed patterns demonstrate a secular decline in the proportion of skilled labor and a sharp rise in the share of the professions in Jewish employment throughout, with a rise in managerial occupations up to the mid century and a substantial downturn thereafter. Note that the share of the professions in employment rose continuously among Non-Jewish white men as well, but the gulf between it and the much higher Jewish equivalent widened constantly over the century (see Figure 3). Closely related to this observation is the persistent Jewish advantage in higher education (Figure 4).

[Figure 3]

[Figure 4]

As Chiswick (1999) rightly pointed out, the decline of Jewish self-employment in the second half of the 20th Century, which remained, nevertheless, twice as high as among Non-Jews, had largely to do with the patterns shown in Figure 3. Particularly noticeable is the shift out of business ownership and management (note that self-employment accounted in 1957 for 69% and 53% of the employment of Jewish and all US men in this category, respectively) into the professions, in which 37% of the Jewish employed men were self-employed in 1957 versus 15% only of the entire US male population (Goldstein, 1969, Table 6).

In the discussion so far I have viewed US Jewry as a single homogeneous whole, distinguishing only between the foreign and the native born. There is, however, one distinct group of American Jews – the Israel-originated immigrants and their descendants of about 200,000 people in 1990, and possibly 250,000 in the early 2000s¹¹ – that merits separate attention. Two characteristics of the Israeli Jews in the US single them out. One is their being a clearly self-identified and self-conscious ethno-immigrant community, building up in the US during the second half of the 20th Century and distancing themselves somewhat from the Non-Israeli American Jews, most of whom were already native born. The second characteristic, distinguishing them from the rest of American

¹¹ For the estimates of the number of Israeli emigrants in the US in 1990 see Gold and Phillips (1996) and Cohen and Haberfeld (1997) and in the early 2000s, Rebhun (2009).

Jewry which may be regarded as a Stateless Diaspora (to use the terminology suggested by Gabriel Sheffer, 2003), is the perceived nature of their sending country. Israel has been regarded by its Jewish émigré's not just as the "old country" but as a national habitat, providing them with their collective identity in the US and in other receiving countries, to which many of them expressed an intention to return (Gold, 2007). In this respect the Diaspora communities of the Israeli émigré's are comparable to other State-linked ancestry groups of American immigrants who are identified by their countries of origin (Sheffer, 2003).

Considering the employment status of the Israelis, the 5% Public Use Micro-data Sample (PUMS) of the 1990 US Census reveals that with a self-employment rate of 22%, they ranked second only to the Koreans (24.3%) in the extent of self-employment among the 95 enumerated ancestry American groups (Yoon, 1997, Table 1.4). Although the Census figures do not separate between Jews and Non-Jews (mostly Arabs) within the group of Israeli emigrants, the sociologist Steven Gold in his comprehensive study of the Israeli Diaspora (Gold 2002) cites a number of independently conducted local studies which suggest that the rates of self-employment among Israeli Jews in America may have been even higher, ranging from 20% to 77%.¹²

Moreover, the existing data indicate that the rate of self-employment among Israel-originated Americans was distinctly high, not only in comparison with most other ancestry groups, but with the US Jewish community, as well. Based on data generated by Gold and Phillips (1996), Table 8 reports percentages of self-employment, college graduates and occupations by sex among Israeli immigrants in New York and Los Angeles (where at least half of the American Israelis are concentrated) and among all American Jews in 1990. The rates presented for the Israeli-Americans were derived from two sources. One is the PUMS, in which Israelis, Jews and Non-Jews, living in New York and Los Angeles, including those who were born outside Israel, were enumerated. The other source is the New York Jewish population study (NYJPS) of 1991 which included only Israel-born Jews.

[Table 8]

The numbers in the table show that self-employment was more prevalent among Israeli immigrants, under either definition, than within American Jewry at large, thereby resembling the above findings on the higher self-employment level among foreign born than among native born

¹² Likewise, drawing on the analyses of Israelis in Australia, Canada, France, England and South Africa (numbering at least 70,000 people in the early 1990s), Gold infers that high rates of self-employment have been a common characteristic of all Israeli Diasporas and not confined to the US only (Gold, 2002, Chapter 3). For Australia see also Collins (2003).

Jews in America . But besides this uniform picture, the table reveals some appreciable differences between the PUMS and the NYJPS samples. For both men and women the proportions of college graduates and of employed adults holding professional occupations were much higher, and of the occupied in the sales category much lower in the PUMS than in the NYJPS. These differences may be closely related to the larger investment in education and professional training of the Israel born Jews compared to the more heterogeneous group recorded in the PUMS (Gold and Phillips, 1996). They may also point to the dual nature of self-employment among Israelis in America.

For the less educated, self-employment may have served as a gainful alternative to the wage labor market in which they faced relatively limited opportunities. The large share of sales in Los Angeles and New York reported in the PUMS, relative to the shares derived from the NYJPS and to those of all American Jews, may reflect just that. Another relevant observation is the high proportion of crafts (25%) in the occupational distribution of Israelis in Los Angeles, compared to 11% in New York. This difference may be partly due to the high concentration in the construction industry mostly by self employed Israelis in the Los Angeles area (Gold and Phillips, 1996).

On the other hand, for the highly trained and the well endowed educationally, the opportunities for engagement in professional pursuits – self-employment included – may have been substantial as the New York data of the NYJPS suggest. Note in particular the exceptionally high proportion of Israeli women in the professions, largely reflecting their substantial number as teachers in the Jewish/Hebrew schooling systems of New York.

The ethno-migration literature typically emphasizes the reliance on co-ethnic social capital and networks in relation to small businesses which serve the ethnic consumer market and/or utilize ethnic resources for the provision of information, financial means and labor supply, and for overcoming language and other host country-specific market barriers. A good parts of the existing research confirms these behavioral patterns in the case of the Israeli-American communities and suggests that all kinds of economic pursuits by the Israelis in America, including those of individual professionals, have been characterized by co-ethnic cooperation (Gold, 2002, Chapter 3).

The economic attributes of Israeli Americans were not left unnoticed by students of entrepreneurship. A vivid example is a recent paper by James Foreman-Peck and Peng Zhou (2009) in which self-employment among US immigrant groups were comparatively analyzed in

two points in time (1910 and 2000) in an attempt to determine the extent and persistence of their entrepreneurial culture and its sending countries' roots. As for the Jewish immigrating community, they use for 1910 the entrepreneurial ratio (measured by the share of employers in total employment) of the immigrants from the Russian Empire, and for 2000, the entrepreneurial ratio of the Israel-originated Americans serves them as a proxy for all Jewish immigrants. The high proportion of employers among the Israeli immigrants made Foreman-Peck and Zhou conclude that the Jews (like the immigrants from Greece, Turkey and Italy) were highly entrepreneurial by the end of the 20th Century, a quality they believe to be consistent with cultural persistence and should be traced to the legacy of entrepreneurial propensities as experienced in their county of origin.

These suggestions lead naturally to the next and last phase of our comparative account of Jewish self-employment which examines its extent and patterns in Mandatory Palestine and Israel over the 20th Century. In highlighting the differences between self-employment in Israel and the Diaspora, this examination should enable us to determine, among other issues, whether the Israeli story supports the conjecture that the high propensity for entrepreneurship among Israeli émigrés has been an "imported" cultural trait from their sending habitat.

Jewish self-employment in British-ruled Palestine and Israel: a comparative view

The Jewish immigrant community was rapidly building up in Palestine under the British Mandate. It grew from about 60,000 people in the late 1910s to more than 600,000 by the end of the Mandate in 1948, with the Arab population growing over the same period from 650,000 to 1.3 million. The Jewish population of Israel continued the fast expansion, reaching 5.7 million people by the end of 2009. Note that 30% of today's Israeli Jews were born abroad, and the fathers of another 33% were also foreign born. Israel's Arab population, which shrank to around 150,000 people following the, largely involuntary, exodus during the 1948 war and its aftermath, reached by the end of 2009 an appreciable size of 1.5 million (Bachi, 1977, *Statistical Abstract of Israel*, 2009).

The Israeli Central Bureau of Statistics (CBS) publishes regularly data on the employment status of the country's employed persons by various cross classifications which enable the derivation of annual self-employment rates by population groups and sex, among

other classifications, from 1955 onwards.¹³ In deriving self-employment figures from the CBS publications, I followed the OECD definition, according to which "self-employed persons include employers, own account workers, members of producers' co-operatives, and unpaid family workers" (*OECD Factbook*, 2009, p. 144).

The Mandate period (1920-1947) lacks, however, similar direct data, and the number of self-employed Jews had to be generated by subtracting contemporary estimates of the number of Jewish wage earners, prepared by the General Federation of Jewish Labor in Eretz-Israel – the *Histadrut* (see *Sikumim*, 1938, 1939 and *Statistical Handbook of Jewish Palestine*, 1947, p. 290), from series of total Jewish employment which we estimated elsewhere (Beenstock, Metzger and Ziv, 1995, Table A2). Since the estimated number of Jewish wage earners included also Kibbutz members, the constructed self-employment series for the Mandate years is consistent with the above OECD definition.

The estimated numbers for Mandatory Palestine are combined with the CBS-derived data for Israel in Figure 5, which presents the rates of self-employed Jews for most of the years between 1923 and 2005 and of Israel's Non-Jews (who are mainly Arabs), since 1955. In inspecting the patterns shown in the figure, two features stand clearly out. One is the relatively large extent of self-employment (more than 50% of all employed persons) among the Jews in the "long" first decade of the Mandate, and the other is its declining trend throughout the entire period.¹⁴ The rate of Jewish self-employment declined by 1945 to about 35% (a lower figure than the rates found for Italy in the early 1920s – 42.5% - and for France during the interwar years – around 40%, see Flora, Kraus, and Pfenning, 1987) with a further decline from 27% in 1955 to about 11-12% by the 2000s. Even the massive inflows of immigrants of the last two decades – 965,000 from the Former Soviet Union, and 62,000 from Ethiopia – did not alter this dynamics. It should be noticed that the secular downturn in self-employment was common to Jewish men and women, at least since 1955 (see Figure 6), with self-employment among Non-Jews exhibiting an analogous pattern during the same period.¹⁵

[Figure 5]

¹³ All the numbers related to Israel that are presented in the text and tables and which serve as a basis for the charts in the figures were derived, unless otherwise stated, from two CBS annual publications, the *CBS Statistical Abstract of Israel* and the *CBS Labour Force Surveys*.

¹⁴ Although the possibility that the estimated self-employment rates for the 1920s and early 1930s may be too high cannot be ruled out, the secular downward trend remains a robust finding.

¹⁵ The quality of the annual CBS data pertaining to the employment status of non-Jews, particularly of women, may be somewhat questionable; nonetheless they seem to leave little doubt about the accuracy of the long term decline in total non-Jewish self employment.

[Figure 6]

The high self-employment rates among Palestine's (mostly immigrating) Jews of the 1920s and the beginning of the 1930s may have reflected the relatively small size of the economy and its limited demand for wage labor in the early phases of the Jewish economic build-up, pushing many of the new-comers, particularly those with some self-imported financial resources, into self-employment. Their choice of (mostly small scale) businesses may have also been partly induced by their experience of relatively high levels of ethnically linked non-wage labor in their sending countries.

Likewise, the fast overall decline in self-employment accompanying the growth of product per capita in the Mandatory Jewish economy (at an annual rate of 4.1% between 1922 and 1945, Metzger, 1998, Table A22) and in Israel (at a yearly average of 3.1% in 1950-2005, see *Statistical Abstract of Israel*, 2007, Tables 14.1-14.2) is consistent with existing cross-country studies which indicate that self-employment (total and non-agricultural alike) has been negatively correlated with GDP per capita (*OECD Employment Outlook*, 2000, Chapter 5; Pietrobelli, Rabellotti, and Aquilina, 2004; Woodruff, 2007). Explanatory factors for these inverse patterns may include the declining employment shares of agriculture – where self-employment has been highly prevalent – in growing economies, and the growing size of firms in modern and modernizing economies, raising wages and increasing the opportunity cost of self-employment (Lucas, 1978; Acs, Audretsch, and Evans, 1994). However, unlike the decrease in overall self-employment, the proportion of employers among the self-employed should be expected to rise (and of those who work on their own account to decline) in a modernizing growing economy, and indeed the experience of Israel is visibly consistent with such expectations (see Figure 7). The increasing share of employers points also to the rising intensity of the entrepreneurial attributes of the Israeli self-employed over the years.

[Figure 7]

As for the comparison between Jews and Non-Jews, the rates of self-employment shown in Figure 5 for 1955-2005 exhibit not only a similarly declining path but also a convergence of the initially much higher Non-Jewish rates down to the Jewish ones by the end of the 1990s. This pattern could be linked to the fast economic transformation of the Arab sector whose prime feature was the massive exit from agriculture, and with it the decline in the extent of unpaid family workers among the Non-Jewish self-employed from more than a third in the mid 1950s down to 5% in the late 1990s. This transformation was partly enhanced by the land expropriation

policies exercised by the Israeli government in the first three decade of statehood, but in the main it reflected the typical growth-associated patterns of decline in the employment and output shares of agriculture.

Another significant development was the gradual abandonment of the restrictions on Arab labor mobility that were part of the military administration imposed on the Arab population of Israel in 1948 and finally abolished in 1966. The lifting of these restrictions, which made for the integration of Arab labor into the expanding Israeli economy, may have limited the scope of the Arab-enclave economy and lowered the extent of Arab self-employment.¹⁶ Further reduction in Arab non-wage labor may have been related in later years to global competition, negatively affecting some of the low-tech industries in Israel, particularly by the relocation of the production processes by many Israeli textile industries to neighboring economies. These changes resulted in sharp decline in the number of Arab establishments including of independent subcontractors of Jewish owned firms.¹⁷

The outlined patterns of self-employment among Jews and Non-Jews, as well as additional compositional attributes of their employment structure are highlighted in Tables 9 and 10, which present data on the industrial and occupational distributions of self and total employment, allowing for the appreciation of their changes over time.

[Table 9]

[Table 10]

It is seen in Table 9 that the most noticeable changes in the industrial distribution of employment between 1960 and 2000 were the decline in the share of total and self employed persons engaged in agriculture and the relative rise in services which accompanied the overall shrinkage of self-employment among Jews and Non-Jews alike.

A comparable picture is provided in Table 10 for the occupational structure. Apart from the relative decline of agricultural workers, it shows a substantial increase in professional and administrative occupations which characterized both Jewish and Non-Jewish total and self employment, thereby marking a tendency towards white collar pursuits. In the Jewish sector this tendency was general (note also the decline in the proportion of skilled workers), resembling the above-discussed occupational trends in American Jewry. In the Arab sector, however, it is observed that besides the relative rise of the professions and the administrative occupations, the

¹⁶ See Lewin-Epstein and Semyonov (1993) and Metzger (2003) and the references cited there.

¹⁷ See Schnell and Sofer (2003). In their paper they report on some indications that between 50% and 60% of textile plants in Arab localities had been closed between 1995 and 2003.

percentage of skilled blue-collar workers among the self-employed has increased as well, pointing to the intensification of skill-based undertakings which were compatible with low levels of educational attainment, and were concentrated primarily in construction and transportation.

Concerning the characteristics of self-employment among Israeli Jews, useful information could be obtained from several studies that have analyzed on the basis of the CBS Population Censuses (for 1961, 1972, 1983 and 1995) the links between non-wage labor and a number of demographic, socio-economic and spatial parameters (Ben-Porath, 1986; Yaar, 1986; Nahon, 1989; Razin, 1989, 1997; Shavit and Yuchtman-Yaar, 2001). These studies have shown that in general Jewish self-employment increased with age and with the duration of stay in Israel (for immigrants), and was more prevalent in the country's central metropolitan areas than in the periphery. Likewise, having a self-employed father and belonging to a wealthy family have been revealed to increase the odds of self-employment. These findings suggest that opportunities for gainful self-employment may have been enhanced by readily available family resources and by the accumulation of job-specific and general managerial experience and good will. Mandatory retirement at the age of 65 (currently at 67) providing an incentive for retirees and retirees to be to become self-employed may also have contributed to the age self-employment nexus. On the other hand, the considered studies have found that the level of schooling was on the whole negatively associated with the rate of self-employment, suggesting that the option of pursuing one's own business may in many instances have substituted for the lack of education to compensate for its caused disadvantages in the wage labor market.

Turning to the intra-Jewish ethnic arena, no marked differences in the overall proportion of self-employment have been found between Eastern (Sephardic) and Western (Ashkenazi) Jews. But the two groups differed in the composition of their non-wage labor, with the self-employed of the former group concentrating in retail trade and construction, and those of the latter, in professional occupations and in public and business services (Razin, 1989). Similarly, the Western group has been found to have a larger proportion of employers among the self-employed (Nahon, 1989). Partial explanation for these findings may be provided by differences in schooling between the two groups and by the interaction of the schooling factor with the center-periphery locational dichotomy (Razin, 1989). Note also the positive association between years of schooling and the share of employers among Jewish self-employed men (shown by Ben-Porath, 1986 for 1972), which adds to the credence of the education based explanations for the differences between the employment profiles of Israeli Jews.

Having so far confined the discussion to the local scene, we should add now an internationally comparative perspective to the Israeli numbers. This is done in Figure 8, which provides a summary picture of self-employment in Mandatory Palestine and Israel, combined with analogous figures for 9 Western and 19 OECD countries.¹⁸

[Figure 8]

It is seen that while Jewish self-employment in the Mandate period was exceptionally high in comparison with the Western countries, the declining rates of Jewish and total self-employment in Israel did rapidly close the gap to reach the range of the 19 OECD countries already in the 1960s and of the 9 Western countries in the 1980s. Moreover, unlike the temporary rise of self-employment in the developed countries between the second half of the 1980s and the early 1990s, in Israel it continued to decline throughout.¹⁹

Note, however, that the OECD and the CBS data for 1990 reveal that while Jewish self-employment rates were relatively low, the proportion of employers among self-employed Israeli Jews was fairly high in comparison with 19 OECD countries (see Figure 9). These observations suggest that in the Israel-OECD comparative context the entrepreneurial nature of Jewish self-employment may have been a prominent feature.

[Figure 9]

A final comparative perspective on the Israeli self-employment scene is offered in Table 11, which presents total and non-agricultural rates of self-employment among the Jews in Israel with analogous rates for Greece, Italy and Turkey. The numbers in the table show a marked difference between the conspicuously low self-employment rates in Israel and the high rates characterizing the other three Mediterranean countries.

[Table 11]

The large extent of self-employment in Greece, Italy and Turkey, seems to support the above-discussed suggestion made by Foreman-Peck and Zhou (2009), namely that the high entrepreneurial zeal found among their émigrés in the US could be traced back to their original

¹⁸ The 9 Western countries for which self-employment rates are available between 1920 and 2007 are: Belgium, Britain, Denmark, France, Ireland, Italy, Norway, Sweden and the US. The 19 OECD countries for which similar data are available between 1966 and 2007 are: Australia, Austria, Belgium, Canada, Denmark, Finland, France, Germany, Ireland, Italy, Japan, Luxemburg, New Zealand, Norway, Portugal, Spain, Sweden, UK and the US. The self employment rates for the two groups were calculated as averages weighed by the employment share of each country in total employment of the respective group.

¹⁹ For analysis and discussion of the rise of self-employment in the developed countries during the 1980s and 1990s see *OECD Employment Outlook* (2000) and Arum and Müller (2004).

habitats, indicating the persistence of their self-imported entrepreneurial culture in the host country. However, the low self-employment rates that have been observed for the Jews in Israel cast serious doubts on the validity of such origin-based cultural persistence as an explanation for the high self-employment tendencies among the Israeli emigrants in America and in other host countries. This issue is further elaborated on in the discussion below.

Discussion and conclusions

Self-employment has been shown in the paper to be a versatile phenomenon in Jewish economic life across time and places. It has encompassed a wide (if not the entire) range of characteristics of non-wage labor that the social science literature has associated with the opportunities and constraints faced by individuals and (primarily ethnic) groups endowed with different entrepreneurial tendencies, and with varied levels of human and social capital, and on the aggregate level, with overall economic development and growth.

While the Jewish self-employment experience seems to encompass it all, two distinct dynamic profiles have been demonstrated to stand clearly out. One is Israel's profile of secularly declining self-employment rates that since the mid 1960s became compatible with, and since the mid 1980s even lower than, the level of self-employment in most OECD countries. This dynamics may be associated with the country's economic growth, as may also be, the rising proportion of employers over the years among the Israeli self-employed.

The other profile is the typical one of Diaspora Jewry, characterized by generally high self-employment rates – Israeli emigrants included – in the US and in other Western countries in comparison with the Non-Jewish populations and with the Jews (and Non-Jews) of Israel. For a substantial segment of the first generation of Jewish immigrants (be they the arrivals from Eastern Europe in the late 19th and early 20th Century, the migrants of the last quarter of the 20th Century from the Former Soviet Union, or the Israeli emigrants heading for the US), self-employment may have provided a preferred option to wage employment. It gained this position by enabling the new arrivals to compensate for their labor market deficiencies and possible discrimination and to utilize their own resources and social capital to achieve independence in employment, relying in many instances on co-ethnic labor supply, financial sources and assistance, and often also on the demand for ethnic-specific goods and services.

In the second and third generations (around the mid 20th Century for the pre WWI immigrants) Jewish self-employment, although declining (in the US), still remained higher than

among (White American) Non Jews, even when controlling for education, occupations, and age. Its composition, however, changed appreciably. It shifted from the family owned businesses of their ancestor generation into an occupational structure in which professional pursuits became a significant activity. This dynamics indicates that Jews in America (as well as in other Diaspora countries) were able to acquire in the course of time sufficient human and financial resources to facilitate their upward move from the type of self-employment which had served mostly as an alternative to limited opportunities in the wage-labor market, to advanced entrepreneurship, generating high returns to the well endowed and the well educated.

Although this may be a fair description of the dynamics of self-employment in American and in other Diaspora Jewish communities, the question what kept the rates of Jewish self-employment relatively high over the years in the US and elsewhere, still awaits a fully convincing answer. One explanation for the phenomenon in question has been offered by the demographer and sociologist Calvin Goldscheider. He suggested, on the basis of his studies of self-employment by religion and ethnicity in Rhode Island and Boston, an ethnicity hypothesis to explain the comparatively high level of self-employment among American Jews (Goldscheider, 1986).

After statistically rejecting the possibility of explanations based on Jewish specific socioeconomic characteristics, and disapproving of the arguments tracing back the propensity for self-employment to the Jewish experience of, largely discriminatory, segregation in the East European countries of origin, he offered by way of elimination the following inference: "For many Jews, self-employment reinforces ties and bonds that are powerful forces for ethnic continuity...high levels of self-employment have characterized Jewish men and women for at least two generations. These patterns are part of existing networks across generations and establish continuing bonds within the Jewish community" (Goldscheider, 1986, pp. 206-207). Note, however, that although ethnic bonds as sources of information, capital, labor supply and consumers demand may have reinforced – and been reinforced by – the self-employment tendencies of American (and perhaps also other Diaspora) Jews, their intergenerational effects are difficult to verify, certainly on a country wide level.

Other findings of an economic nature that may be relevant to the considered issue are contained in several papers by Chiswick (1983, 1985, 1988a, 1988b) in which he comparatively investigated the earnings and the investment in human capital by American Jews. His analysis shows that the earnings of Jewish men exceeded in 1970 the earnings of Non-Jews of British

origin by 16% and that the rate of return from schooling was higher for Jews than for Non-Jews by 20%.²⁰ He found in addition that the self-employed earned significantly more than employees and that the differential was larger for Jews than for Non-Jews (see also Butler and Herring, 1991).

Consequently, Chiswick was able to argue, rather convincingly, that the substantial investment in human capital by American Jews and its derived occupational choice in wage labor and self-employment could be explained, at least partly, by the Jewish ability to generate relatively high returns from schooling. He conjectured that this ability may have reflected a productivity advantage of Jews in acquiring human capital per unit of schooling and/or in converting schooling into earnings, and hypothesized that its explanation may lie in the cultural realm. He emphasized community and particularly intra family education-supporting modes of behavior as possible factors raising the productivity of investment in human capital. Such attributes of "educational care" (to use Chiswick's own terminology) included the substitution of higher quality for larger number of children associated, among other factors, with the relatively low fertility of Jewish women and with the comparatively lower rates of labor-force participation of Jewish mothers with children under the age of 18. However, since he found that the economic success of the second generation of American Jews was independent of the country of origin of their fathers, he concluded that it had to be American specific and derived from the "historical, cultural, and religious experience common to the American Jewish community, rather than the experiences or influences of particular European countries of origin, that have shaped the pattern of investment and earnings" (Chiswick, 1983, p. 333).

It should be pointed out, though, that the finding from which Chiswick derived his conclusion could also support an alternative inference – namely that the cultural factors inducing high productivity of education may have been a common Jewish characteristic, similarly affecting the returns from schooling of Jews in all their origin and host Diaspora countries. The various demographic studies, cited by Chiswick (1985, 1988a), which suggest that fertility rates among Canadian and European Jews, in addition to the US, were relatively low in the 19th Century, only strengthen the plausibility of this alternative.

This qualification notwithstanding, Chiswick, like Goldcheider, disapproved of the notion that persistent cultural attributes "imported" from the "old" countries were instrumental for the economic behavior of American Jews. In the emphasis on the importance of the cultural values

²⁰ Qualitatively similar results on the Jewish advantage in generating relatively high rates of return from schooling have also been found for Canadian Jews in 1970 (see Nigel Tomes, 1983).

of the host countries he was joined also by Andrew Godley who made a similar argument in his illuminating comparative studies of the entrepreneurial characteristics of the first generation of East European Jewish immigrants in New York and London in 1880-1914 (Godley, 2000, 2001).

The case of the intensely self-employed Israeli émigrés in the US compared to the low self-employment levels in Israel provides another recent example of the instrumental role that the conditions in the host county and the drive to "make it" there may play in determining the employment status of the new arrivals.²¹ Having said that, however, I would suggest that the relevance of some cultural traits rooted in the Israeli society should not be overlooked. Take for instance the following statement by Steven Gold summarizing his field work on Israeli emigrants:

...nearly every Israeli emigrant that we contacted, regardless of occupation, background, gender, educational level or place of settlement, relied on co-nationals to achieve economic ends. Paradoxically, Israeli emigrants appear to maintain their Jewish and Israeli-based traditions of collectivism and self-help, even as they pursue individualistic goals beyond the Jewish State (Gold, 2002, p. 64).

This assessment suggests that even if the tendency for self-employment was a late acquired trait by Israeli emigrants, adapting to their new status as members of a distinct ethnic community of immigrants, the legacy of cooperation and mutual assistance rooted in their upbringing in Israel may have lowered the cost of their entrepreneurial activity in the host countries. Generalizing from the example of the Israeli emigrants to the larger scene of Diaspora Jewry, one may wonder if similar cost reducing and earning increasing cultural factors may not have contributed, in concurrence with Goldscheider's suggestions, to the intergenerational persistence of Jewish (American) high level of self-employment.²²

To conclude; it may be suggested that besides rational response to market opportunities and constraints, which undoubtedly were an important component of our story, additional factors are needed to explain the high propensity for self-employment among Diaspora Jews across time

²¹ While it could not be ruled out that a disproportionately large number of Israeli immigrants in America may have been self-employed prior to migration and others may have been self selected aiming for business ownership in the US, the gulf between the levels of self-employment in Israel and among its emigrants seems to be too wide to suggest a large effect of the home-country experience on the outcomes in the host country.

²² On culture – approximated by the extent of trust in society – raising the probability of being self-employed in the general American context, see Guiso, Sapienza and Zingales (2006).

and places. The very different employment profile of the Jews in Israel, who have been part of the overall Jewish migratory scene, reduces obviously the plausibility of an all-encompassing Jewish “taste” for self-employment. Nonetheless, the possibility of Jewish cultural attitudes and norms playing a role in the choice for independence in employment made by large segments of Diaspora Jewry cannot be ruled out. These attributes may be either "imported" from the countries of origin and/or acquired in the host countries, but in order not to remain in a state of an *unexplained residual* more research is needed to unveil their exact nature and the precise mechanisms leading from culture to self-employment.

References

- Acs, Zoltán J., David B. Audretsch, and David S. Evans (1994). "Why Does the self-employment rate vary across countries and over time?" CEPR Discussion Paper No. 871.
- Arkin, Antony (1984). "Economic activities," in Marcus Arkin (ed.), *South African Jewry: A Contemporary Survey*. Cape Town: Oxford University Press, 57-76.
- Arum, Richard and Walter Müller (eds.) (2004). *The Reemergence of Self-Employment: A Comparative Study of Self-Employment Dynamics and Social Inequality*. Princeton and Oxford: Princeton University Press.
- Bachi, Roberto (1977). *The Population of Israel*. Jerusalem: The Institute of Contemporary Jewry, Hebrew University of Jerusalem, and Demographic Center, Prime Minister's Office.
- Bates, Timothy (1997). *Race, Self-Employment, and Upward Mobility: An Illusive American Dream*. Washington, D.C.: The Woodrow Wilson Center Press, Baltimore and London: The John Hopkins University Press.
- Beenstock, Michael, Jacob Metzger and Sanny Ziv (1995). "Immigration and the Jewish economy in Mandatory Palestine," *Research in Economic History*, 15: 149-213.
- Ben-Porath, Yoram (1986). "Self-employed and wage earners in Israel: Findings from the census of population 1972," in Uziel O. Schmelz and Gad Nathan (eds.), *Studies in the Population of Israel in Honor of Roberto Bachi*. Jerusalem: The Hebrew University Magnes Press, pp. 245-280.
- Blanchflower, David G. (2000). "Self-employment in OECD countries," *Labor Economics*, 7 (5): 471-505.
- Blanchflower, David G. (2004). "Self-employment: More may not be better," *Swedish Economic Policy Review*, 11 (2): 15-74.
- Blanchflower, David G. and Andrew Oswald (1998). "What makes an entrepreneur?" *Journal of Labor Economics*, 16 (1): 26-60.
- Blanchflower, David G., Andrew Oswald, and Alois Stutzer (2001). "Latent entrepreneurship across nations," *European Economic Review*, 45 (4-6): 680-691.
- Borjas, George J. (1986). "The self-employment experience of immigrants," *The Journal of Human Resources*, 21 (4): 485-506.

- Butler, John S. and Cedric Herring (1991). "Ethnicity and Entrepreneurship in America: Toward an Explanation of racial and ethnic group variations in self-employment," *Sociological Perspectives*, 34 (1): 79-94.
- Casson, Mark, Bernard Yeung, Anuradha Basu, and Nigel Wadeson (eds.) (2006). *The Oxford Handbook of Entrepreneurship*. Oxford and New York: Oxford University Press.
- CBS Labour Force Surveys* (annual issues). Jerusalem: Central Bureau of Statistics.
- CBS Statistical Abstract of Israel* (annual issues). Jerusalem: Central Bureau of Statistics.
- Chiswick, Barry R. (1983). "The earnings and human capital of American Jews," *The Journal of Human Resources*, 18 (3): 313-336.
- Chiswick, Barry R. (1985). "The labor market status of American Jews: Patterns and Determinants," *American Jewish Year Book*, pp. 131-153.
- Chiswick, Barry R. (1988a). "Differences in education and earnings across racial and ethnic groups: Tastes, discrimination, and investments in child quality," *The Quarterly Journal of Economics*, 103 (3): 571-597.
- Chiswick, Barry R. (1988b). "Labor supply and investment in child quality: A study of Jewish and Non-Jewish women," *Contemporary Jewry*, 9 (2): 35-61.
- Chiswick, Barry R. (1992). "The economic status of American Jews: Analysis of the 1990 National Jewish Population Survey," revised version of a paper prepared for the Conference on the Policy Implications of the 1990 National Jewish Population Survey, Los Angeles, 1991.
- Chiswick, Barry R. (1999). "The occupational attainment and earnings of American Jewry, 1890 to 1990," *Contemporary Jewry*, 20 (1): 68-98.
- Chiswick, Barry R. (2007). "The occupational attainment of American Jewry, 1890 to 1990," *Contemporary Jewry*, 27 (1): 80-111.
- Cohen, Yinon and Yitchak Haberfeld (1997). "The number of Israeli Immigrants in the United States in 1990," *Demography*, 34 (2): 199-212.
- Collins, Jock (2003). "Cultural diversity and entrepreneurship: Policy responses to immigrant entrepreneurs in Australia," *Entrepreneurship & Regional Development*, 15 (2): 137-149.
- DelaPergola, Sergio (1986). *The Jewish Population in France: Socio-Demography and Identity*. Jerusalem: The Institute of Contemporary Jewry, The Hebrew University of Jerusalem; Paris: Centre National De La Recherche Scientifique (in French).

- DellaPergola, Sergio (2007). "Migrations," *Encyclopedia Judaica*, Detroit Michigan: MacMillan Reference USA, Vol. 14, pp. 207-219.
- DellaPergola, Sergio and Allie A. Dubb (1988). "South African Jewry: A sociodemographic profile," *American Jewish Year Book*, pp. 59-140.
- Dubb, Allie A. (1994). *The Jewish Population of South Africa: The 1991 Sociodemographic Survey*. Cape Town: Jewish Publications – South Africa.
- Flora, Peter, Franz Kraus, and Winfried Pfenning (1987). *State, Economy and Society in Western Europe 1815-1975*. Frankfurt: Campus Verlag, London: Macmillan Press, Chicago: St. James Press.
- Foreman-Peck, James and Peng Zhou (2009). "The strength and persistence of entrepreneurial cultures," Cardiff Economics Working Papers, E2009/32.
- Godley, Andrew (2000). "Cultural determinants of Jewish immigrant entrepreneurship in the UK and USA and British and American culture," in Mark Casson and Andrew Godley (eds.), *Cultural Factors in Economic Growth*. Berlin, Heidelberg, New York: Springer, pp. 125-141.
- Godley, Andrew (2001). *Jewish Immigrant Entrepreneurship in New York and London 1880-1914: Enterprise and Culture*. Houndmills, Basingstoke, Hampshire, and New York: Palgrave.
- Gold, Steven J. (2002). *The Israeli Diaspora*. Seattle: University of Washington Press.
- Gold, Steven J. (2007). "The place of Israel in the identity of Israelis in the Diaspora: An ethnographic exploration," in Danny Ben-Moshe and Zohar Segev (eds.), *Israel, the Diaspora and Jewish Identity*. Brighton, Portland: Sussex Academic Press, pp. 185-205.
- Gold, Steven J. and Bruce A. Phillips (1996). "Israelis in the United States," *American Jewish Year Book*, pp. 51-101.
- Goldscheider, Calvin (1986). "Self-employment and Jewish continuity," *Studies in Contemporary Jewry*, 2: 191-207.
- Goldscheider, Calvin and Frances E. Kobrin (1980). "Ethnic continuity and the process of self-employment," *Ethnicity* 7: 256-78.
- Goldstein, Sidney (1969). "Socioeconomic differentials among religious groups in the US," *American Journal of Sociology*, 74 (6): 612-631.
- Goldstein Sidney and Calvin Goldscheider (1968). *Jewish Americans: Three Generations in a Jewish Community*. Englewood Cliffs, New Jersey: Prentice-Hall, Inc.

- Guiso, Luigi, Paola Sapienza, and Luigi Zingales (2006). "Does culture affect economic outcomes?" *Journal of Economic Perspectives*, 20 (2): 23-48.
- Hiebert, Daniel (2002). "Economic associations of immigrant self-employment in Canada," *International Journal of Entrepreneurial Behaviour & Research*, 8 (1/2): 93-112.
- Historical Statistics of the United States: Earliest times to the Present*, (2006) Millennial ed. New York: Cambridge University Press.
- Kuznets, Simon (1960). "Economic structure and life of the Jews," in Louis Finkelstein (ed.), *The Jews: Their History, Culture and Religion*, Volume II. New York: The Jewish publication society of America, pp. 1597-1666.
- Lewin-Epstein, Noah and Moshe Semyonov (1993). *The Arab Minority in Israel's Economy*. Coulter, San Francisco, Oxford: Westview Press.
- Light, Ivan and Steven J. Gold (2000). *Ethnic Economics*. San Diego and London: Academic Press.
- Lipman, Vivian D. (1960). "Trends in Anglo-Jewish occupations," *The Jewish Journal of Sociology*, 2 (2): 202-218.
- Lucas, Robert E. (1978). "On the size distribution of business firms," *Bell Journal of Economics*, 9 (2): 508-23.
- Metzer, Jacob (1998). *The Divided Economy of Mandatory Palestine*. Cambridge: Cambridge University Press.
- Metzer, Jacob (2003). "From the Jewish national home to the state of Israel: Some economic aspects of nation and state building," in Alice Teichova and Herbert Matis (eds.), *Nation, State and the Economy in History*. Cambridge and New York: Cambridge University Press, pp. 270-287.
- Minns, Chris and Marian Risov (2005). "The spirit of capitalism? Ethnicity, religion, and self-employment in early 20th century Canada," *Explorations in Economic History*, 42 (2): 259-281.
- Nahon, Yaacov (1989). *Self-Employed Workers – the Ethnic Dimension*. Jerusalem: The Jerusalem Institute for Israel Studies.
- Nakhaie, Reza, Xiaohua Lin, and Jian Guan (2009). "Social capital and the myth of minority self-employment: Evidence from Canada," *Journal of Ethnic and Migration Studies*, 35 (4): 625-644.

- OECD Employment Outlook* (annual issues). Paris: Organization for Economic Co-operation and Development (OECD).
- OECD Factbook* (annual issues). Paris: Organization for Economic Co-operation and Development (OECD).
- OECD Labour Force Statistics* (annual issues). Paris: Organization for Economic Co-operation and Development (OECD).
- Parker, Simon C. (2004). *The Economics of Self-Employment and Entrepreneurship*. Cambridge and New York: Cambridge University Press.
- Pietrobelli, Carlo, Roberta Rabellotti, and Matteo Aquilina (2004). "An empirical study of the determinants of self-employment in developing countries," *Journal of International Development*, 16 (6): 803-820.
- Razin, Eran (1989). "Relating theories of entrepreneurship among ethnic groups and entrepreneurship in space: The case of the Jewish population in Israel," *Geografiska Annaler. Series B, Human Geography*, 71 (3): 167-181.
- Razin, Eran (1997). "Social networks, local opportunities and entrepreneurship among immigrants in Israel," in Ivan Light and Richard E. Isralowitz (eds.), *Immigrant Entrepreneurs and Immigrant Absorption in the United States and Israel*. Aldeshot and Brookfield: Ashgate, pp. 57-81.
- Rebhun, Uzi (2009). "The Israeli Jewish Diaspora in the United States: Socio-cultural mobility and attachment to homeland," in Eliezer Ben-Rafael and Yitzhak Sternberg (eds.), *Transnationalism: Diasporas and the advent of a new (dis)order*. Leiden and Boston: Brill, pp. 317-334.
- Robinson, Vaughan and Rina Valeny (2005). "Ethnic minorities, employment, self-employment, and social mobility in postwar Britain," in Glenn C. Loury, Tariq Modhood, and Steven M. Teles (eds.), *Ethnicity, Social Mobility, and Public Policy: Comparing the USA and UK*. Cambridge and New York: Cambridge University Press, pp. 414-447.
- Schmelz, Usiel O. and Sergio DellaPergola (1985). "The demography of Latin American Jewry," *American Jewish Year Book*, pp. 51-102.
- Schmelz, Usiel O. and Sergio DellaPergola (2007). "Demography," *Encyclopedia Judaica*, Detroit Michigan: MacMillan Reference USA, Vol. 5, pp. 553-572.

- Schnell, Izhak and Michael Sofer (2003). "Embedding entrepreneurship in social structure: Israeli-Arab Entrepreneurship," *International Journal of Urban and Regional Research*, 27 (2): 300-318.
- Shavit, Yossi and Ephraim Yuchtman-Yaar (2001). "Ethnicity, education, and other Determinants of self-employment in Israel," *International Journal of Sociology*, 31 (1): 59-91.
- Sheffer, Gabriel (2003). *Diaspora Politics: At Home Abroad*. Cambridge and New York: Cambridge University Press.
- Sikumim* (statistical bulletin; various issues, 1930-1946). Tel Aviv: General Federation of Jewish Labor in Eretz-Israel, Department of Statistics and Information (in Hebrew).
- Statistical Handbook of Jewish Palestine* (1947). Jerusalem: Jewish Agency for Palestine, Department of Statistics.
- Swedberg, Richard (ed.) (2000). *Entrepreneurship: The Social Science View*. Oxford and New York: Oxford University Press.
- Tomes, Nigel (1983). "Religion and the rate of return on human capital: Evidence from Canada," *The Canadian Journal of Economics*, 16 (1): 122-138.
- Torczyner, Jim L. and Shari L. Brotman (1995). "The Jews of Canada: A profile from the census," *American Jewish Year Book*, pp. 227-260.
- "UK National Statistics on line" (2006). Office for National Statistics (published on 21 February 2006), www.statistics.gov.uk.
- Waldinger, Roger, Howard Aldrich and Robin Ward (eds.) (1990). *Ethnic Entrepreneurs: Immigrant Business in Industrial Societies*. Newbury Park Calif.: Sage
- Woodruff, Christopher (2007). "Self-employment: Engine of growth or self-help safety net?" in Pierella Paci and Pieter Serneels (eds.), *Employment and Shared Growth: Rethinking the Role of Labor Mobility for Development*. Washington, DC: The World Bank. pp. 53-68.
- Yaar, Ephraim (1986). "Private entrepreneurship as a track for socio-economic mobility: An additional aspect of ethnic stratification in Israel," *Megamot*, 25 (4): 393-412 (in Hebrew).
- Yoon, In-Jin (1997). *On My Own: Korean Business and Race Relations in America*. Chicago and London: The University of Chicago Press.

Table 1. Occupations and non-agricultural self-employment: Jews and Non-Jews in East and Central European countries prior to WWII (percent)							
		Industries' shares in labor force				Nonagricultural	
		Agriculture		Trade & finance		self-employment	
		Jews	Non-Jews	Jews	Non-Jews	Jews	Non-Jews
Poland (1931)		4.0	53.4	39.2	10.3	62.2	18.2
USSR-European part (1926)		4.0	73.0	25.8	9.2	38.9	17.5
Romania (1913, 1930)*		4.1	63.5	51.5	18.1	47.4	34.2
Hungary (1930)		2.7	48.2	49.9	11.0	35.0	16.4
Czechoslovakia (1930)		8.3	27.3	56.8	12.1	42.2	12.2
* Self-employment, 1913; Industries' shares in labor force, 1930.							
<i>Source:</i> Kuznets (1960), Tables 1, 2, 5.							

Table 2. World Jewish population, 1939

	Numbers (000')	Percent	
		In Total	In Diaspora
Palestine	445	2.7	
Diaspora	16,055	97.3	100.0
Total	16,500	100.0	
<hr/>			
Eastern Europe			
Poland	3,225	19.5	20.1
USSR (Europe)	3,141	19.0	19.6
Romania	520	3.2	3.2
Hungary	404	2.4	2.5
Czechoslovakia	357	2.2	2.2
All 5 countries	7,647	46.4	47.6
Other countries of Eastern Europe	428	2.6	2.7
Total Eastern Europe	8,075	49.0	50.3
<hr/>			
Western Europe	1425	8.6	8.9
America US (1940)	4,771	28.9	29.7
Other American countries	599	3.6	3.7
Asia and Africa	1,600	9.7	10.0
Oceania	30	0.2	0.2

Source : Schmelz and DellaPergola (2007), Tables 2, 3, 4.

Table 3. Post WWII self-employment rates, Jews and general populations in selected countries (other than the US) (percent)

France						
	Region of Paris		Provinces	France-general pop.		
	Jews	Total pop.	Jews	Total	Non-agricultural	
1975	22.9	9.1	23.2	13.9	9.5	
United Kingdom						
	Jews	All				
2004	33.3	13.6				
Canada						
	Jews	All				
1996	28.7	11.1				
Argentina						
	Adults ages 15+		Jews by age			
	All	Jews	15-29	30-44	45-64	65+
1961	27.9	56.6	27.8	59.4	72.6	80.4
South Africa						
	Jews	All whites				
1970*	27.6	11.6				
1991	41.0	16.0				

*Employers only.

Sources: France-DellaPergola (1986), pp. 195, 201 for the region of Paris and the provinces; Flora, Kraus, and Pfenning (1987) for all of France. United Kingdom-"UK National Statistics on line" (2006) for Jews; *OECD Factbook* (2009) for all. Canada-Hiebert (2002), Table VI for Jews; *OECD Factbook* (2009) for all. Argentina-Schmelz and DellaPergola (1985), Table 13. South Africa-Arkin (1984), Table 4.15 and Dubb (1994), pp. 62-65.

Table 4. World Jewish population 1970, 2005

	Numbers (000')		Percent				
	1970	2005	1970			2005	
			World	Diaspora		World	Diaspora
			Without Soviet block	All			
Israel	2,582.0	5,237.6	20.4			39.5	
Soviet block	2344.9		18.5				
Russia		235.0					3.0
Other Diaspora countries	7,715.4	7561.5	61.0	100.0			97.0
All Diaspora countries	10,060.3	7,796.5	79.6		100.0	59.8	100.0
Total world	12,642.3	13,269.1	100.0			100.0	
US	5,400.0	5,652.2	42.7	70.0	53.7	43.4	72.5
France	530.0	494.0	4.2	6.9	5.3	3.8	6.3
UK	390.0	297.0	3.1	5.1	3.9	2.3	3.8
Canada	286.0	372.0	2.3	3.7	2.8	2.9	4.8
Argentina	282.0	185.0	2.2	3.7	2.8	1.4	2.4
South Africa	118.0	72.5	0.9	1.5	1.2	0.6	0.9
All 6 countries	7,006.0	7,072.7	55.4	90.8	69.6	54.3	90.7

Source : Schmelz and DellaPergola (2007), Table 6.

Table 5. Jewish Diaspora countries (other than the US):
Educational attainment of Jews and the general population (percent)

Canada (1991), age 15+						
	Men		Women		All	
	Jews	All	Jews	All	Jews	All
Less than high school	22.6	37.7	24.9	38.5	23.8	38.1
High school	9.8	13.1	14.0	16.4	11.9	14.8
Trade certificate	15.0	27.2	17.8	25.5	16.4	26.3
University, Bachelor	33.1	17.0	31.6	16.7	32.3	16.8
Above Bachelor	19.5	5.0	11.6	2.9	15.5	3.9
Total	100.0	100.0	100.0	100.0	100.0	100.0

Argentina (1960)						
	Adults age 15+		Jews by age			
	All	Jews	15-29	30-44	45-64	65+
No schooling	10.5	5.3	0.6	1.1	7.1	23.4
Primary	71.6	51.3	27.7	55.6	63.6	60.8
Secondary	15.2	32.1	50.6	30.9	23.8	13.6
University	2.7	11.3	21.1	12.4	5.5	2.2
Total	100.0	100.0	100.0	100.0	100.0	100.0

South Africa (1980), age 20+						
	Men		Women		All	
	Jews	All-Whites	Jews	All-Whites	Jews	All-Whites
No schooling	2.3	1.5	3.4	2.1	2.9	1.8
Primary & part secondary	22.7	45.2	31.1	53.7	27.1	49.5
Secondary	36.7	29.4	40.1	26.4	38.5	27.9
Non degree diplomas	16.5	14.1	15.0	13.3	15.8	13.7
University, Bachelor	19.5	8.4	9.8	4.3	14.3	6.3
University, Master&PhD	2.3	1.4	0.6	0.2	1.4	0.8
Total	100.0	100.0	100.0	100.0	100.0	100.0

Sources: Canada-Torczyner and Brotman (1995), Tables 9, 13. Argentina-Schmelz and DellaPergola (1985), Table 13. South Africa-DellaPergola and Dubb (1988), Table 22.

Table 6. Jewish Diaspora countries (other than the US):
Occupational distributions of Jews and the general population (percent)

Canada (1991), ages 15-64					France (1975), age 15+		
	Men		Women		Region of Paris		
	Jews	All	Jews	All	Jews	All	
Professions	18.5	7.4	5.5	3.0	25.3	12.2	
Human services	12.5	6.4	22.0	14.4			
Managerial	19.2	10.6	11.0	6.2	21.4	5.8	
Sales	16.3	8.0	11.0	7.3			
Other	33.5	67.6	50.5	69.1	53.3	82.0	
Total	100.0	100.0	100.0	100.0	100.0	100.0	

Argentina (1960)

	Adults ages 15+		Jews by age			
	All	Jews	15-29	30-44	45-64	65+
Professions	6.5	11.1	14	14.2	7.5	3.7
Managerial	2.6	9.5	4.4	11.5	11.4	10.2
Sales	10.3	37.2	28.7	35.4	43.3	49.7
Other	80.6	42.2	52.9	38.9	37.8	36.4
Total	100.0	100.0	100.0	100.0	100.0	100.0

South Africa, age 20+

	1970						1980	
	Men		Women		All		All	
	Jews	All Whites						
Professions	23.5	13.0	19.1	18.0	22.1	16.0	29.1	20.1
Managerial	22.1	7.0	3.2	1.0	16.3	5.4	17.5	7.4
Sales	32.7	11.0	19.6	13.0	28.6	10.6	23.0	9.9
Other	21.7	69.0	58.1	68.0	33.0	68.0	30.4	62.5
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

Sources: Canada-Torczyner and Brotman (1995), Table 14. Argentina-Schmelz and DellaPergola (1985), Table 13. South Africa-DellaPergola and Dubb (1988), Table 25.

Table 7. Self-employment rates in the US (percent)

A. Foreign and native born Jews* and Non-Jews, and all Americans, 1910-1970

	Jewish and Non-Jewish white men (aged 25-64)				All Americans (age 16+)		
	Foreign Born		Native Born		Total	Agricultural	Non Agricultural
	Jews	Non-Jews	Jews (2nd generation)	Non-Jews			
1910	38.4	22.3	16.1	35.5	31.5	55.3	19.9
1920	45.5	21.8	32.8	36.8	28.1	62.8	15.5
1940	41.4	21.2	27.0	27.3	20.2	54.0	12.2
1960	41.0	16.4		16.2	12.6	48.4	9.4
1970			31.9	14.1	9.0	48.9	7.2

B. Jews**, Non-Jewish whites and all Americans by sex, 1990, 2000

	Jews and Non-Jewish whites (aged 25-64)				All Americans (aged 16+)				
	Men		Women		Total			Agricultural	Non Agricultural
	Jews	Non-Jews	Jews	Non-Jews	Men	Women	All		
Early post WWII years***	55.6	36.2							
1957	31.9	15.8							
Around 1980****	35.1	16.3							
1990	26.8	14.1	14.0	8.6	9.8	5.9	8.5	42.8	7.5
2000	23.2	14.0	11.3	8.6	8.2	5.7	7.3	37.3	6.6

* Jews are identified by Jewish mother tongue.

** Jews are directly identified.

*** Parents of respondents to the General Social Surveys, 1972-1987.

**** Respondents in the General Social Surveys, 1972-1987.

Sources: The reported rates for Jews and Non-Jews and their operational definitions were all taken from Chiswick (1999), Table 2 and (2007), Tables 2, 3. The all American rates were taken from the *Historical Statistics of the United States* (2006).

Table 8. Higher education, occupations and self-employment:
 Israeli immigrants in Los Angeles (LA) and New York (NY) and all US Jews, 1990 (percent)

		Men				Women			
		Israeli immigrants			All Jews	Israeli immigrants			All Jews
		LA	NY			LA	NY		
		Census	Census	NYJPS		Census	Census	NYJPS	
Education	College graduates	33.0	33.0	61.0	71.0	27.0	29.0	46.0	57.0
Occupations	Professions	17.0	21.0	44.0	43.3	33.0	41.0	63.0	42.4
	Sales	22.0	29.0	8.0	17.9	11.0	16.0	8.0	9.4
	Other	61.0	50.0	48.0	38.7	56.0	43.0	29.0	48.2
	Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Self-employment		36.0	31.0	36.0	26.8	16.0	14.0	20.0	14.0

Sources: Gold and Phillips (1996), Tables 4, 5, 6, Chiswick (1992) Table 2, and (2007), Tables, 2, 3.

Table 9. Self and total employment by industry, total and non-agricultural rates of self-employment:
Jews and Non-Jews in Israel, 1960, 1980, 2000 (percent)

	1960				1980				2000			
	Self-employment		Total employment		Self-employment		Total employment		Self-employment		Total employment	
	Jews	Non-Jews	Jews	Non-Jews	Jews	Non-Jews	Jews	Non-Jews	Jews	Non-Jews	Jews	Non-Jews
Agriculture	25.5	71.3	15.0	48.5	14.4	36.0	5.4	14.6	6.6	5.1	2.1	2.9
Manuf. Construction & public utilities	23.3	8.6	35.0	29.6	22.7	26.5	30.0	39.2	17.4	23.8	22.5	34.6
Business, transport & communication*		18.1	19.1	10.8	47.9	31.1	27.7	18.3	54.3	60.2	40.2	36.8
Public, communal & personal services	51.2**	2.1	30.8	11.0	15.0	6.5	36.9	24.9	21.7	11.0	35.2	25.7
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Self-employment rates												
Total	24.4	39.1			16.5	26.8			11.8	12.5		
Non-agricultural	21.4	21.9			15.0	19.2			11.4	12.2		

* The business, transport and communication industries include all business and financial services, accommodation services and restaurants.

** 51.2% is the share of both service categories in Jewish self-employment

Sources: CBS Labour Force Surveys.

Table 10: Self and total employment by occupation: Jews and Non-Jews in Israel, 1970, 1980, 1990, 2000 (percent)

	1970		1980		1990		2000	
	Jews	Non-Jews	Jews	Non-Jews	Jews	Non-Jews	Jews	Non-Jews
Self-employment*								
Professional, Scientific & technical	7.2	0.8	14.5	3.3	18.0	4.6	25.0	12.5
Administrative, executive, managerial & clerical	9.1	1.2	11.4	4.2	11.1	6.3	16.3	6.6
Sales and service workers	34.0	26.8	30.6	20.8	32.7	38.0	26.4	33.2
Agricultural workers	19.4	49.2	16.3	37.0	12.5	18.2	7.3	4.8
Skilled workers (non-agricultural)	30.4**	22.0**	25.5	31.3	24.7	30.7	22.1	40.4
Other workers			1.6	3.3	1.0	2.3	2.9	2.4
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Total employment								
Professional, Scientific & technical	16.4	6.0	23.6	12.8	26.9	12.2	29.3	17.1
Administrative, executive, managerial & clerical	18.8	3.3	24.2	5.9	24.4	7.4	26.5	10.3
Sales and service workers	20.3	19.3	19.0	15.1	22.1	21.1	18.6	15.3
Agricultural workers	7.7	23.6	4.9	14.8	3.4	7.0	1.6	2.3
Skilled workers (non-agricultural)	36.7**	47.9**	24.8	39.0	21.2	42.3	17.0	39.4
Other workers			3.4	12.3	2.1	10.0	7.0	15.6
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

* Self-employed Jews include Kibbutz members.

** Skilled and other workers combined

Sources: CBS Labour Force Surveys .

Table 11. Total and non-agricultural self-employment:
Greece, Italy, Turkey and Israeli Jews, 1976-2004 (percent)

	Total self-employment				Non-Agricultural self-employment*			
	Greece	Italy	Turkey	Israeli Jews	Greece	Italy	Turkey	Israeli Jews
1976	52.4	29.2		18.3				
1979					32.0	18.9		
1980								15.0
1986	41.8	25.9	42.1	15.0	27.5	21.6		
1990	47.7	28.7	61.0	15.1	27.2**	22.3	27.6	
					[32.6**]	[25.8]	[32.0]	
2000	41.9	28.5	51.4	11.8				11.4
2002	39.3	27.7	50.2	11.0	26.4	23.2	24.0	

* Excluding unpaid family members, except for Israel and for the rates in brackets which include them

**The rates are for 1989

*** The rate is for 2001

Sources: For Greece, Italy and Turkey-*OECD Employment Outlook* (1992), Tables 4.1, 4.2;

OECD Labour Force Statistics . For Israel-*CBS Labour Force Surveys* and *CBS Statistical Abstracts*.

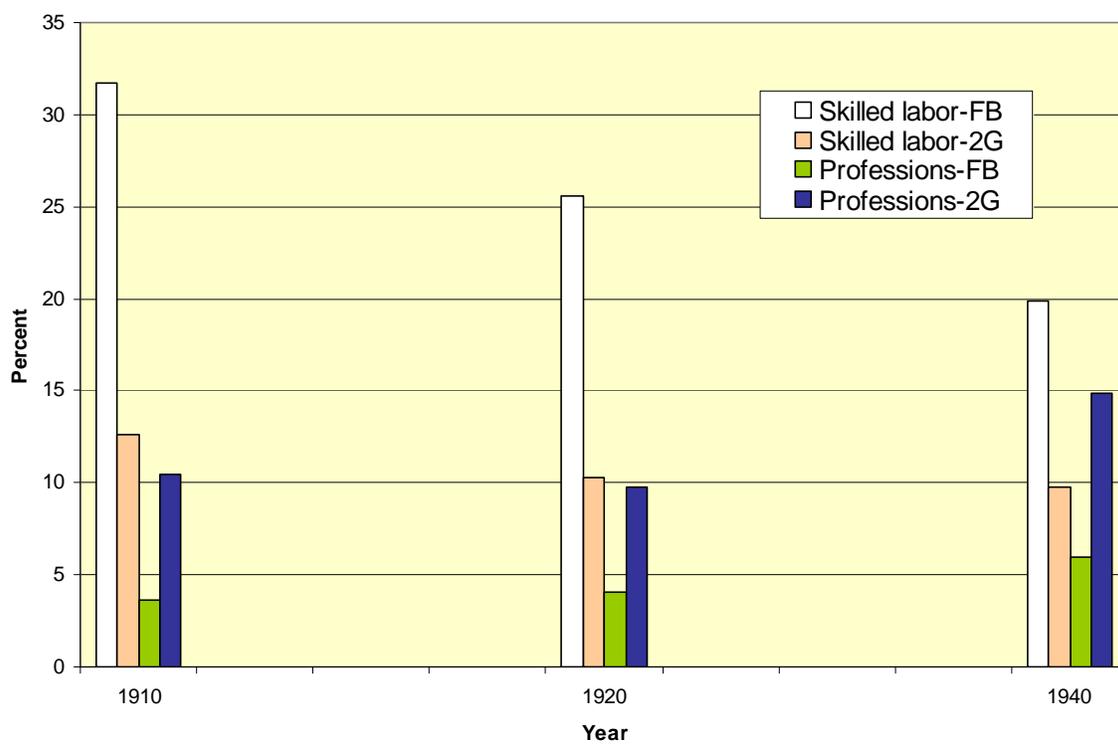


Figure 1. US-Percentage shares of skilled labor and professions in employment:
Foreign born (FB) and second generation native born (2G) Jewish men, age 25-64.
1910-1940.

Source: Chiswick (1999), Table 2.

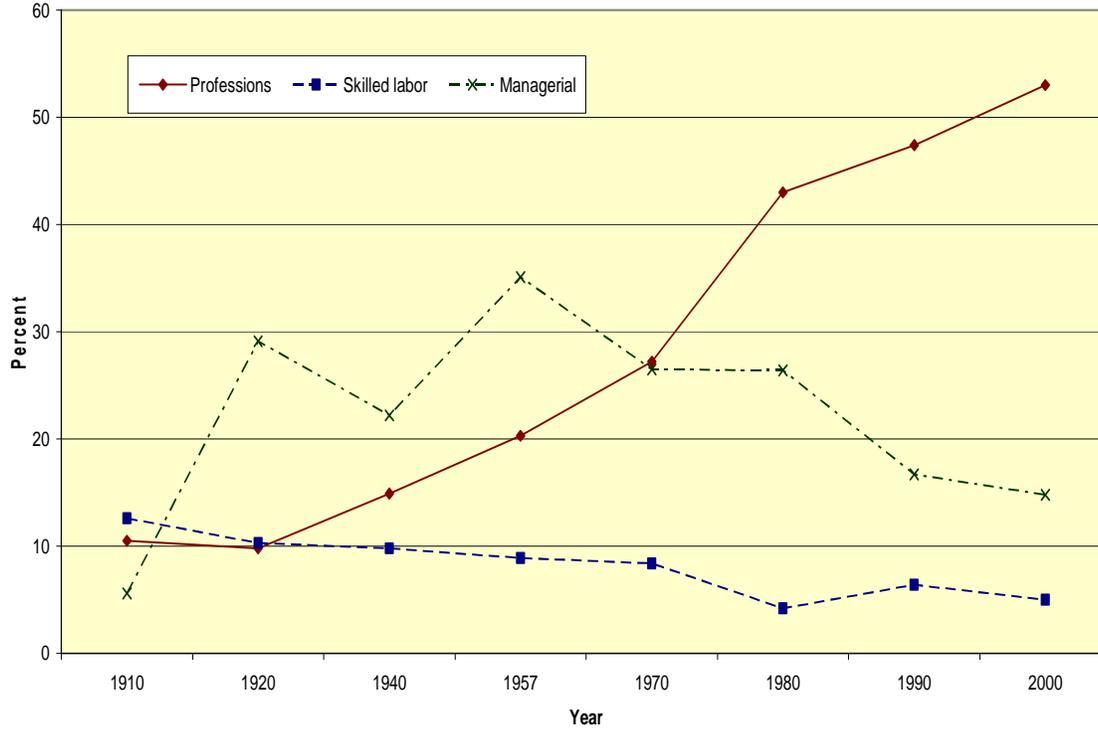


Figure 2. US Jewish men, age 25-64: Percentage shares of occupations in employment, 1910-2000.

Sources: Chiswick (1999), Table 2; (2007), Table 2.

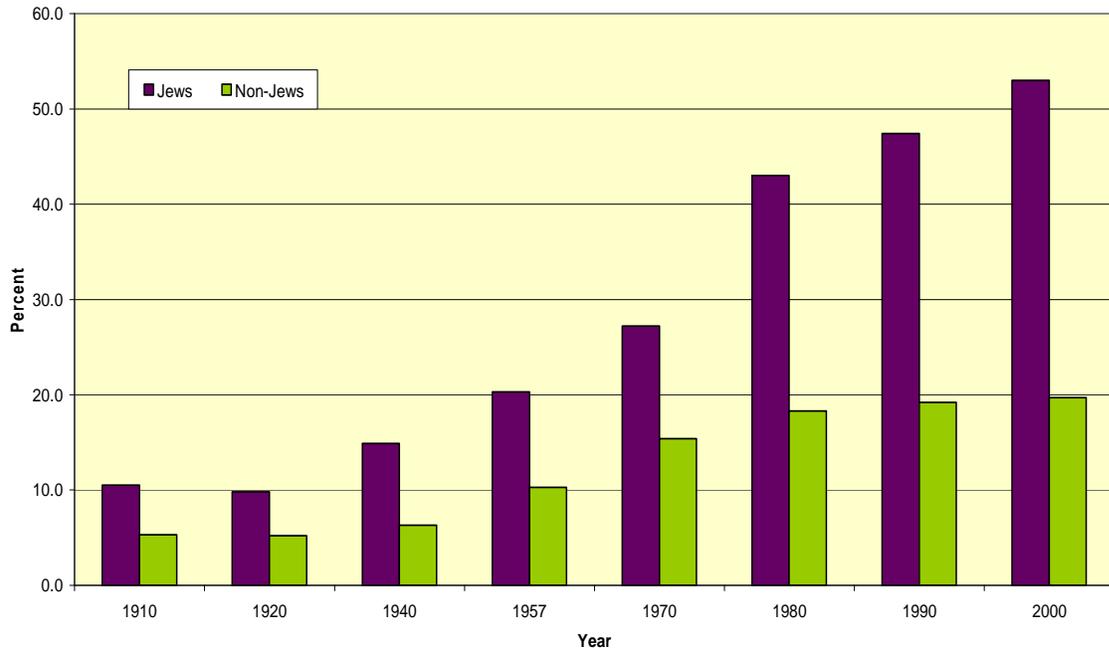


Figure 3. Percentage share of Professions in employment: US white men, Jews and Non-Jews, age 25-64, 1910-2000.

Sources: As in Figure 2.

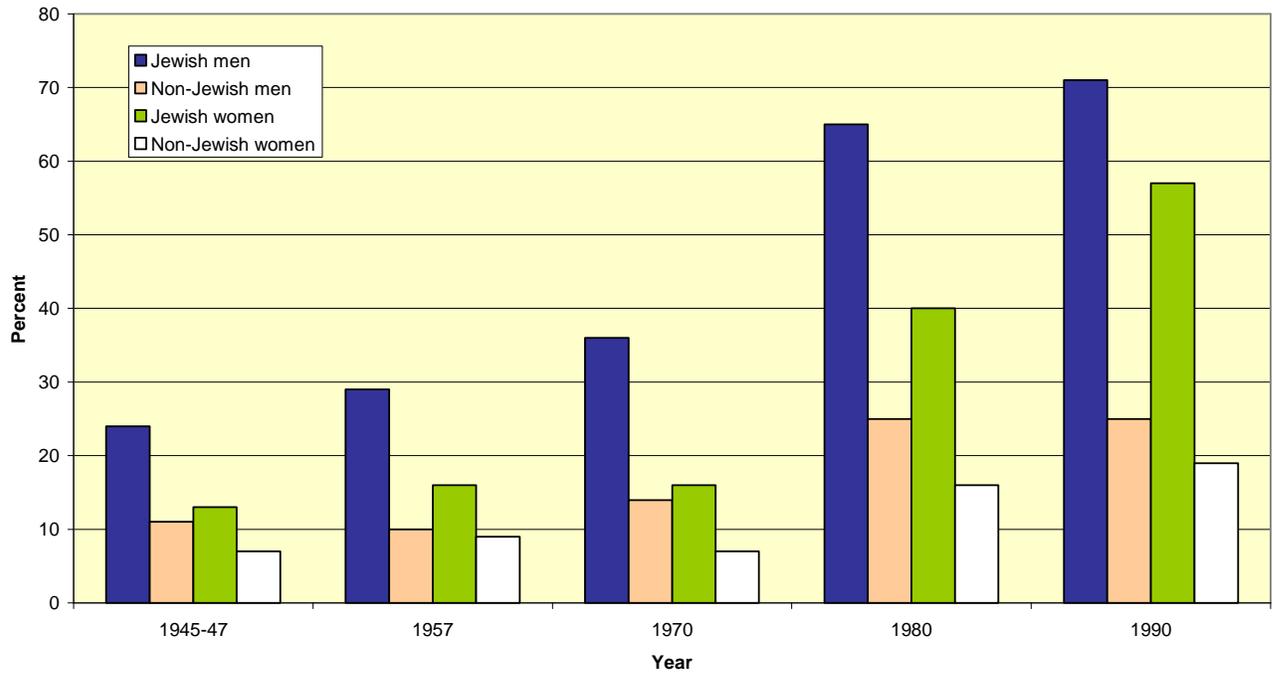


Figure 4. Percent of college graduates among adult Jews and white Non-Jews by sex 1945-1990.

Source: Chiswick (1992), Table 2.

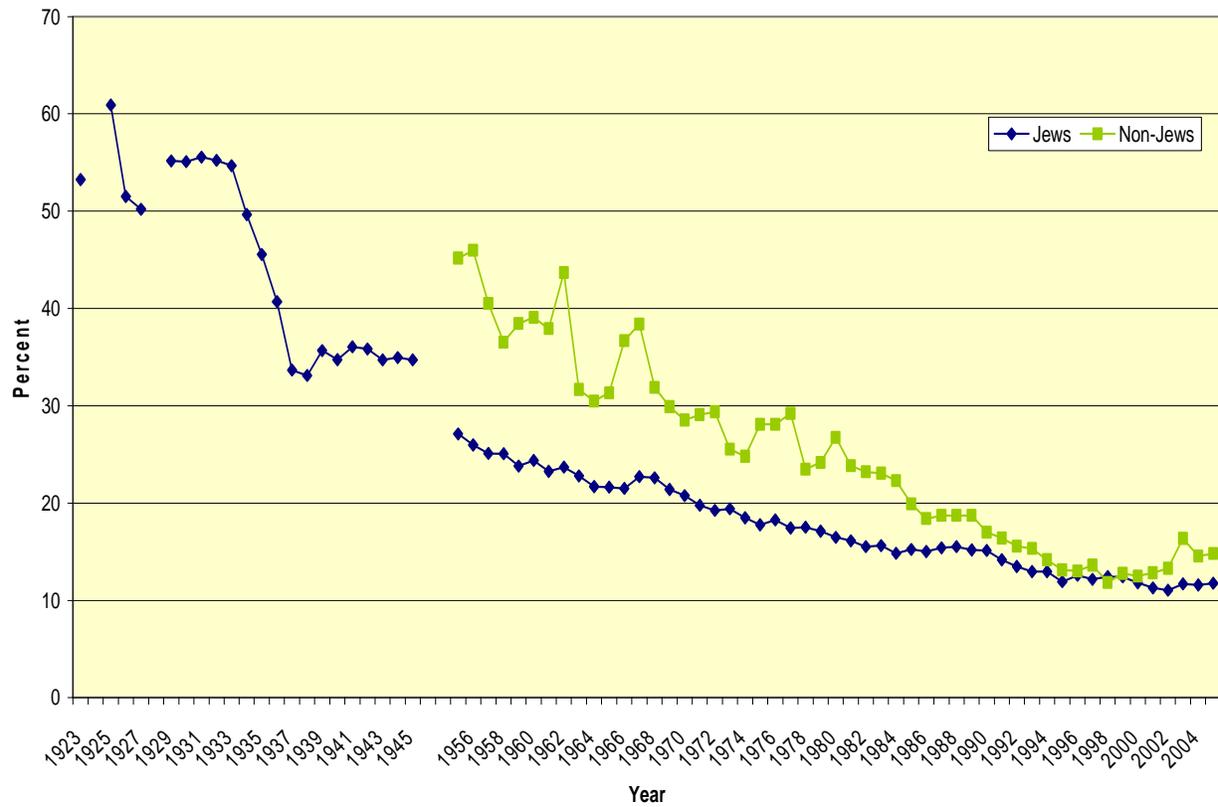


Figure 5. Self-employment rates: Jews in Mandatory Palestine and Israel, and Non-Jews in Israel, 1923-2005.

Sources: For 1923-1945, see text. For 1955-2005, *CBS Labour Force Surveys* and *CBS statistical Abstract of Israel*.

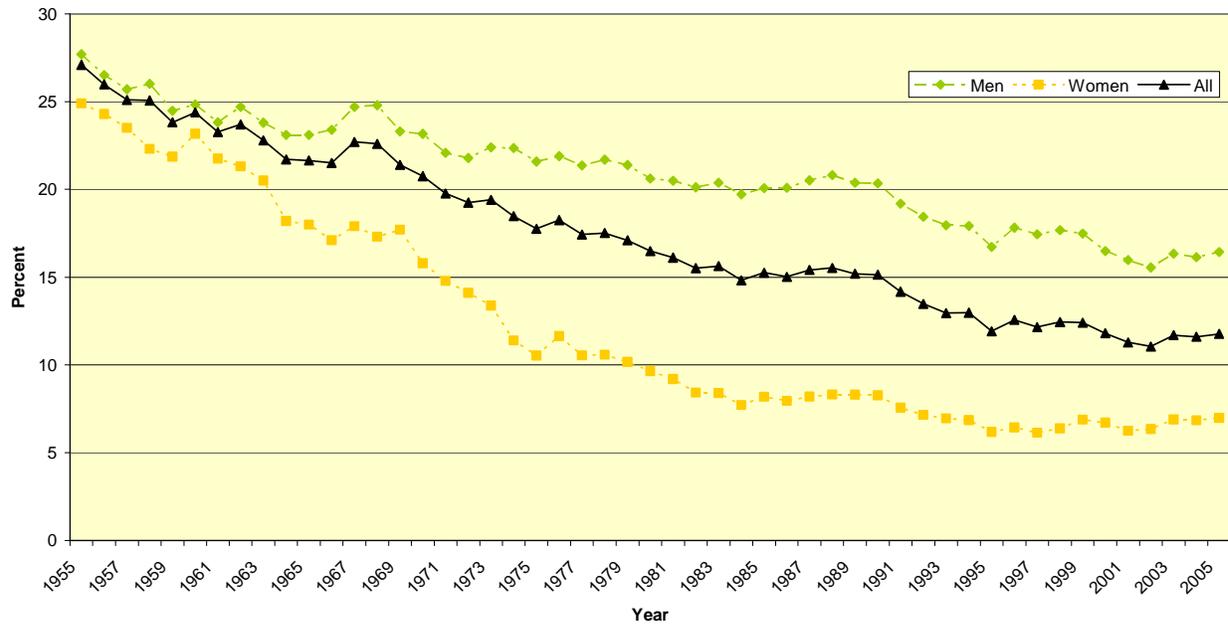


Figure 6. Self-employment rates: Jews in Israel by sex, 1955-2005.
Sources: CBS Labour Force Surveys and CBS statistical Abstract of Israel.

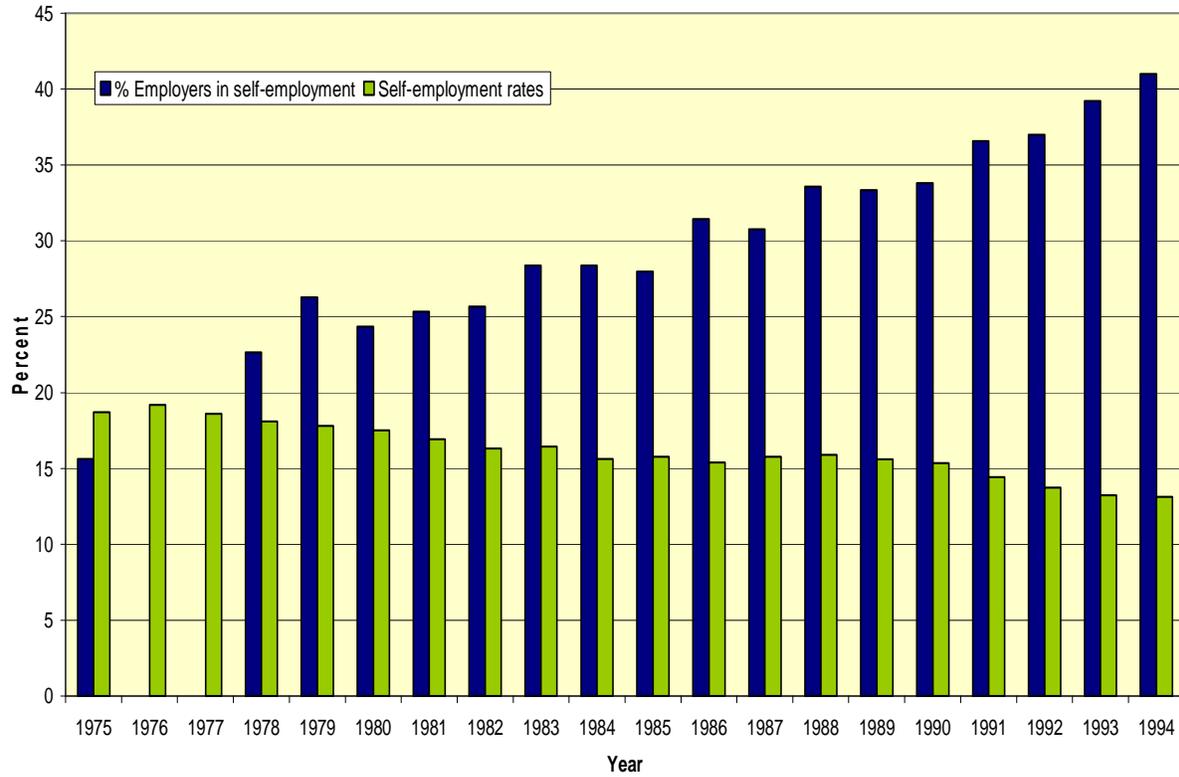


Figure 7. Percent employers in self-employment and total self-employment rates: All Israeli employed persons, 1975-1994.

Source: CBS statistical Abstract of Israel.

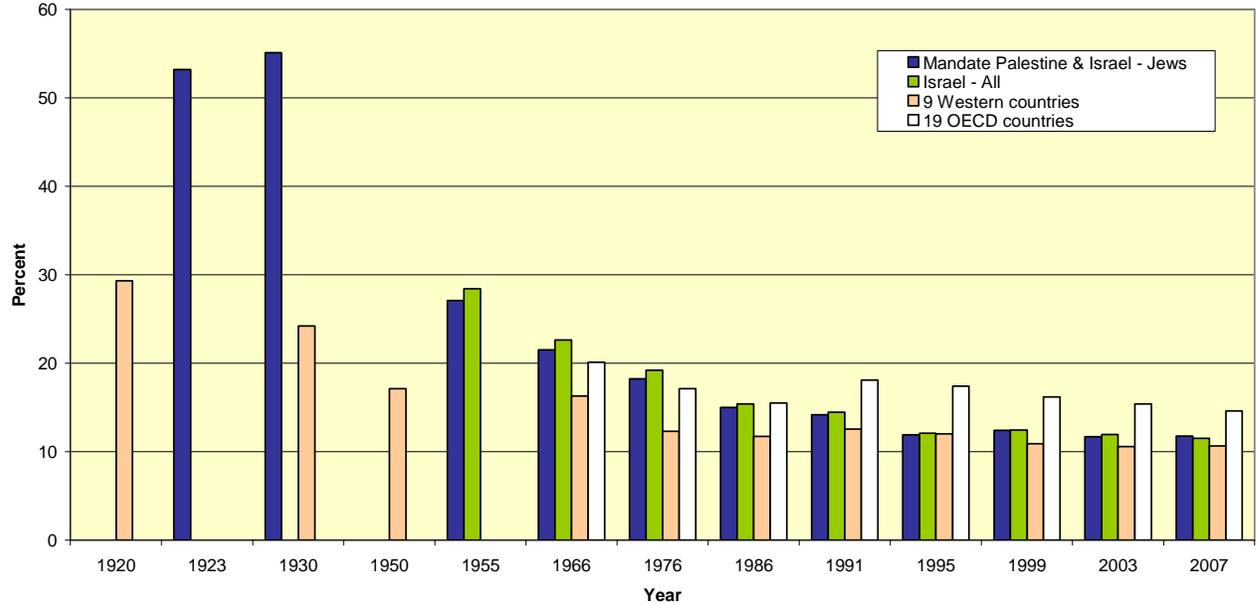


Figure 8. Self-employment rates: Mandate Palestine and Israel and selected Western and OECD countries, 1920-2007.

Sources: For Mandate Palestine and Israel as in Figure 5. For the 9 Western countries, Flora, Kraus, and Pfenning (1987), For the 19 OECD countries, *OECD Labour Force Statistics*.

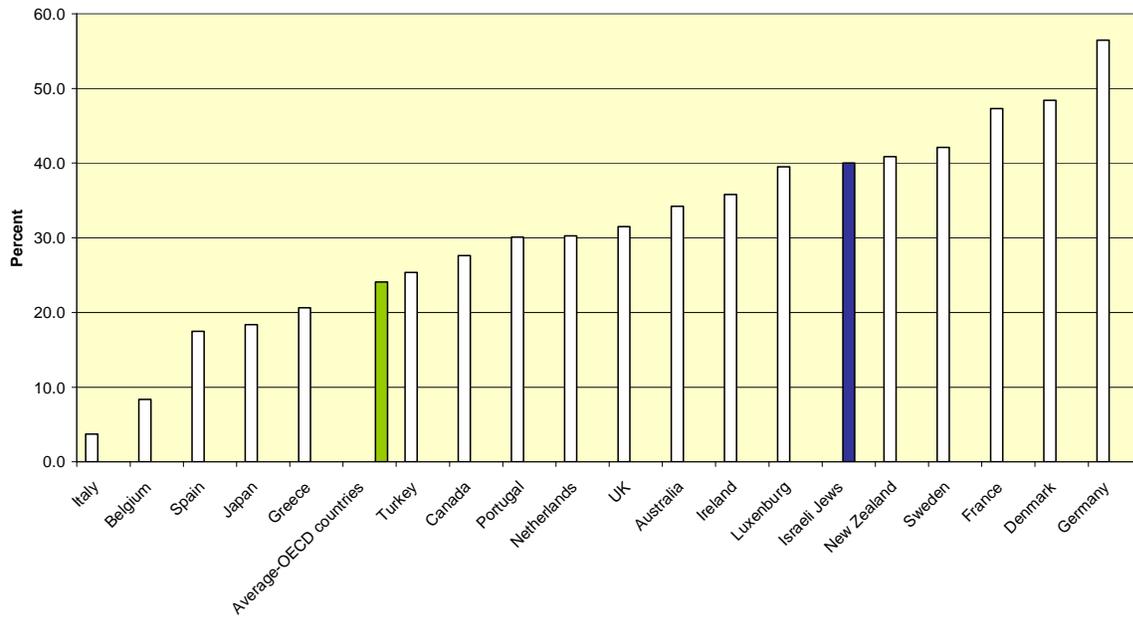


Figure 9. The share of employers in self-employment: Israeli Jews and 18 OECD countries, 1990.

Sources: For Israel, *CBS Labour Force Surveys*. For the OECD countries, *OECD Employment Outlook* (1992), Table 4.3.