Post-Soviet Jewish Demographic Dynamics: An Analysis of Recent Data*

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In the 1990s the demography of the Jews in the former Soviet Union (FSU) changed dramatically. Subsequently sizable demographic changes have continued. To understand these changes demographic characteristics of today's Jews in different FSU countries as well as in some parts of the Russian Federation should be compared with those of Soviet Jewry at the onset of the mass post-Soviet emigration. Fortunately population statistics of the FSU countries and migration statistics of receiving countries, especially those of Israel, contain ample appropriate data which will be utilized in our study.[1]

Numerical dynamics

The last Soviet census was held in 1989, giving us a good base against which to measure Jewish population decrease in the FSU countries. Between 1995 and 2004, the first post-Soviet censuses were conducted in all the newly independent states of the FSU, except Uzbekistan. A question on ethnicity, which counted Jews among many other ethnic groups, was included in each of these censuses. Overall, results of these censuses empirically confirmed earlier predictions with regard to the dramatic demographic decline of the Jewish population in the former Soviet republics (Tolts, 2007).

In 2009 a new round of censuses began in the FSU countries, and there is once again a question on ethnicity in each census. However, Ukraine and Uzbekistan did not execute censuses in this round which finished in 2014. For the former country, the last census data are those from the 2001 Ukrainian census, and for the latter – the data are even much more outdated: from the1989 Soviet census. Unfortunately, results of the most recent population census conducted in Turkmenistan were not available in time to be included in this paper. To fill these lacunae we have prepared estimates for these countries based on known Jewish population dynamics.

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[1] In our study we utilized publications of the Interstate Statistical Committee of the Commonwealth of Independent States (Interstate Statistical Committee of the CIS, 1996; 2006), information retrieved from internet sites of statistical agencies of FSU countries and Israel, statistics of the Hebrew Immigrant Aid Society (HIAS) and the German Federal Office for Migration and Refugees (BAMF), as well as data on the 1989 Soviet census available in the Inter-Active Supplement to *Demoscope Weekly*.

Table 1 Jewish Population in the FSU Countries, According to the 1989 Soviet Census and Post-Soviet Censuses, Thousands

Country[a]	1989 Soviet census	2000 round of censuses		2010 round of censuses	
	Number of Jews	Census date	Number of Jews	Census date	Number of Jews
Russian Federation	570.5[b]	2002	233.6[c]	2010	157.8[c]
Ukraine	487.3	2001	104.3	2010	71.5[d]
Belarus	112.0	1999	27.8	2009	12.9
Uzbekistan	94.9	2000	8.0[d]	2010	4.5[d]
Moldova	65.8	2004	4.9[e]	2014/2015	2.3[e]
Azerbaijan	39.9[b]	1999	8.9[f]	2009	9.1
Georgia	24.8	2002	3.8[g]	2014	1.9[g]
Latvia	22.9	2000	10.4	2011	6.4
Kazakhstan	19.9	1999	6.8	2009	3.6
Tadzhikistan	14.8	2000	0.2	2010	0.0
Lithuania	12.4	2001	4.0	2011	3.05
Kirgizstan	6.0	1999	1.6	2009	0.6
Estonia	4.6	2000	2.15	2011	2.0
Turkmenistan	2.5	1995	1.6	2010	0.2[d]
Armenia	0.7	2001	0.1	2011	0.1
Entire FSU	1480[b]	2000	485[d]	2010	325[d]

[a]FSU countries are listed in the order of the number of Jews in the 1989 Soviet census.
[b]Including Tats (for the Russian Federation – all; for Azerbaijan – urban dwellers; the figure for the entire FSU contains also Tats recorded in other FSU republics besides the two noted).
[c]There were possibly additional Jews (approximately 20,000 in 2002 and 42,000 in 2010) among people whose ethnicity was not recorded in the census; see text.
[d]Author's estimates for the start of the given year.
[e]According to the results of the Moldova censuses of 2004 and 2014, there were 3,628 and 1,597 Jews, respectively; however, these censuses did not cover Moldovan territory east of the Dniester River. According to the separate censuses, in this territory there were 1,259 Jews in 2004 and about 700 Jews in 2015.
[f]There were possibly additional Jews (approximately 3,600) among those who were recorded as Tats in the census.
[g]Not including Abkhazia and South Ossetia.
Sources: 1989 Soviet census; Post-Soviet censuses; author's estimates.

Our estimates based on the post-Soviet censuses show that in the decade between 2000 and 2010 the total number of Jews in the FSU countries fell from 485,000 to 325,000, or by 33% (Table 1). The tempo of this sizable Jewish numerical decrease was about the same as seen in the Soviet censuses for the three decades from 1959 to 1989 when it was 35% (Tolts, 2003). Between 1999 and 2009, the number of Jews decreased in Azerbaijan to 9,100 (by 27%). In this period in other post-Soviet Muslim countries the drop was much more pronounced: in Kazakhstan to 3,600 (by 48%) and in Kirgizstan to 600 (by 61%). The most pronounced decrease after the civil war was recorded in Tadzhikistan: according to the 2000 census, the number Jews there was

only about 200 and it fell as low as 36 in the results of the 2010 census (0.2% of the 1989 figure). According to the 2009 census, the number of Jews in Belarus halved during the decade to 12,900 (by 54%).

During the last intercensal period, this number fell less precipitously in two Baltic States: it decreased to 6,400 (by 38%) in Latvia and to 3,050 (by 24%) in Lithuania. In the third Baltic country – Estonia – the number of Jews dropped very moderately: it declined to about 2,000 (by 8%). An explanation of these dynamics may be found in the continuing shift of some persons of mixed Jewish-Russian origin to Jewish ethnicity which was first found in the results of the 2000 Estonian census (Kupovetsky, 2005). At the same time, according to the 2010 Estonian census, only 26.5% of Jews aged 15 and older were recorded to feel "an affiliation to a religion"; of these, 10.3% declared themselves to be followers of one of the branches of Christianity. Unfortunately, the number of those who stated Judaism as their religion was not shown separately in the census results for Jews, but we may conclude, based on the above noted figures, that it was about 16% or less. However, in this census a smaller (unknown) number of non-Jews by ethnicity also declared Judaism to be their religion.

In the Russian Federation, the October 2010 census recorded 157,763 Jews as against our Jewish population estimate of 200,000 for the census date (derived as all our evaluations for this country from the February 1994 Russian microcensus estimate of 401,000 Jews and subsequent vital and migration dynamics). Thus, there were possibly additional Jews (approximately 42,000) among people whose ethnicity was unknown/unstated in the census.[2] The previous October 2002 census recorded 233,596 Jews as against our Jewish population estimate of 254,000 for the census date (the gap for this census was approximately 20,000). These two gaps clearly demonstrate a growing process of Jewish ethnic assimilation in contemporary Russia, and show that a sizable group of Jews does not want to be recorded as Jews in the census.

At the same time, recent Russian censuses indicate a process of strengthening Jewish identification among members of different Jewish subgroups. A well-known fact is that in the post-Soviet period a share of non-Ashkenazi Jews grew up among Russia's Jewish population, especially in Moscow, the consequences of which will be seen below in the dynamics of Jewish demographic characteristics. However, the 2010 Russian census reported only 762 Mountain Jews, 78 Georgian Jews, 32 Central Asian (Bukharan) Jews and 90 Krymchaks, whereas 99.4% of the above-noted total number of 157,763 simply called themselves "Jews". This was a continuation of the tendency previously found in the data of the 2002 Russian census in which already 98.4% of the total number of 233,596 were recorded as "Jews" with no specified sub-group (Tolts, 2004).[3]

At the start of the recent mass emigration, Russia's Jews made up 39% of the total number of Jews in the FSU. However, since 1989 the population decline of Russia's Jewry was lower than that of the total Jewish population in the FSU, and by 2000 the Jews in the Russian Federation accounted for more than 60% of the total number of Jews in the FSU.

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[2] In the 2010 Russian census for more than 5.6 million persons (4%) ethnicity was unknown/unstated. In the previous Russian census of 2002, the number of such people was much lower: about 1.5 million persons (1%; Bogoyavlensky, 2013)

[3] On the problem of Jewish identity in general in Russia, see: Gitelman, 2012.

Table 2 Distribution of the Jewish Population in the Russian Federation, by Area, 1989-2010

Census	Total	Moscow	St. Petersburg	Provinces
Thousands				
1989[a]	570.5	177.0	106.8	286.7
2002	233.6	80.4	36.7	116.5
2010	157.8	53.4	24.2	80.2
Percent				
1989[a]	100	31	19	50
2002	100	34	16	50
2010	100	34	15	51

[a]Including Tats.
Sources: 1989 Soviet census; 2002 and 2010 Russian censuses.

Between the 1989 Soviet census and the 2002 Russian census Moscow's share of Russia's Jewish population increased from 31% to 34%, and that of St. Petersburg decreased from 19% to 16%, whereas the percentage of provincial Jewry remained unchanged (50%; Table 2). Undoubtedly, this was due to the different general propensities to emigrate of these three Jewries in this period. Most prone to emigrate were St. Petersburg Jews (Tolts, 2003). During the last intercensal period, from 2002 to 2010, the distribution of Russia's Jews by area was almost unchanged: the share of St. Petersburg Jews in the country's Jewish population slightly decreased from 16% to 15%, and that of provincial Jewry marginally increased from 50% to 51%, whereas the share of Moscow's Jews was unchanged – 34%. Therefore, we may surmise rather identical general propensities to emigrate of these three Jewries in this period. At the same time, the annual propensities to emigrate to Israel varied very sizably for these three Jewries (see below).

The proportional adjustment of the 2010 Russian census data in accordance with the estimated total number of Jews on the census date (200,000) allowed us to estimate about 67,700 Jews for Moscow and 30,600 Jews for St. Petersburg.[4] From 1989 to 2010, the estimated decrease based on these figures was more pronounced in St. Petersburg (3.5 times) than in Moscow (2.6 times).

Some post-Soviet censuses show a more dramatic decrease in the number of Jews in the capital cities of FSU countries and a sizable change in the percentage of their Jewish inhabitants among the total Jewish population. Between the 1989 Soviet census and the 2001 Ukrainian census, the number of Jews in the city of Kiev fell by 5.6 times, and their share in that country's Jewish population decreased from 21% to 17%. In the Belarusian capital Minsk the decrease of the Jewish population over the longer period of two decades was more pronounced – by 7.5 times; however, the share of Minsk's Jews increased from 35% in 1989 to 40% in 2009 (Table 3).

In the Baltic States a great majority of Jews continue to be capital dwellers; however, their share in the total Jewish population decreased steadily in the post-Soviet period. The same is true of Jews in Azerbaijan and Kirgizstan. At the same time, between 1989 and 2009 in Azerbaijan the share of capital dwellers sizably decreased from 80% to 67%, whereas in Kirgizstan this share remained more than 80%. According to the most recent data from Astana, the new capital of Kazakhstan, there were only about 200 Jews (5% of the total Jewish population in the country). In

[4] For the results of the adjustment of the 2002 Russian census data, see: Tolts, 2004.

2009 the most sizable number of Jews was in the city of Almaty, the former capital of Kazakhstan – 1,500 (42%).

Table 3 Jews in Capital Cities of Some FSU Countries, 1989-2009/2011

Capital (country) and year	Number, thousands	Percent of total number of Jews in the country
Kiev (Ukraine)		
1989	100.6	21
2001	18.0	17
Minsk (Belarus)		
1989	39.0	35
1999	10.1	36.5
2009	5.2	40
Tallinn (Estonia)		
1989	3.6	78
2000	1.6	74
2011	1.5	74
Riga (Latvia)		
1989	18.8	82
2000	8.25	79
2011	4.8	75
Vilnius (Lithuania)		
1989	9.1	74
2001	2.8	69
2011	2.0	66
Chisinau (Moldova)		
1989	35.5	54
2004	2.6	...
Baku (Azerbaijan)		
1989[a]	32.1	80
2009	6.1	67
Tbilisi (Georgia)		
1989	13.5	54
2002	2.3	...
Astana (Kazakhstan)		
1989	0.5	3
1999	0.2	3
2009	0.2	5
Almaty (Kazakhstan)		
1989	7.1	38
1999	2.8	42
2009	1.5	42
Bishkek (Kirgizstan)		
1989	5.2	86
1999	1.3	82
2009	0.5	82

[a]Including Tats.

Sources: 1989 Soviet census; Post-Soviet censuses.

Conceptually, all the analyzed numbers above correspond to what has been defined in Jewish demography as the "core" Jewish population which is the aggregate of all those who, when asked, identify themselves as Jews or, in the case of children, are identified as such by their parents; it does not include persons of Jewish origin who report another ethnicity in the census (DellaPergola, 2002). Jewish demography also employs another definition of Jewish population based on household data that can be empirically measured from existing statistics. This approach measures the "enlarged" Jewish population, which includes "core" Jews as well as all their household members. However, even the "enlarged" Jewish population is much smaller than the total population entitled to immigration to Israel (*aliyah*) in accordance with the Law of Return, which includes Jews, children and grandchildren of Jews, and all their respective spouses. For instance, according to the most recent estimates for 2017, in the Russian Federation the "core" Jewish population numbered 176,000, the "enlarged" Jewish population – 380,000, whereas "Law of Return population" was figured at 570,000 (DellaPergola, 2018).

Fertility and aging

Data of the two post-Soviet Russian censuses provided us a good possibility to analyze recent dynamics of and differentiation in fertility for the most sizable part of the FSU Jewish population. The fertility of the Jews in Russia has for a long time been too low to ensure replacement. Total Jewish fertility in the Russian Federation has not exceeded 1.6 children per woman in all the cohorts born since the beginning of the 20th century. Moreover, according to the data of the Soviet censuses of 1979 and 1989, since 1919 the birth cohorts of Jewish women had a very stable and low level of fertility – about 1.4 or less (Tolts, 2003). According to the data of the 1989 Soviet census, Jews had the lowest level of fertility of all ethnic groups in the Russian Federation (Harris, 1993).

Table 4 Average Number of Children Ever Born to Jewish Females in the Russian Federation, by Age, 1989-2010

Age at census date	1989	2002	2010
20-24	0.41	0.32	0.22
25-29	1.02	0.79	0.69
30-34	1.30	1.07	1.14
35-39	1.40	1.34	1.34
40-44	1.33	1.45	1.39
45-49	1.33	1.40	1.43

Sources: 1989 Soviet census; 2002 and 2010 Russian censuses.

According to the 2002 Russian census, Jewish fertility has declined further among females under age 40. According to the 2010 Russian census, Jewish fertility has recently declined even further among females under age 30. Both post-Soviet censuses show that in the Russian Federation Jewish fertility of the cohorts that had reached the upper limit of their fertile period (aged 45-49) was only about 1.4 children per woman (Table 4). Thus, the recent data clearly show that the vital crisis among Russia's Jewry is continuing, and that the Jews are preserving their characteristic as the ethnic group with the lowest level of fertility in the Russian Federation (Bogoyavlensky, 2014).

According to the 2010 Russian census, there were very sizable differentiations in the level of Jewish fertility by area. For example, the average number of children ever born to Jewish females aged 20-24 years old in Moscow (0.27) was three times that in St. Petersburg (0.09). Under age 40 this indicator was the highest among Jewish females in Moscow, whereas in the older ages it was the highest among those in the Russian provinces. The average number of children ever born to Jewish females was the lowest in all ages among Jewish females in St. Petersburg where it was only 1.22 among Jewish females aged 45-49 years old, whereas in the Russian provinces this indicator was 1.50 (Table 5). Moreover, comparison of the data of the 2002 and 2010 Russian censuses shows that the level of Jewish fertility in St. Petersburg fell during the last intercensal period in all ages (Cf. Tolts, 2005; Table 5).

Table 5 Average Number of Children Ever Born to Jewish Females in Moscow, St. Petersburg and the Russian Provinces, by Age, 2010

Age at census date	Moscow	St. Petersburg	Provinces
20-24	0.27	0.09	0.22
25-29	0.75	0.49	0.71
30-34	1.20	0.80	1.17
35-39	1.38	1.15	1.36
40-44	1.38	1.19	1.44
45-49	1.39	1.22	1.50

Source: 2010 Russian census.

Since the Second World War the Jewish population of the FSU aged substantially, a fact which is linked to the low fertility level (Tolts, 2003). For Jews in 1959 the median age was 41.2 years in Russia and 39.3 years in Ukraine. But, according to the 1989 census, the median age of the Jewish population was older than 52 years in the Russian Federation and only slightly younger in Ukraine. The mass emigration of the 1990s has accelerated this process. In 2002, the median age of the Jews in the Russian Federation reached 57.5 years and according to partial data it was in 2001 about the same in Ukraine. By 1999 in Belarus the median age had increased dramatically: by more than nine years over the previous decade (Table 6).

In the following decade the process of aging among FSU Jewry continued. According to the most recent data the median age of the Jews in Belarus reached 61.2 years which was higher by about one year than that of Russia's Jews, which had reached 60.3 years. In all other FSU countries except Azerbaijan this indicator had also increased sizably since 1989. By 2011, the median age of the Jews in the Baltic States had become very similar: 57-58 years despite the fact that, according to the 1989 census, it had been quite different: 43.4 years in Lithuania, 47.1 years in Latvia and 48.7 years in Estonia.

Table 6 Jews in Some FSU Countries, by Age Group, 1989-2009/2011, %

Country and year	All ages	0-14	15-29	30-44	45-64	65+	Median age
Russian Federation							
1989	100.0	8.4	11.4	19.5	33.8	26.9	52.3
2002	100.0	4.9	10.7	14.2	33.6	36.6	57.5
2010	100.0	5.2	10.0	13.7	31.5	39.6	60.3
Ukraine							
1989	100.0	9.7	12.0	19.8	33.2	25.3	51.6
2001[a]	100.0	5.8	10.5	14.0	34.6	35.1	58.0
Belarus							
1989	100.0	12.5	13.7	21.8	31.8	20.2	47.0
1999	100.0	5.2	8.8	15.5	37.9	32.6	56.3
2009	100.0	3.9	7.6	11.1	37.8	39.6	61.2
Estonia							
1989	100.0	11.3	11.7	23.0	31.4	22.6	48.7
2011	100.0	8.6	11.2	16.7	30.3	33.2	56.5
Latvia							
1989	100.0	12.4	12.7	22.8	28.8	23.3	47.1
2011	100.0	8.5	11.6	14.7	31.9	33.3	57.4
Lithuania							
1989	100.0	15.1	13.7	24.0	26.1	21.1	43.4
2011	100.0	10.7[b]	8.0[c]	19.3[(d)]	34.4[e]	27.6[f]	57.8
Azerbaijan							
1989[(g)]	100.0	23.2	21.6	20.2	23.1	11.9	33.2
2009	100.0	18.9	24.7	18.9	24.5	13.0	35.7
Kazakhstan,							
1999	100.0	17.6[b]	9.9[c]	24.0[d]	31.1[e]	17.4[f]	49.0
2009	100.0	15.0[b]	13.0[c]	23.7[d]	29.5[e]	18.8[f]	48.6

[a]According to the data for Kiev city, Dnepropetrovsk, Kharkov and Odessa Regions, and Crimea including Sevastopol.
[b]0-19.
[c]20-29.
[d]30-49.
[e]50-69.
[f]70+.
[g]Including Tats in Baku city.
Sources: 1989 Soviet census; Post-Soviet censuses.

The dynamics of the Jewish age structure in Azerbaijan present a special case. According to the Soviet 1989 census, this structure was rather young, with the median age being 33.2 years. In the late Soviet period, the Azerbaijani Jewish population comprised both Ashkenazi and Mountain Jews (Tolts, 2013), but we may surmise that in the post-Soviet period Ashkenazi Jews were more prone to emigration from Azerbaijan. As a result, Mountain Jews became the great majority of the Jewish population of this country. In fact, the last Azerbaijani census of 2009 shows that the great majority of Jews (93.5%) in that country consider the language of their ethnic group to be their native language and only a small minority of these Jews (19.3%)

speak Russian fluently. This language characteristic of the contemporary Azerbaijani Jewish population is very different from the language proficiency of Ashkenazi Jews in the FSU (Tolts, 1999). Thus, due inter alia to the recent selective mass emigration, according to the 2009 census of Azerbaijan, the median age of Jews was only 35.7 years. Unfortunately, we have no data on the age structure of Jews from the 1989 Soviet census for Kazakhstan, and the post-Soviet censuses for this country presented data on the age of Jews only by ten-year groups. Therefore, only very rough estimates of the median age could be computed; based on these data we arrived at about the same results for both post-Soviet censuses – approximately 49 years.

According to the most recent data, the share of those younger than 15 years was highest among Azerbaijani Jews (19%) and lowest among Belarusian Jews (4%). In Belarus, the share of those aged 65 and over grew the fastest: from 20% in 1989 to 33% in 1999, and by 2009 it was almost 40%.

Also in Russia, according to the 2010 census there, about 40% of the Jews were aged 65 and above. Between 1989 and 2002 in the Russian Federation, the percentages of all age groups under 65 decreased. However, in the next intercensal period the share of those younger than 15 years increased slightly. These dynamics depend on dissimilar changes in different areas of Russia which may analyzed separately for the Jews of Moscow, St. Petersburg and the provinces outside these cities.

According to the 1989 Soviet census, the Jewish populations of Moscow and St. Petersburg were older than those of the provinces. The median ages of the Jews in Moscow (53.8) and St. Petersburg (53.7) were about the same, but this indicator for provincial Jewry (50.7) was lower by about 3 years (Table 7).

Table 7 Jews in Moscow, St. Petersburg and the Russian Provinces, by Age Group, 1989-2010, %

Area and year	All ages	0-14	15-29	30-44	45-64	65+	Median age
Moscow							
1989	100.0	7.6	10.6	18.1	24.1[a]	39.6[b]	53.8
2002	100.0	5.1	11.3	15.9	31.7	36.0	56.9
2010	100.0	6.3	10.5	15.5	28.9	38.8	59.0
St. Petersburg							
1989	100.0	7.2	10.7	18.4	25.1[a]	38.6[b]	53.7
2002	100.0	3.4	8.6	11.7	33.8	42.5	62.6
2010	100.0	3.4	8.0	12.2	30.2	46.2	63.6
Provinces							
1989	100.0	9.4	12.0	21.1	24.0[a]	33.5[b]	50.7
2002	100.0	5.2	11.1	13.7	34.8	35.2	57.3
2010	100.0	5.1	10.3	13.0	33.5	38.1	59.9

[a]45-59.
[b]60+.
Sources: 1989 Soviet census; 2002 and 2010 Russian censuses.

According to the 2002 Russian census, the Jewish population of St. Petersburg had aged more than that of Moscow. In the intercensal period the median age of Moscow Jews increased only by 3.1 years, whereas that of St. Petersburg Jews – by 8.9 years. The median ages of Moscow Jews and St. Petersburg Jews reached 56.9 and 62.6

years, respectively. This indicator for provincial Jewry increased to 57.3 years. As a consequence, the difference in the median ages of the Jewish populations in the two Russian capitals reached 5.7 years, whereas this difference between Moscow Jews and provincial Jewry narrowed to 0.4 years. This was due to the different general propensities to emigrate of these three Jewries in this period. Most prone to emigrate were St. Petersburg's Jews (see above).

According to the 2010 Russian census, the median ages of Moscow Jews and St. Petersburg Jews reached 59.0 and 63.6 years, respectively. This indicator for provincial Jewry increased to 59.9 years. There was no huge differentiation in their increase in the last intercensal period as there had been in the previous one. This finding coincided with the almost identical general propensities to emigrate of these three Jewries in this period which were noted above.

Between the 1989 Soviet census and the 2002 Russian census, the percentages of those younger than 15 years sizably decreased for all three groups of Russia's Jews. However, during the next intercensal period this indicator was almost unchanged for St. Petersburg Jews and provincial Jewry, but it actually increased for Moscow's Jews, causing the growth in Russia's Jewish population as a whole as noted above. According to the most recent data, the share of those younger than 15 years was the highest among Moscow Jews (6.3%) and the lowest among St. Petersburg Jews (3.4%). This coincides with our finding that the level of fertility was highest among Jewish females under age 40 in Moscow (Table 5). We may surmise that the increased presence of non-Ashkenazi Jewish groups in the Russian capital led to the growth found there.

According to the 2010 Russian census, the share of those aged 65 and above reached a high of 46% among St. Petersburg Jews and even among provincial Jewry it was 38% (Table 7). Clearly, the contemporary very aged "core" Jewish population in Russia could not produce large-scale emigration which, despite this, increased again considerably after 2008 (see below).

Table 8 Entire Urban Population of the Russian Federation and Emigrants from this Country to Israel, by Age Group, 1989/1990-2010, %

Years	All ages	0-14	15-29	30-44	45-64	65+	Median age
Entire urban population of the Russian Federation[a]							
1989	100.0	22.4	22.8	23.3	22.7	8.8	32.7
2010	100.0	14.3	23.3	21.8	28.1	12.5	37.9
Emigrants from the Russian Federation to Israel[b]							
1990-2001	100.0	20.9	25.0	23.1	19.9	11.1	32.4
2010	100.0	12.5	26.0	20.7	25.8	15.0	38.0

[a]Rosstat data.
[b]Israel CBS data.
Sources: As noted above.

The data show that the age structure of emigrants from the Russian Federation to Israel rather resembled that of the entire urban population of the sending country (Table 8). For example, in 2010 the median age was about 38 years for the two groups; that is, it was lower by more than 22 years than that of the "core" Jewish population in Russia (cf. Tables 6 and 8). This corresponds to the fact that in 2009 only 43% of the newcomers from Russia were registered as Jews by Israeli statistics

in accordance with Jewish religious law (*Halakhah*), whereas in Rosstat statistics the share of Jews, which shows practically only those who belong to the "core" Jewish population, since 2001 was even smaller – 25% and lower (Tolts, 2014).

Migratory movements

Since 1989 mass emigration, to Israel in particular, has played a decisive role in the fate of the Jews in the FSU. During the first ten years of the mass emigration, from 1989 to 1998, the number of Jews and their relatives who emigrated from the FSU to Israel reached about 770,000. For the same ten-year period the number of Jews and their relatives who emigrated to the USA may be estimated at approximately 290,000. The number of Jews and their relatives who emigrated to Germany was lower – about 115,000 (Tolts, 2003).

During the next period, from 1999 to 2016, the number of Jews and their relatives who emigrated from the FSU to Israel continued to be the most sizable – 297,700. In this period, the number of Jews and their relatives who emigrated to the USA is estimated at about 38,000 (including those who were not assisted by HIAS), while the number emigrated to Germany was 113,500.

Table 9 Emigration of Jews and Their Relatives from the FSU to Israel, Germany and the USA, 1998-2016, Thousands

Year	Israel	Germany	USA[a]
1998	46.0	17.8	7.4
1999	66.8	18.2	6.3
2000	50.8	16.5	5.9
2001	33.6	16.7	4.1
2002	18.5	19.3	2.5
2003	12.4	15.4	1.6
2004	10.1	11.2	1.1
2005	9.4	6.0	0.9
2006	7.5	1.1	0.6
2007	6.5	2.5	0.3
2008	5.6	1.4	0.2
2009	6.8	1.1	0.2
2010	7.0	1.0	0.2
2011	7.2	1.0	0.1
2012	7.2	0.5	0.1
2013	7.3	0.25	0.15
2014	11.6	0.2	0.2
2015	14.7	0.4	...
2016	14.4	0.7	...

[a]Immigrants who were assisted by the Hebrew Immigrant Aid Society (HIAS).
Sources: Israel CBS data; HIAS data; and the German Federal Office for Migration and Refugees (BAMF) data.

After September 11, 2001, the USA ceased to be a major destination for ex-Soviet Jewish emigrants as immigration rules became much more stringent. From 2002 to 2004 more emigrants went to Germany than to Israel, and Germany, which had in the beginning of the 1990s introduced a special program for Jewish immigration from the FSU temporarily became the first-ranking receiving country. After 2005, when

Germany's admission policy became much more restrictive, the number of Jews and their relatives who emigrated to Germany dropped dramatically, and Israel again became the first-ranking receiving country for ex-Soviet Jewish emigration (Table 9). Israel keeps its borders open unselectively to Jewish immigration in accordance with the Law of Return.

Emigration of Jews and their relatives from the FSU to Israel reached its first low level in 1998. However, in 1999, the total number of FSU emigrants to Israel again temporarily increased after the Russian financial crash of the previous year. Naturally, the number of emigrants with the most noticeable increase was from the Russian Federation, and this more than doubled. At the same time, we note that in 1999 emigration to Israel increased also from other parts of the FSU due to the continued dependence on the Russian economy (Table 10).

Table 10 Emigration to Israel from the FSU, by Country/Region, 1998-2016, Thousands

Year	Russian Federation	Ukraine	Other FSU countries in Europe[a]	All FSU countries in Asia[b]
1998	14.4	20.1	4.4	7.1
1999	31.1	23.2	4.8	7.7
2000	18.8	20.3	5.1	6.6
2001	10.9	14.1	3.6	5.0
2002	6.5	6.6	1.9	3.5
2003	4.8	3.9	1.2	2.5
2004	4.0	3.0	1.0	2.1
2005	4.2	2.3	1.1	1.8
2006	3.6	1.8	0.8	1.3
2007	3.2	1.5	0.6	1.2
2008	2.6	1.3	0.6	1.1
2009	3.2	1.6	0.8	1.2
2010	3.4	1.8	0.7	1.1
2011	3.7	2.0	0.6	0.9
2012	3.5	2.0	0.7	1.0
2013	4.0	1.9	0.6	0.8
2014	4.6	5.7	0.6	0.7
2015	6.6	6.9	0.6	0.6
2016	7.0	5.8	0.9	0.7

[a]Baltic States, Belarus and Moldova.
[b]Armenia, Azerbaijan, Georgia, Kazakhstan, Kirgizstan, Tadzhikistan, Turkmenistan and Uzbekistan.
Source: Israel CBS data.

Since 2000 sizable economic growth has resumed in the FSU countries and emigration to Israel has decreased rather steadily. In 2009, a severe world economic crisis affected all FSU countries; however its impact on the Israeli economy was much more moderate. In 2009 the real gross domestic product fell by 6.9% in all eleven FSU countries that are members of the Commonwealth of Independent States

(CIS).[5] This decrease was even more pronounced in the principal country of concentration of Jews still in the FSU – the Russian Federation – where it was 7.8% (Interstate Statistical Committee of the CIS, 2016). In striking contrast, Israel's real gross domestic product increased in 2009 by 0.8% (Israel CBS, 2010). The earlier decrease of emigration from the FSU to Israel was reversed, and the number of migrants increased in 2009 by 21% from FSU countries as a whole and by 25% from the Russian Federation alone. In this year emigration to Israel also increased from other parts of the FSU.

The number of emigrants from the Russian Federation to Israel continued its rather steady increase from 2010 to 2014. This smooth development was dramatically accelerated when Russia experienced again a collapse of the ruble and was pushed into a deep recession mainly by a steep drop in oil prices. By the end of 2015 the Russian economy had contracted for six consecutive quarters, which led to a cumulative decline in real gross domestic product of about 5% since June 2014 (World Bank in the Russian Federation, 2016). As a consequence, the number of emigrants from the Russian Federation to Israel grew sizably in 2015 – by 44%, and it was 2.5 times higher than it had been in 2008.

Even more dramatic was the growth of recent emigration from Ukraine to Israel. The Ukrainian economy contracted by 6.6% in 2014 and almost 10% in 2015 due to unprecedented shocks from the conflict in Donbas and lower global commodity prices (World Bank, 2016). In 2014, the year of civil unrest and the start of war activity in Donbas, the number of emigrants from Ukraine to Israel jumped by 3 times, and this increase continued into the following year.

Our analysis clearly shows the decisive role of the "push" factor in migration movements from the FSU countries to Israel. These findings coincide with the generally decisive role of the push factor in world Jewish migration (DellaPergola, 2009). At the same time, the former synchronicity of emigration from the Russian Federation and other parts of the FSU to Israel disappeared. In the period when emigration from Russia and Ukraine dramatically increased, that from other parts of the FSU fell to the lowest numbers. As a result, in 2015, 92% of all FSU emigrants to Israel were from Russia and Ukraine, whereas in 1998 the share of these two countries in the emigration was only 75%.

The data show that the share of migrants to Israel from St. Petersburg among the total number of emigrants from the Russian Federation peaked in 1990 (31.7%), and from Moscow in 1991 (31.6%; Tolts, 2016). By 1998 this share had fallen to 5.0% for each city (Table 11). Consequently in the same period, the percentage of emigrants from outside Moscow and St. Petersburg (provincial Jewry) increased steadily until 1998. In 1990-1991, this share was about half and by 1998 it was as high as 90% – much more than the percentage of these Jews among all of Russian Jewry (only one half; cf. Table 2).

However, in the second half of the last decade the trend reversed. By 2009, Moscow's share in the migration movement from the Russian Federation to Israel increased to 22.0%, and St. Petersburg's share – to 10.8% (Table 11). The sizable increase in the share of the two capital cities as a whole and from Moscow in particular in the migration from the Russian Federation to Israel in this period coincided with the dramatic decrease in the possibility of emigration to the Western countries, especially to Germany (see above). Thus, we may surmise that the former

[5] These data do not include the Baltic States and Georgia which are not CIS-members.

was caused by the latter. Nevertheless, the great majority (67.2%) of emigrants to Israel from Russia continue to originate from the Russian provinces, despite the fact that according to the data of the 2010 Russian census only half of the country's Jewish population lived outside Moscow and St. Petersburg (cf. Table 2).

Table 11 Emigration from the Russian Federation to Israel, by Area, 1998-2016, %

Year	Total	Moscow	St. Petersburg	Provinces
1998	100.0	5.0	5.0	90.0
1999	100.0	7.8	7.9	84.3
2000	100.0	8.3	7.3	84.4
2001	100.0	7.8	7.1	85.1
2002	100.0	6.9	6.5	86.6
2003	100.0	8.0	6.8	85.2
2004	100.0	8.4	7.6	84.0
2005	100.0	10.9	8.4	80.7
2006	100.0	12.5	9.0	78.5
2007	100.0	18.0	8.2	73.8
2008	100.0	20.3	9.3	70.4
2009	100.0	22.0	10.8	67.2
2010	100.0	22.0	9.1	68.9
2011	100.0	29.8	10.3	59.9
2012	100.0	30.9	9.5	59.6
2013	100.0	39.2	12.1	48.7
2014	100.0	48.1	11.7	40.2
2015	100.0	57.5	10.9	31.6
2016	100.0	47.3	15.1	37.6

Sources: Rosstat data for 1998; and data on Jewish Agency assisted flights of migrants to Israel for 1999-2016.

By 2013, Moscow's share in the migration movement from the Russian Federation to Israel had increased more – to 39.2%, and now it actually exceeded the percentage of Jews who lived in the capital city – about one-third (34%). In the same year St. Petersburg's share in the emigration reached a new maximum 12.1%, which was, however, lower than their share in Russia's Jewish population – 15% (cf. Tables 2 and 11). Accordingly, the percentage of emigrants from outside Moscow and St. Petersburg fell to one half. In 2015, with the onset of a new economic recession, Moscow's share jumped to an unprecedented 57.5%, whereas that of St. Petersburg fell slightly to 10.9%. The percentage of the Jews from outside Moscow and St. Petersburg fell to less than one-third (31.6%). Thus, we may conclude that the response of Moscow's Jews to the economic recession was the most dramatic.

Of course, there was some returning migration from Israel to the FSU countries. The largest FSU return migration flow has been to the Russian Federation (Tolts, 2016). The respective statistics of Rosstat are based on the neighborhood passport office registration of immigrants who resumed residence status in Russia.[6] In 2003, in a period of recession in the Israeli economy, the registered number of immigrants to Russia from Israel reached its maximum to date – about 1,800. If we compare these

[6] These data include also some people who previously emigrated to Israel from other parts of the FSU.

immigrants with emigrants to Israel of the same year we see that the ratio between the two movements is 37 percent. By 2011, the comparable number of immigrants fell to 646. However, in this year Rosstat started to employ new, much more inclusive criteria for counting migrants (Chudinovskikh, 2014). According to these criteria, in 2011 Rosstat counted 1.9 times more immigrants from Israel – 1,239. Thus, in 2011, even based on the new, much more inclusive criteria, the number of these immigrants was far from the maximum of 2003 registered according to the pre-2011 criteria (Table 12).

Table 12. Comparison of Immigration from Israel with Emigration to Israel, Russian Federation, 1998-2016, Thousands

Year	Immigration from Israel[a]		Emigration to Israel [b]	Immigration as % of emigration
	Registered according to pre-2011 criteria	Registered according to 2011 criteria		
1998	1.5		14.4	11
1999	1.4		31.1	5
2000	1.5		18.8	8
2001	1.4		10.9	13
2002	1.7		6.5	26
2003	1.8		4.8	37
2004	1.5		4.0	37
2005	1.0		4.2	24
2006	1.05		3.6	29
2007	1.1		3.2	34
2008	1.0		2.6	38
2009	0.9		3.2	27
2010	0.8		3.4	24
2011	0.65	1.2	3.7	18[d]
2012	0.6[c]	1.1	3.5	16[d]
2013	0.6[c]	1.1	4.0	15[d]
2014	0.6[c]	1.1	4.6	13[d]
2015	0.6[c]	1.1	6.6	8[d]
2016	0.5[c]	0.9	7.0	7[d]

(a) According to Rosstat data; on criteria of registration, see text.
(b) According to Israel CBS data.
(c) Author's estimate.
(d) Computed based on author's estimate for immigration from Israel according to pre-2011 criteria.
Sources: As noted above for respective indicator.

According to the 2011 criteria, by 2016 the registered number of immigrants to Russia from Israel fell to the lowest figure – 900. Based on the pre-2011 criteria the respective number of these immigrants may be estimated at about 500 and the ratio between the two movements was 7 percent; that is, it was at one of its lowest level.

In any interpretation of the above-cited indicators, we must remember that many people who immigrate from Israel to the Russian Federation in any given year emigrated to Israel in a different year. However, the length of time between the dates

of their arrival and departure is unknown and, indeed, varies from one individual to the next.

Concluding remarks

At the start of the recent mass emigration (1989) the Jewish population of the Russian Federation was the 2nd largest Jewish community in the Diaspora, and Ukrainian Jewry was in the 4th place. Today the Jewish population of the Russian Federation ranks 6th in the Diaspora, and Ukrainian Jewry is number 11 (DellaPergola 2018). Results of the recent censuses of the FSU countries clearly demonstrated that Jewish demographic decline has transpired rather quickly in most of them. Our analysis shows that aging reached a very advanced level among all post-Soviet Jews, with the exception of those in Azerbaijan. Especially high indicators of aging were found in Belarus and St. Petersburg. Based on the data of Russian censuses we also found that low fertility persisted among the Jewish population. Germany and the USA ceased to be a major destination for ex-Soviet Jewish emigration as immigration rules became more stringent in these countries. At the same time, a severe economic crisis led to a great increase in emigration from Russia and Ukraine to Israel in recent years, whereas return migration, as seen in Russian data, reached its lowest level.

References

Bogoyavlensky, D. D. (2013). Etnicheskii sostav naseleniia i vladenie aizykami [Ethnic Composition of the Population and Language Proficiency]. In A. G. Vishnevsky (Ed.), *Naselenie Rossii 2010-2011* [Population of Russia 2010-2011]. Moscow: Institute of Demography, pp. 93–143.

Bogoyavlensky, D. D. (2014). Etnicheskaia differentsiaisia rozhdaemosti v Rossii [Ethnic Differentiation of Fertility in Russia]. In A. G. Vishnevsky (Ed.), *Naselenie Rossii 2012* [Population of Russia 2012]. Moscow: Institute of Demography, pp. 174–188.

Chudinovskikh, O. (2014). Use of administrative data sources to measure migration in Russia. Working paper prepared for Conference of European Statisticians. Work Session on Migration Statistics. Chisinau, 10-12 September 2014. Available at: https://www.unece.org/fileadmin/DAM/stats/documents/ece/ces/ge.10/2014/mtg1/WP_11_Olga_MSU.pdf. Accessed November 2, 2017.

Cisstat Database. (2016). Interstate Statistical Committee of the CIS. http://www.cisstat.com/eng/index.htm. Accessed November 2, 2017.

DellaPergola, S. (2002). Demography. In M. Goodman (Ed.), *The Oxford Handbook of Jewish Studies*. Oxford: Oxford University Press, pp. 797–823.

DellaPergola, S. (2009). International Migration of Jews. In E. Ben-Rafael & Y. Sternberg, (Eds.), *Transnationalism: Diasporas and the Advent of a New (Dis) Order*. Leiden and Boston, MA: Brill, pp. 213–236.

DellaPergola, S. (2018). World Jewish Population, 2017. Forthcoming in A. Dashefsky & I. Sheskin (Eds.), *American Jewish Year Book 2017*. New York: Springer.

Gitelman, Z. (2012). *Jewish Identity in Postcommunist Russia and Ukraine*. Cambridge, MA: Cambridge University Press.

Harris, Ch. D. (1993). A Geographic Analysis of Non-Russian Minorities in Russia and Its Ethnic Homelands. *Post-Soviet Geography*, Vol. 34, No. 9, pp. 543–597.

Interstate Statistical Committee of the CIS. (1996). *1989 USSR Population Census*. CD-ROM edition. Minneapolis, MN: East View Publications.

Interstate Statistical Committee of the CIS. (2006). *Results of Population Censuses in the Countries of the Commonwealth of Independent States (2000 Round): Statistical Abstract*. Moscow: Interstate Statistical Committee of the CIS.

Israel CBS. (Various years). *Immigration to Israel*. Jerusalem: Central Bureau of Statistics.

Israel CBS. (Yearly). *Statistical Abstract of Israel*. Jerusalem: Central Bureau of Statistics.

Kupovetsky, M. (2005). K otsenke chislennosti evreev i demograficheskogo potentsiala evreiskoi obshchiny v SSSR i postsovetskikh gosudarstvakh v 1989-2003 gg. [An Estimate of the Number of Jews and Demographic Potential of the Jewish Community in the Soviet Union and Post-Soviet States for 1989-2003]. In M. Chlenov (Ed.), *Evroaziatskii evreiskii ezhegodnik 5765* [Euro-Asian Jewish Year Book 5765]. Kiev: Dukh i Litera, pp. 78–91.

Tolts, M. (1999). Yiddish in the Former Soviet Union Since 1989: A Statistical-Demographic Analysis. In G. Estraikh & M. Krutikov (Eds.), *Yiddish in the Contemporary World*. Oxford, UK: Legenda, pp. 133–146.

Tolts, M. (2003). Demography of the Jews in the Former Soviet Union: Yesterday and Today. In Z. Gitelman with M. Glants & M.I. Goldman (Eds.), *Jewish Life After the USSR*. Bloomington, IN: Indiana University Press, pp. 173–206.

Tolts, M. (2004). The Post-Soviet Jewish Population in Russia and the World. *Jews in Russia and Eastern Europe*, No. 52 (1), pp. 37–63.

Tolts, M. (2005). Demographic Trends Among the Jews in the Three Post-Soviet Slavic Republics. Paper presented at the 14th World Congress of Jewish Studies Jerusalem, 31 July – 4 August 2005. https://www.academia.edu/5223944. Accessed November 2, 2017.

Tolts, M. (2007). Post-Soviet Jewish Demography, 1989-2004. In Z. Gitelman & Y. Ro'i (Eds.), *Revolution, Repression and Revival: The Soviet Jewish Experience*. Lanham, MD: Rowman & Littlefield, pp. 283–311.

Tolts, M. (2013). Demograficheskii portret evreev Azerbaidzhana, 1959-1989 [The Demographic Profile of the Jews in Azerbaidzhan, 1959-1989]. *Diaspory* [Diasporas], Vol. 14, No. 1, pp. 131–157.

Tolts, M. (2014). Sources for the Demographic Study of the Jews in the Former Soviet Union. In U. Rebhun (Ed.), *The Social Scientific Study of Jewry: Sources, Approaches, Debates* (*Studies in Contemporary Jewry*, Vol. 27). New York: Oxford University Press, pp. 160–177.

Tolts, M. (2016). Demography of the Contemporary Russian-Speaking Jewish Diaspora. In Z. Gitelman (Ed.), *The New Jewish Diaspora: Russian-Speaking Immigrants in the United States, Israel, and Germany*. New Brunswick, NJ: Rutgers University Press, pp. 23-40.

World Bank in the Russian Federation. (2016). *Russia Economic Report*. No. 35. http://www.worldbank.org/eca/pubs/rer35_ENG.pdf. Accessed November 2, 2017.

World Bank. (2016). *Ukraine Economic Update April 1, 2016*. http://pubdocs.worldbank.org/en/882014595047497 49/Ukraine-Macroeconomic-Update-April-2016-ENG.pdf. Accessed November 2, 2017.