A Half Century of Jewish Emigration from the Former Soviet Union* Mark Tolts (mtolts@huji.ac.il)

1. Introduction and Sources

Mass migration of the Jews from the former Soviet Union (FSU) has a history of about half a century. The dynamics of this emigration have been unsteady and have been characterized by successive waves which were very selective by age and sex. This emigration led to dramatic shrinkage in the size of the Jewish population remaining in the FSU, as well as resettlement of ex-Soviet Jews mainly in the three destination countries — Israel, the USA and Germany. Fortunately, population statistics of the FSU countries and migration statistics of receiving countries, especially those of Israel, contain ample appropriate data which were utilized in this study.

In my study I used 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 1970 and 1989 Soviet censuses available in the Inter-Active Supplement to *Demoscope Weekly*. Besides the special migration publications of the Israel Central Bureau of Statistics (Israel CBS 1995, 1998, 2000, 2006, 2007, 2009, 2012), I also utilized some of its unpublished data. Other sources used in the study are noted in the text.

2. Dynamics of Emigration

For many years Soviet Jews, like all other citizens of the USSR, had no real possibility to emigrate in sizable numbers, but this changed in the 1970s. Between 1970 and 1988, a total of about 291,000 Soviet Jews and their relatives emigrated from the country, the majority of whom – approximately 164,000 – came to Israel (see Table 1).

^{*} Paper prepared for the Symposium in Honor of Dr. Mark Tolts on His Retirement (The Hebrew University of Jerusalem, 27 June 2019).

Table 1 Emigration of Jews and their relatives from the FSU to three main destinations, thousands

Year	Israel	USA ^a	Germany	Year	Israel	USA ^a	Germany
1970-1978	131.3	42.9	•••	2003	12.4	1.6	15.4
1979-1988	32.8	83.8	•••	2004	10.1	1.1	11.2
1989	12.9	56 ^b	0.6	2005	9.4	0.9	6.0
1990	185.2	6.5 ^b	8.5	2006	7.5	0.6	1.1
1991	147.8	35.2	8.0	2007	6.5	0.3	2.5
1992	65.1	45.9	4.0	2008	5.6	0.2	1.4
1993	66.1	35.9	16.6	2009	6.8	0.2	1.1
1994	68.1	32.9	8.8	2010	7.0	0.2	1.0
1995	64.8	21.7	15.2	2011	7.2	0.1	1.0
1996	59.0	19.5	16.0	2012	7.2	0.1	0.5
1997	54.6	14.5	19.4	2013	7.3	0.15	0.25
1998	46.0	7.4	17.8	2014	11.6	0.2	0.2
1999	66.8	6.3	18.2	2015	14.7	•••	0.4
2000	50.8	5.9	16.5	2016	14.5	•••	0.7
2001	33.6	4.1	16.7	2017	16.2	•••	0.9
2002	18.5	2.5	19.3	1989-2017	1083.7 ^c	328 ^d	229.3

^a Data for 1970-1988 include all destinations other than Israel for those who emigrated with Israeli visas; since 1991 annual data cover only those immigrants who were assisted by the Hebrew Immigrant Aid Society (HIAS).

Sources: Altshuler 1987: 56; Florsheim 1990: 314; Tolts 2016: 24; Tolts 2018: 224 [updated].

In all these years the emigrants left the USSR with Israeli visas, and in the first half of the 1970s only 7.5% of them went to destinations other than Israel. However, in 1976-1977 about half of the total number of emigrants from the Soviet Union with Israeli visas changed their destinations, mostly for the United States. By 1979 only one-third of these emigrants were arriving in Israel. The great majority of those who left Russia, Ukraine, and Belarus in the period 1976-1988 as a whole went to the United States.

After 1989 mass emigration, to Israel in particular, played a decisive role in the fate of the Jews in the FSU. This emigration peaked in 1990-1991, the last two years of severe crisis that preceded the dissolution of the Soviet Union. The rate of this mass exodus has been even much higher than the mass Jewish emigration from the Russian Empire around the turn of the 20th century (Gitelman 1997). In 1990

^b Departures from the Soviet Union.

^c Total for 1989-2017 does not equal the sum for these years due to rounding.

^d Including migrants who were not assisted by HIAS.

Israel again became the first destination for this migration movement. Between 1989 and 2017, almost 1,084,000 (ex-) Soviet Jews and their relatives emigrated to Israel, whereas the rest went mostly to the United States and Germany. During this period the number of Jews and their relatives who emigrated from the FSU to the USA is estimated at about 328,000, while the number emigrating to Germany was about 229,000.

In the 1990s the USA introduced quotas that limited the possibility of FSU Jewish immigration to only those persons who had close relatives in the USA (Lazin 2005); nevertheless, between 1991 and 1996 the USA ranked second as a receiving country. From 1997 to 2001, more emigrants went to Germany than to the USA, and Germany, which had in the beginning of the 1990s introduced a special program for Jewish immigration from the FSU, became the second-ranking receiving country. After September 11, 2001, the USA ceased to be a major destination for FSU Jewish emigration as immigration rules had been severely tightened. From 2002 to 2004 more emigrants went to Germany than to Israel, and Germany temporarily became the first-ranking receiving country. After 2005, when Germany's admission policy became much more restrictive (see, e.g., BAMF 2009), the number of Jews and their relatives who emigrated to Germany dropped dramatically, and Israel again became the first-ranking receiving country for FSU Jewish emigration. Israel keeps its borders open unselectively to Jewish immigration in accordance with the Law of Return, enacted in 1950 by the Israeli parliament (Knesset) and amended in 1970 to include Jews, their children and grandchildren, and all respective spouses in the group of persons eligible for immigration to Israel (aliyah).

According to estimates for 1989-2001, among those who emigrated to the USA the absolute number of Ukrainian Jews and their relatives was 1.6 times higher than that from Russia; the absolute number of Ukrainian Jews and their relatives who emigrated to Germany was double the number from Russia. In consequence, among FSU emigrants to the USA, and even more so to Germany, the share of those originating in Ukraine was predominant – 41% and 56%, respectively; the share of those emigrating to these two countries from Russia was much lower – 26% and 27%, respectively. Among migrants to Germany the number of those originating in

Transcaucasia and Central Asia was very low and about equal to that of the Baltic States, despite the tremendous discrepancy in the sizes of the Jewish populations in these regions at the start of this migration (see Table 2).

Table 2 Emigration of Jews and their relatives from the FSU, by country (region), thousands

Country	Total,	To the USA,	To Germany,	To Israel,	To Israel,
(region)	1970-1988	1989-2001 ^a	1989-2001 ^a	1989-2001	2002-2017
Russia	50.4	81.1	45.0	291.2	72.3
Ukraine	106.7	128.5	92.7	299.7	55.3
Belarus	13.8	34.4	6.1	70.4	8.0
Baltic States	27.3	8.0	7.2	21.2	1.7
Moldova	29.4	15.7	8.1	48.3	4.0
Transcaucasia	41.5	10.8	2.2	56.5	8.0
Central Asia	21.7	35.5	5.0	114.7	13.2
Unknown	0.0	0.0	0.0	19.1	0.1
Total	290.8	314.0	166.3	921.1	162.6

^a Estimate for country (region) is based on the known distribution of emigrants which was adjusted for the total number for the FSU in this period.

Sources: Altshuler 1987: 62; Florsheim 1990: 314; Tolts 2016: 26 [updated]; Appendix of this paper.

During the years of mass migration to all three main receiving destinations (1989-2001), Israel was the predominant receiver from each sending country (region). Among FSU emigrants to Israel the shares of those who originated in Ukraine and Russia were about the same – 33% and 32%, respectively. Jews and their relatives from Transcaucasia and Central Asia were especially inclined to migrate to Israel. The share of migrants from Central Asia among newcomers from the FSU in this country ranked third – 12.5%. During 1989-2001, the recorded number of immigrants to Israel alone from each region (except the Baltic States) was higher than the entire emigration over the previous nineteen years (1970-1988) for that region. In the following period, 2002-2017, the shares of all countries (regions) other than Russia and Ukraine in FSU migration to Israel decreased sizably.

In 1970-1988, more migrants from Ukraine arrived in Israel than from Russia. However, the situation changed in the following period. Analysis of annual figures shows that in 1991-1994, 1999 and since 2003, except 2014-2015, the number of migrants from Russia to Israel exceeded that from Ukraine, and during the entire

period 1989-2017 more migrants arrived in Israel from Russia than from Ukraine: 33.5% and 32.6% of all FSU migrants, respectively (see Table 3).

Table 3 Emigration from FSU Slavic countries to Israel, thousands

Year	Russia	Ukraine	Belarus	Year	Russia	Ukraine	Belarus
1970-1975 ^a	11.8	34.9	2.0	2003	4.8	3.9	0.7
1976-1988	9.8	12.8	2.5	2004	4.0	3.1	0.5
1989	3.3	3.6	1.1	2005	4.2	2.3	0.6
1990	45.5	58.9	23.4	2006	3.6	1.8	0.5
1991	47.3	39.8	16.0	2007	3.3	1.5	0.4
1992	24.8	13.1	3.3	2008	2.6	1.3	0.3
1993	23.1	12.8	2.3	2009	3.2	1.6	0.4
1994	24.6	22.7	2.9	2010	3.4	1.8	0.3
1995	15.7	23.6	4.2	2011	3.7	2.1	0.3
1996	16.5	23.4	4.4	2012	3.5	2.0	0.4
1997	15.3	24.1	3.4	2013	4.0	1.9	0.3
1998	14.5	20.1	2.3	2014	4.6	5.7	0.3
1999	31.1	23.2	2.7	2015	6.6	6.9	0.3
2000	18.8	20.2	2.6	2016	7.0	5.8	0.6
2001	10.9	14.1	2.0	2017	7.1	7.0	1.0
2002	6.5	6.6	1.0	1989-2017	363.5	355.0 ^b	78.4 ^b

^a All emigrants who left with Israeli visas; 7.5% of the total number of emigrants from the Soviet Union with Israeli visas went to destinations other than Israel in this period. ^b Total for 1989-2017 does not equal the sum for these years due to rounding. *Sources:* Tolts 2008: 1438; Appendix of this paper.

Emigration of Jews and their relatives from the FSU to Israel reached its first low level in 1998 (see Table 1). 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 Russia, and this more than doubled (see Table 3). At the same time, in 1999 emigration to Israel increased from other parts of the FSU as well, due to the continued dependence on the Russian economy (see Appendix).

Since 2000, sizable economic growth has resumed in the FSU countries and emigration to Israel has decreased rather steadily. In 2009, a severe world-wide economic crisis affected all FSU countries. This crisis was even more pronounced in Russia, which had the highest concentration of Jews still in the FSU. However, its impact on the Israeli economy was much more moderate. The decrease in emigration from the FSU to Israel reversed itself in 2009, and the number of migrants increased by 21% from FSU countries as a whole and by 25% from Russia alone (see Tables 1

and 3). In this year emigration to Israel also increased from other parts of the FSU (see Appendix).

The number of emigrants from Russia to Israel rose rather steadily from 2010 to 2014. This smooth development was dramatically accelerated when Russia again experienced a collapse of the ruble and was pushed into a deep recession caused mainly by a steep drop in oil prices in the last year of the period. As a consequence, the number of emigrants from Russia to Israel grew sizably in 2015 – by 44%, and it was 2.5 times higher than it had been in 2008.

Even more dramatic has been the growth of recent emigration from Ukraine to Israel. The Ukrainian economy contracted in 2014 and 2015 due to unprecedented shocks from the conflict in Donbas and also because of a fall in global commodity prices. 2014 was a 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.

At the same time, the former synchronicity of emigration from Russia and other parts of the FSU to Israel disappeared. When emigration from Russia and Ukraine dramatically increased, that from other parts of the FSU fell to its lowest numbers (see Appendix). As a result, in 2015, 92% of all FSU emigrants to Israel were from Russia and Ukraine, whereas in 1990 the share of emigration from these two countries was only 56%. Emigration from the third Slavic country – Belarus – started its new increase only in 2016 when it doubled, and in 2017 it was three times higher than the annual figures for 2014-2015.

According to the results of the 1989 Soviet census, 31% of the Jews in Russia lived in Moscow, 19% in St Petersburg, and half in the provinces (see below). The data show that the share of migrants to Israel from St. Petersburg among the total number of emigrants from Russia peaked in 1990 (31.7%), and from Moscow in 1991 (31.6%). By 1994 these shares had declined to 11.0% from Moscow and to 9.7% from St. Petersburg, and in 1998 they were as low as 5.0% for each city (see Table 4). In the same period, the percentage of emigrants from outside Moscow and St. Petersburg increased steadily until 1998. In 1990-1991, this share was about half; by 1994 it reached 79% and in 1998 it was as high as 90% – much more than the percentage of these Jews among all Russian Jewry – about half.

Table 4 Emigration from Russia, by area, %

Year	Moscow	St.	Provinces	Year	Moscow	St.	Provinces
		Petersburg				Petersburg	
1990	21.7	31.7	46.6	2003	8.0	6.8	85.2
1991	31.6	13.7	54.7	2004	8.4	7.6	84.0
1992	22.1	10.6	67.3	2005	10.9	8.4	80.7
1993	14.1	9.5	76.4	2006	12.5	9.0	78.5
1994	11.0	9.7	79.3	2007	18.0	8.2	73.8
1995	9.0	8.8	82.2	2008	20.3	9.3	70.4
1996	9.0	8.0	83.0	2009	22.0	10.8	67.2
1997	6.6	5.9	87.5	2010	22.0	9.1	68.9
1998	5.0	5.0	90.0	2011	29.8	10.3	59.9
1999	7.8	7.9	84.3	2012	30.9	9.5	59.6
2000	8.3	7.3	84.4	2013	39.2	12.1	48.7
2001	7.8	7.1	85.1	2014	48.1	11.7	40.2
2002	6.9	6.5	86.6	2015	57.5	10.9	31.6

Sources: Israel Ministry of Immigrant Absorption data for 1990-1993; Rosstat data for 1994-1998; and data on Jewish Agency assisted flights of migrants to Israel for 1999-2015.

However, in the second half of the last decade this trend reversed. By 2009, Moscow's share in the migration movement from Russia to Israel increased to 22.0%, and St. Petersburg's share to 10.8%. The sizable increase in the share of the two capital cities as a whole, and from Moscow in particular, in the migration from Russia 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, one may surmise that the former was caused by the latter. Nevertheless, the great majority (67.2%) of emigrants to Israel from Russia continued 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.

By 2013, Moscow's share in the migration movement from Russia to Israel had increased more – to 39.2%, actually exceeding the percentage of Jews who lived in the capital city – about one-third (34% as seen in the data of the 2002 Russian census). In the same year St. Petersburg's share in the emigration reached a new high of 12.1%, which was, however, lower than their share in Russia's Jewish population – 15%. 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, one may conclude that the response of Moscow's Jews to the economic recession was the most dramatic.

3. Demographic Selectivity of Emigration

The collected data for the period of 1990/1991-2004 show that age structures of the migrants to the three main destinations differed greatly (see Table 5). The stream to Israel was the youngest. The most numerous among these migrants were 15-29 years old – 24.3 % – and only 12.3% were 65 and above. Among the migrants to the USA and Germany the most numerous age group was 45-64 years old: 26.5 and 28.1%, respectively. The share of those 65 and above was much higher than among migrants to Israel: 16.9% in the stream to the USA and 22.6% in that to Germany. Furthermore, the share of children among migrants to Israel was higher than that in the streams to the USA or Germany. Children under 15 made up 20.1% of the migrants to Israel, whereas the broader age group under 18 accounted for only 12.1% of the migrants to Germany.

Table 5 Age distribution of Jews and their relatives who migrated from the FSU to three main destinations, %

Age	Germany,	USA,	Israel,	Israel,
group	1991-2004	1991-2004	1990-2004	2015-2017
Total	100.0	100.0	100.0	100.0
0-14	12.1 ^a	16.9	20.1	17.1
15-29	15.0 ^a	18.7	24.3	23.1
30-44	22.2	21.0	22.3	25.1
45-64	28.1	26.5	21.0	22.6
65+	22.6	16.9	12.3	12.1
Median age	45.5	40.2	33.6	34.9

^a 0-17 and 18-29 age groups, respectively.

Sources: Computation based on Israel CBS data, Moscow IOM office data recorded for Jewish emigration to the USA, and the German Federal Office for Migration and Refugees (BAMF) statistics on authorized applications.

In 1990-2004, the median age of emigrants to Israel was 33.6. In 1991-2004, this indicator was much higher for migrants to the USA and especially to Germany: 40.2 and 45.5 years, respectively. In 2015-2017, the median age of emigrants to Israel rose to 34.9, but the share among them of those 65 and above fell slightly to 12.1%. This very large differentiation in age structure of the migrants to the three main destinations should lead to many differences in their adaptation processes in the

receiving countries and different prospects for future development of the three segments of the contemporary post-Soviet Jewish Diaspora.

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). According to the 1989 census, the median age of the Jewish population was the oldest in Russia – more than 52 years, and the mass emigration has accelerated this process. According to the most recent Russian data of 2010, the median age of the Jews had reached 60.3 years (see Table 6).

 Table 6 Jews and entire urban population in Russia and emigrants from this country

to Israel, by age group, %

to israel, by	age group,	70					
Years	All	0-14	15-29	30-44	45-64	65+	Median
	ages						age
Jews in Russ	ia ^a						
1989	100.0	8.4	11.4	19.5	33.8	26.9	52.3
2010	100.0	5.2	10.0	13.7	31.5	39.6	60.3
Entire urban	population	in Russia ^b					
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
2014	100.0	15.5	21.0	23.1	27.4	13.0	38.3
2015	100.0	15.9	20.1	23.5	27.1	13.4	38.4
Emigrants fro	om Russia	to Israel ^c					
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
2014	100.0	14.7	21.4	22.4	24.9	16.6	38.6
2015	100.0	16.6	19.1	24.8	24.8	14.7	38.1

^a Census data.

Sources: As noted above.

The median age of emigrants from Russia to Israel advanced from 32.4 years in 1990-2001 to 38.6 years in 2014. However, in 2015, when a sizable new increase in the migration occurred (see above), it fell by 0.5 years. Moreover, in 2014 the oldest group of 65 and over (16.6%) was more numerous than that of children under 15 (14.7%) among the emigrants. But after the increase in emigration from Russia to Israel in 2015, these groups exchanged their positions in the emigrants' age structure: the children's group jumped to the previous figure of the oldest group (16.6%), while the share of the latter fell to the level of the former (14.7%).

^b Census data and Rosstat estimate.

^cIsrael CBS data.

The data show that the age structure of emigrants from Russia to Israel rather resembled that of the entire urban population of the sending country. 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 Jewish population in Russia. This corresponds to the fact that in 2010 Israeli statistics registered only 43% of the newcomers from Russia as being Jewish in accordance with Jewish religious law (Halakhah), whereas in Rosstat statistics the share of Jews since 2001 was even smaller – 25% and lower, and these data show practically only those who were previously considered "passport" Jews and include their children to an even lesser extent (see Table 7).

Table 7 Percentage of Jews among Migrants to Israel from Russia and the Entire FSU

Year	Rus	ssia	Entire FSU	Year	Russ	ia	Entire FSU
	Rosstat	Israel	Israel CBS		Rosstat	Israel	Israel CBS
	data ^a	CBS	data ^b		data ^a	CBS	data ^b
		data ^b				data ^b	
1990		94	96	2003	(24)	45	43
1991		87	91	2004	(22)	45	41
1992	64 ^c	82	84	2005	(21)	46	43
1993	60	82	82	2006	(20)	46	45
1994	58	77	77	2007	(22)	48	46
1995	53	73	72	2008		44	45
1996	49	67	67	2009		43	41
1997	36	59	59	2010		43	41
1998	31	54	53	2011		45	42
1999	31	49	49	2012		43	40
2000	27	47	45	2013		41	40
2001	25	44	43	2014		41	39
2002	24	43	41	2015		40	37

^a Of the emigrants whose ethnicity was known; for 1990-1991 and 2008-2015 the data on ethnicity of the migrants were not processed by Rosstat. In 2003-2007 the registered number of Jews among the migrants was lower than that of people of unknown ethnicity.

Sources: Computation based on Rosstat data and Israel CBS data.

Israeli statistics are based on the Ministry of Interior population register file, which defines "who is a Jew" in accordance with Jewish religious criteria: either a person born to a Jewish mother (female lineage is decisive and the number of generations backwards is not determined) or one who has converted to Judaism. As in the Israeli Law of Return, only conversion to another religion can abrogate Jewish

^b Of the immigrants whose ethnicity/religion was known by 2017.

^c Second half of the year.

lineage. Logically, in the official Israeli data, the share of Jews among all immigrants from Russia is much higher than what appeared in Russian migration statistics.

One consequence of the post-Soviet Jewish vital crisis and of rising mixed marriage is the recent pronounced decrease in the share of Jews among FSU immigrants to Israel, according to official Israeli data: 96% in 1990, 72% in 1995, 45% in 2000, 41% in 2010 and 37% in 2015. At the same time, in recent years these proportions were steadily higher among the immigrants from Russia: 47% in 2000, 43% in 2010 and 40% in 2015 (see Table 7). According to official Russian data, the proportion of Jews among all those who emigrated to Israel fell from 64% in the second half of 1992 to 53% in 1995, 27% in 2000 and 22% in 2007, the last year for which such data were processed by Rosstat. The different definitions of Jewishness in Israel and the FSU explain the divergence in the respective percentages.

In Israel all FSU immigrant children are educated in Jewish schools, and the great majority of the non-Jewish segment of these immigrants does not incline to Christianity. In the first decade of the recent migration wave, 1990-1999, in Israel only a small minority (8,700) of the FSU newcomers who were classified as non-Jews chose to be registered as Christians. In the following decade, 2000-2009, this number was as low as 2,100 and, in 2010-2015, less than 900. The great majority of FSU immigrants classified in Israel as non-Jews preferred to be registered as having "no religion." They may be seen as a potential increment to the Israeli Jewish population.

According to the data for 1990-1994 and 2015-2017, among the FSU emigrants to Israel, females outnumber males starting from age 20 (see Table 8). This imbalance contrasts with the situation in the FSU where, in the Jewish population in general, and particularly in Russia, males outnumbered females in the marriageable ages (Tolts 2003). Thus, the relative shortage of males among FSU migrants in Israel is the result of a selective propensity by sex to migrate.

At the same time, FSU immigrants and veteran Israelis are characterized by rather different sex ratios in the marriageable ages. Among veteran Israelis, males outnumber females in these ages. These differences imply a potential demographic basis for the spreading incidence of mixed marriage between these two groups in the Israeli population. In fact, female FSU immigrants show a high propensity to choose partners from outside their own group (Cohen et al. 2012).

Table 8 Number females per 100 males among emigrants from the FSU to Israel, by age group

Age group	1989-1994	2015-2017
0-4	95	92
5-9	96	94
10-14	90	94
15-19	100	88
20-24	105	114
25-29	111	118
30-34	111	110
35-39	109	115
40-44	108	106
45-49	116	104
50-54	130	106
55-59	141	118
60-64	143	135
65+	174	117
Total	114	108

Sources: Computation based on Florsheim & Tal 1996: 20, and Israel CBS data.

Clearly, this demographic selectivity of emigration further exacerbated the demographic erosion among the Jews who remained in the FSU: it accelerated their aging and jeopardized the marriage market. Following the mass exodus of the 1990s, these Jews have been living in a permanent state of severe demographic collapse (Tolts 2013) which has inevitably led to their rapid numerical decline.

4. Numerical Decline and Resettlement

Results of the migration can be seen in the dynamics of the Jewish population and its resettlement. The start of the first wave of large-scale Jewish emigration outside the Soviet Union occurred very close to the date of the 1970 Soviet census. Comparison of the data of this census with those of the 1989 Soviet census (see Table 9) shows that in Georgia and Lithuania this emigration led to a dramatic decrease in the numbers of their Jewish populations: they were halved – by 55% and 47%, respectively. In the other parts of the Soviet Union with sizable Jewish populations the numerical decrease was less pronounced: 38% in Latvia, 37% in Ukraine, 33% in Moldova, 30% in Russia, 28% in Kazakhstan, 24% in Belarus and 19% in Azerbaijan, and even as low as 8% in Uzbekistan. In contrast, Tajikistan saw a slight increase (by 1%) of its Jewish population at this time due to migration of Bukharan Jews from

Uzbekistan. However, the main reason for numerical decrease of the great majority of the Jewish population in the Soviet Union continued to be the negative balance of births and deaths.

Table 9 Jewish population in the FSU countries, according to the 1970 and 1989 Soviet and post-Soviet censuses, thousands

Country ^a	1970 Soviet	1989 Soviet	2000 r	ound of	2010 rc	ound of
	census	census	cen	suses	cens	uses
	Number	Number	Census	Number	Census	Number
	of Jews ^b	of Jews ^b	date	of Jews	date	of Jews
Russia	816.7	570.5	2002	233.6°	2010	157.8°
Ukraine	777.4	487.3	2001	104.3	2010	71.5 ^d
Belarus	148.0	112.0	1999	27.8	2009	12.9
Uzbekistan	103.1	94.9	2000	8.0^{d}	2010	4.5 ^d
Moldova	98.1	65.8	2004	4.9 ^e	2014/15	2.3 ^e
Georgia	55.4	24.8	2002	3.8^{f}	2014	1.9 ^f
Azerbaijan	49.0	39.9	1999	8.9^{g}	2009	9.1
Latvia	36.7	22.9	2000	10.4	2011	6.4
Kazakhstan	27.7	19.9	1999	6.8	2009	3.6
Lithuania	23.6	12.4	2001	4.0	2011	3.05
Tajikistan	14.6	14.8	2000	0.2	2010	0.0
Kyrgyzstan	7.7	6.0	1999	1.6	2009	0.6
Estonia	5.3	4.6	2000	2.15	2011	2.0
Turkmenistan	3.5	2.5	1995	1.6	2010	0.2^{d}
Armenia	1.0	0.7	2001	0.1	2011	0.1
Entire FSU	2168	1480	2000	485 ^d	2010	325 ^d

^a FSU countries are listed in the order of the number of Jews in the 1970 Soviet census.

Sources: 1970 and 1989 Soviet censuses; post-Soviet censuses; author's estimates.

The last Soviet census was held in 1989, giving us a good base against which to measure Jewish population decrease in the FSU countries after the mass exodus of

^b Including Tats: in 1970 – all; in 1989 for Russia – 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 Not including Abkhazia and South Ossetia.

^g There were possibly additional Jews (approximately 3,600) among those who were recorded as Tats in the census.

the 1990s. 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.

The census data show that during the decade following the 1989 Soviet census, the number of Jews dropped in Belarus by 75%, in Kyrgyzstan by 74%, in Azerbaijan by 69%, and in Kazakhstan by 64%. During the intercensal period, this number fell less precipitously in two Baltic States: it decreased by 55% in Latvia and by 54% in Estonia. In the third Baltic country – Lithuania – the number of Jews dropped even more sharply: it declined by 68%. At the same time, the results of the 2001 Ukrainian census show that during less than 13 years following the 1989 Soviet census, the number of Jews in this second largest community in the FSU dropped dramatically by 79%. The most pronounced decrease after the civil war was recorded in Tajikistan: according to the 2000 census, the number of Jews there was only 1.5% of the 1989 figure. In two FSU countries torn apart in the 1990s by severe interethnic conflicts – Moldova and Georgia – the decrease by the date of their first post-Soviet census was also very pronounced: by 93% and 85%, respectively.

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. 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 I have prepared estimates for these countries based on known Jewish population dynamics.

Between 1999 and 2009, the number of Jews in Azerbaijan decreased by 27%. Over this period in other post-Soviet Muslim countries the drop was much more pronounced: in Kazakhstan by 48% and in Kyrgyzstan by 61%. The most pronounced decrease was recorded in Tajikistan: according to the 2010 census, the number of Jews there was as low as 36 (0.2% of the 1989 figure). According to the last censuses, the number of Jews in Belarus and Moldova halved during the decade – by 54% and 53%, respectively.

During the last intercensal period, the number of Jews fell less precipitously in two Baltic States: it decreased by 38% in Latvia and by 24% in Lithuania. In the third Baltic country – Estonia – the number of Jews dropped very moderately by only 8%.

These dynamics may be explained by 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).

The results of the two post-Soviet censuses in Russia present a special case. The 2010 Russian census recorded 157,763 Jews as against my Jewish population estimate of 200,000 for the census date (derived for this country from the 1994 Russian microcensus 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. The previous 2002 Russian census recorded 233,596 Jews as against my 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.¹

At the start of the mass exodus, 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 Russia accounted for more than 60% of the total number of Jews in the FSU.

My estimates based on the first post-Soviet censuses show that between 1989 and 2000, the total number of Jews in the FSU countries fell dramatically by 67%. In this much shorter period the tempo of post-Soviet Jewish numerical decrease was much higher than that seen in the Soviet censuses of 1970 to 1989 when it was 32%. In the decade between 2000 and 2010 the total number of Jews in the FSU countries additionally declined by 33%.

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%; see Table 10). 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

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¹ 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).

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, one 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 above).

Table 10 Distribution of the Jewish population in Russia, by area, thousands

Census	Total	Moscow	St. Petersburg	Provinces
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

^a Including Tats.

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

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 me to estimate about 67,700 Jews for Moscow and 30,600 Jews for St. Petersburg.² 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).

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). At the beginning of 2010, according to my guesstimate that uses the 1970 Soviet census as a baseline, there were about 1.6 million "core" Jews worldwide who had originated from the FSU (see Table 11). On that date in the FSU, the number of remaining "core" Jews was estimated at about 325,000, as compared with 2,168,000 in 1970 (see Table 9). My guesstimated figure for Israel, the major destination of FSU Jewish emigrants is less than 0.85 million in 2010. On that date in the USA the guesstimated number was 0.3 million and in Germany it was 0.1 million (see Table 11). Thus, by 2010 more than

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² For the results of the adjustment of the 2002 Russian census data, see: Tolts 2004.

half of the "core" Jews worldwide who had originated from the FSU lived in Israel and only one-fifth remained in their place of origin – the countries of the FSU.

Table 11 Distribution of the post-Soviet Jewish diaspora population, by country, 2010, millions

Country	"Core" Jews	Total ^a
Israel	less than 0.85	more than 1.1
FSU	0.325	less than 1.0
USA	0.3	less than 0.5
Germany	0.1	0.2
World ^b	1.6	2.9

^a For Israel, FSU immigrants, their children and grandchildren. For all other countries, mostly people eligible to immigrate to Israel according to the Law of Return.

The analysis shows that today Israel, the USA, Germany, Russia and Ukraine are the main centers of concentration of Jews originating from the FSU. To this one may add information on two overseas countries. The 2011 census shows 8,395 Jews from the FSU in Australia (Graham 2014). According to the 2018 Survey of Canadian Jews, there were about 25,000 "core" Jews born in the FSU (Brym et al. 2019).

However, "core" Jewish population is much smaller than the total population entitled to immigrate to Israel (aliyah) in accordance with the Law of Return, which, as noted above, includes Jews, children and grandchildren of Jews, and all their respective spouses. For 2010, the total guesstimated number of the post-Soviet Jewish Diaspora world population is 2.9 million (see Table 11).

5. New Demography of FSU Migrants: Israeli Case

Even before the large-scale emigration of the 1970s, the balance of births to at least one Jewish parent and Jewish deaths had become negative in Russia and Ukraine. By the end of the 1980s, this balance was decidedly unfavorable in all the republics of the European part of the Soviet Union (Tolts 2003). As noted above the most sizable group of FSU migrants went to Israel. Fortunately, Israeli statistics, as a rare exception, contain ample appropriate demographic data on these migrants which can be utilized in this analysis. Absence of appropriate data provides no possibility for such detailed study of other segments of the Diaspora.

^b Including other much smaller ex-Soviet Jewish immigrant communities, see text. *Sources:* Tolts 2016: 35; Table 9 of this paper.

The Israeli Jewish population represents a mix of very different lifestyles and values (see, e.g., Levy et al. 2004). Therefore, the demography of its components shows great differentiations. The total fertility rate (TFR) of the Jews in Israel is the highest among contemporary developed countries: in 1985-1989 it was 2.8 and it returned to the same level again in 2005-2009 and it was even higher in 2016-2017 – almost 3.2 (Israel CBS 2018). However, that is only an average. At one end of the fertility spectrum are ultra-Orthodox Jews (Haredim) who have a high average fertility (TFR of about seven), whereas at the other end is the non-religious segment of the Jewish veteran population with a TFR of slightly over two (DellaPergola 2011; Hleihel 2018). The non-religious majority of FSU immigrants is much more similar to the latter in overall lifestyle and outlook on life.

Table 12 Total fertility rate (TFR) among FSU immigrants who arrived in Israel since 1990

Year	Total	Of these:		Year	Total	Of tl	nese:
		Jews	Non-			Jews	Non-
			Jews				Jews
1991	1.31			2000	1.62	1.73	
1992	1.33			2001	1.56	1.69	
1993	1.52			2002	1.55	1.70	1.27
1994	1.65			2003	1.60	1.78	1.27
1995	1.72			2004	1.55	1.76	1.15
1996	1.70			2005	1.55	1.75	1.20
1997	1.71			2010	1.89		
1998	1.71			2013	2.03	2.19	1.68
1999	1.63	1.69		2015	2.05		

Sources: Tolts 2015: 153; Konstantinov 2017: 39-40.

Analysis of birth dynamics shows that the Jews and their relatives who emigrated to Israel in the 1990s escaped the dramatic fertility reduction which was characteristic of the FSU population as a whole and Jews in particular (see Table 12). By 2001 their TFR was 1.56; that is, at the same level as that of Jews in the Soviet Union in 1988-1989. In 1999-2005 the TFR among FSU immigrants registered as Jews was rather steady at 1.7-1.8. At the same time, according to my estimate, this indicator for FSU immigrants registered as non-Jews in 2002-2005 was also steady and as low as approximately 1.2-1.3; thus, it was similar to the low level of post-Soviet Slavic populations in their home countries.

By 2013 the TFR among FSU immigrants registered as Jews reached 2.19; that is, it was similar the TFR level of Israeli non-religious veteran Jews and shows the possibility for their demographic self- reproduction. In the same year, this indicator for FSU immigrants registered as non-Jews increased only to 1.68. It continues to be rather similar to the increased level of post-Soviet Slavic populations in their home countries. By 2015 the TFR among FSU immigrants as a whole reached 2.05.

At the onset of the mass exodus, Jewish males had a much higher life expectancy than the average for total Soviet males, whereas Jewish females in the Soviet Union had no such advantage. Life expectancy at birth for Soviet Jews in 1988-1989 was 70.1 for males and 73.7 for females (Andreev et al. 1993).

At this time, this indicator was much higher among the Jewish population of Israel. A comparison of Jewish life expectancy at birth in the Soviet Union and Israel shows a sizable disadvantage for both Soviet Jewish males and females of more than four years (Israel CBS 1991). However, whereas in 1990-1994 in Israel the standardized rates of female mortality were lower for the new immigrants from the FSU than for the veteran Jewish population of Israel, the indicators for males of both groups were rather close (Rotem 1998).

In 2000-2003, life expectancy at 15 for FSU immigrants in Israel reached 61.0 for males and 67.0 for females (Ott et al. 2009). This indicator for FSU immigrant females was very close to all Jewish females in the country (67.4 years in 2000-2004). However, for FSU immigrant males, despite the pronounced increase, it was still considerably lower than for all Jewish males (63.5 years in the same period). The great majority of all deaths occur at age 45 and over. By the end of the 1990s, the decline in death rates for FSU immigrants in Israel was very pronounced for both sexes over age 45 in comparison with the indicators for Jews in the Soviet Union on the eve of the mass exodus of the 1990s. Over the next two decades the improvement in mortality rates among FSU immigrants in Israel continued steadily for both sexes (see Table 13).

Table 13 Age-specific death rates of Jews in the USSR and FSU immigrants in Israel,

by age group for ages 45 and over, per 1,000 males and females

	by age group for ages 45 and over, per 1,000 males and females									
Age group	Jews in the USSR,	FSU immigrants in Israel ^a								
	1988-1989	1998-1999	2007-2009	2014-2016						
Males										
45-49	5.3	4.3	3.8	3.3						
50-54	7.9	5.7	5.4	5.4						
55-59	15.1	9.9	7.5	6.9						
60-64	23.4	13.8	10.9	10.4						
65-69	35.6	23.7	18.7	16.3						
70-74	57.6	36.1	27.4	26.6						
75-79	90.2	51.9	46.0	39.7						
80-84	134.3	85.5	73.9	70.5						
85+	219.7	176.7	158.5	•••						
Females										
45-49	3.2	1.8	1.6	1.2						
50-54	5.4	3.1	2.4	2.2						
55-59	9.6	5.2	4.1	3.0						
60-64	15.3	7.8	5.9	5.1						
65-69	25.5	13.3	9.5	8.0						
70-74	44.2	22.5	16.7	13.7						
75-79	74.2	38.5	31.6	24.6						
80-84	122.8	69.4	58.0	50.7						
85+	220.7	153.3	139.5	•••						

^a Who arrived in Israel since 1990.

Sources: Compiled on the basis of Goskomstat of USSR data and Israel CBS data.

Table 14 Balance of births and deaths among FSU immigrants who arrived in Israel since 1990, per 1,000

Year	Births	Deaths	Balance
1991	9.3	7.1	2.2
1996	12.9	8.7	4.2
2001	13.0	8.7	4.3
2005	13.7	9.4	4.3
2009	14.9	9.7	5.2
2015	14.7	8.3	6.4

Sources: Israel CBS 2006, 137; Konstantinov 2017, 39; Author's estimates.

Positive fertility and mortality dynamics coupled with the rather favorable age structure of the FSU immigrants to Israel (see above) led to a decisively positive balance of births and deaths. By 2015, there were 14.7 births and 8.3 deaths per 1,000 FSU immigrants who arrived in Israel since 1990 and were still living there (see Table 14).

The results of the research clearly demonstrate demographic revitalization of FSU Jews in Israel. One may surmise that in the two other main destinations – the USA and Germany – the life expectancy of FSU Jewish emigrants also increased sizably. At the same time, German Jewry – the great majority of which consists of immigrants from the FSU – has a decidedly negative balance of births and deaths. Nor does American Jewry as a whole have a positive balance of births and deaths. Clearly, the fact that their immigrant segments which originated from the FSU were relatively aged did not augur well demographically for these immigrant groups in either Germany or the USA.

6. Concluding Remarks

Based on collected data it may be guesstimated that since 1970 almost two million Jews and their relatives emigrated outside the FSU (including destinations other than Israel, Germany and the USA). The great majority of this mass emigration occurred since 1989 – about 1.7 million. The analysis clearly shows the decisive role of the push factor in migration movements from the FSU countries. These findings coincide with the generally decisive role of the push factor in world Jewish migration (DellaPergola, 2009).

Moreover, socio-economic problems in FSU countries continue to push Jews and their relatives to emigrate in rather sizable numbers. According to the most recent data, in 2018 migration from Russia to Israel reached a new high point – about 10,500. Of course, this number is not as impressive as figures for the beginning of the 1990s. However, after the first years of mass exodus during that decade the number of "core" Jews in Russia continued its dramatic decline: from 410,000 in 1994 to 172,000 in 2018. Thus, one may conclude that in 2018 the level of emigration returned to that of 1994 when almost 25,000 migrants arrived in Israel from Russia.

Acknowledgments

This paper is part of an ongoing broader research project being carried out by the author at the Division of Jewish Demography and Statistics, the Avraham Harman Institute of Contemporary Jewry, the Hebrew University of Jerusalem. I would like to express my appreciation to Sergio DellaPergola for his general advice in all stages of this project and to Uzi Rebhun for encouraging me to revisit recent FSU Jewish

population problems. I would like to express my appreciation to Dmitry Bogoyavlensky, Nati Cantorovich, Olga Chudinovskikh, Mikhail Denissenko, Rafi Pizov, Liat Rehavi, Marina Sheps and Emma Trahtenberg for providing materials, information, and suggestions. I wish also to thank Judith Even for reading and editing an earlier draft. Responsibility for the content of the paper is, of course, the author's alone.

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Appendix. Emigration from the FSU to Israel, by country

Appendix. Emigration from the 150 to israel, by country															
Country	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003
Russia	3,281	45,522	47,276	24,786	23,082	24,612	15,707	16,488	15,290	14,454	31,104	18,758	10,871	6,541	4,837
Ukraine	3,575	58,936	39,769	13,149	12,833	22,733	23,556	23,447	24,103	20,083	23,231	20,231	14,082	6,641	3,871
Belarus	1,121	23,356	16,006	3,273	2,265	2,906	4,219	4,381	3,369	2,258	2,692	2,560	2,003	974	691
Moldova	1,470	11,926	15,452	4,305	2,173	1,907	2,407	1,953	1,396	1,194	1,345	1,774	959	538	356
Estonia	30	391	225	81	110	61	60	99	75	40	55	100	60	27	22
Latvia	294	4,393	1,852	866	1,399	845	541	709	599	447	326	390	300	166	78
Lithuania	322	2,737	1,052	369	333	245	353	339	332	194	198	300	308	176	68
Armenia	10	162	108	132	387	370	114	97	82	125	121	126	101	80	34
Azerbaijan	466	7,833	5,676	2,625	3,133	2,285	3,090	2,627	1,876	1,134	1,240	854	614	475	387
Georgia	263	1,346	1,407	2,595	3,750	3,295	2,275	1,493	1,107	944	1,050	858	748	513	358
Kazakhstan	67	1,313	998	475	536	699	2,736	2,034	2,350	1,948	1,861	1,757	992	654	437
Kyrgyzstan	73	992	572	250	449	447	367	347	203	214	247	472	274	219	115
Tajikistan	202	2,389	2,736	2,286	1,581	413	455	317	138	97	72	47	48	30	15
Turkmenistan	3	33	0	79	54	59	359	465	400	279	246	193	157	110	105
Uzbekistan	1,544	20,726	14,271	5,533	8,471	6,510	6,172	3,410	2,695	2,399	2,858	2,276	2,040	1,358	1,051
Unknown	211	3,175	439	4,289	5,589	692	2,436	843	603	223	202	121	43	24	1
Total	12,932	185,230	147,839	65,093	66,145	68,079	64,847	59,049	54,618	46,033	66,848	50,817	33,600	18,526	12,426

Appendix. Emigration from the FSU to Israel, by country (continuation)

Country	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	1989-2017
Russia	3,982	4,183	3,594	3,250	2,605	3,245	3,404	3,678	3,545	4,026	4,593	6,632	6,992	7,135	363,473
Ukraine	3,056	2,332	1,778	1,451	1,312	1,602	1,752	2,051	2,048	1,917	5,739	6,886	5,809	7,046	355,019
Belarus	518	644	458	363	338	407	334	304	377	323	312	318	632	952	78,354
Moldova	343	322	271	182	184	237	226	217	209	178	211	177	187	196	52,295
Estonia	7	11	6	4	5	12	30	8	10	3	6	2	9	5	1,554
Latvia	69	74	41	26	31	68	76	67	57	36	28	49	46	49	13,922
Lithuania	41	39	23	21	17	12	15	21	19	32	10	13	31	25	7,645
Armenia	34	36	28	28	15	43	31	46	25	22	12	19	29	48	2,465
Azerbaijan	297	188	171	132	194	221	191	141	154	124	94	105	115	131	36,573
Georgia	273	311	260	324	330	334	380	187	231	141	175	119	175	205	25,447
Kazakhstan	410	254	187	127	129	160	155	153	145	146	146	117	152	131	21,269
Kyrgyzstan	52	77	40	52	31	21	58	54	48	28	24	16	37	21	5,800
Tajikistan	11	22	14	10	5	20	4	10	9	2	0	5	0	7	10,945
Turkmenistan	72	81	44	60	38	53	15	10	38	24	4	11	20	24	3,036
Uzbekistan	957	831	542	452	364	367	314	270	312	266	208	234	196	208	86,835
Unknown	10	27	14	22	18	17	14	8	7	12	16	22	26	0	19,104
Total	10,132	9,432	7,471	6,504	5,616	6,819	6,999	7,225	7,234	7,280	11,578	14,725	14,456	16,183	1,083,736

Sources: Israel CBS data; Israel. Ministry of Immigrant Absorption data (distribution by republic for 1989 and for Baltic States for 1990-1994).