DEMOGRAPHIC TRENDS AMONG THE JEWS OF THE FORMER SOVIET UNION \*

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Since 1989 the demography of the Jews in the former Soviet Union (FSU) has

changed dramatically. To understand these changes we prepared new estimates of

their dynamics in different parts of the FSU for which recently released results of

post-Soviet censuses were utilized. Special attention in this work will be given to

evaluation of the first partial results of the 2002 Russian census. Causes of Jewish

demographic decrease will be examined. In our analysis we shall study emigration to

outside the FSU as a whole, and to Israel in particular. Out-migration from Israel of

FSU immigrants as a whole, and some aspects of return migration from Israel to

Russia and Ukraine in particular will be examined. The vital crisis of FSU Jewry and

the transformation of its fertility as a result of aliya and emigration will also be

studied.

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<sup>\*</sup> Paper presented at the International Conference in Honor of Professor Mordechai Altshuler on Soviet and Post-Soviet Jewry (Jerusalem, December 28-30, 2003); German translation published in: *Menora: Jahrbuch für deutsch-jüdische Geschichte* 2004. Band 15. Berlin/Wien: Philo, 2005, pp. 15-44.

#### 1. Jewish Numerical Decrease

The numbers of Jews according to Soviet census data have in the past been entirely dependent on the self-declaration of respondents. Conceptually, these numbers correspond to what has been defined as the "core" Jewish population (DellaPergola, 2002). The "core" Jewish population 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 reported another ethnic nationality in the census. A majority of scholars agree that Soviet census figures on Jewish ethnic nationality for adults correspond very closely with "legal" ethnic nationality as recorded in internal passports.

A broader definition, that of the "enlarged" Jewish population which can also be empirically measured, includes Jews along with their non-Jewish household members (ibid.). In the FSU today this group is significantly larger than the "core" Jewish population. However, even the "enlarged" Jewish population is smaller than the total population entitled to immigrate to Israel; according to the Israeli Law of Return, Jews, their children and grandchildren, and all their respective spouses are eligible.

The last Soviet census was in 1989, giving us a good base against which to measure Jewish population decrease during the recent mass emigration. Since 1999 new population censuses were conducted in most FSU countries and the results of all these censuses empirically confirmed the earlier predictions of demographic decline

<sup>&</sup>lt;sup>1</sup> According to our estimate, in the Russian Federation the ratio of "enlarged" to "core" Jewish population was 1.6 to 1 in 1989, and 1.8 to 1 in 1994; presuming continuation of observed increase in ratio, we suggest a conservative guesstimate of 1.9 to 1 for 2003 (Tolts, 2003b). The decreasing share of "core" Jews among the remaining "enlarged" Jewish population offers a serious challenge to community-building in the FSU in the future (see Gitelman, 2001, chapters 8 and 9; Krutikov, 2002). By the start of 2003, the "enlarged" number of Jews in the FSU as a whole could be estimated at about more than 780,000.

of Jewish communities in the FSU (Table 1). Thus, the results of the 2001 Ukrainian census show that during less than 13 years following the 1989 Soviet census, the total number of "core" Jews in this second largest community in the FSU dropped dramatically to 104,300 (by 79 percent).

Table 1. "Core" Jewish Population According to the Recent Post-Soviet Censuses,
Thousands

Country	Census date	Number	Number	Numerical
-		of Jews	of Jews	decrease,
			according to	%
			the 1989	
			Soviet census	
Azerbaidzhan <sup>(a)</sup>	27 January 1999	8.9	30.8	71
Belorussia	14 February 1999	27.8	112.0	75
Kazakhstan	26 February 1999	6.8	18.9 <sup>(b)</sup>	64
Kirgiziia	25 March 1999	1.6	6.0	74
Tadzhikistan	20 January 2000	0.2	14.8	98.5
Estonia	31 March 2000	2.15	4.6	54
Latvia	31 March 2000	10.4	22.9	55
Lithuania	6 April 2001	4.0	12.4	68
Ukraine	5 December 2001	104.3	487.3	79
Georgia	17 January 2002	3.6 <sup>(c)</sup>	24.8	85
Russian				
Federation	9 October 2002	~233 <sup>(d)</sup>	570	59

- (a) Not including "Tats".
- (b) As published in the results of the 1999 census of Kazakhstan.
- (c) Resident (de jure) population, not including Abkhazia and South Ossetia.
- (d) For more detailed data and their evaluation, see Table 2 and text.

Sources: Recent Post-Soviet censuses; 1989 Soviet census.

In 2001, a population census was conducted also in Armenia, but it results are not yet available; and a census is planned for 2004 in Moldavia (Korolyev, 2001; UN Stat. Division, 2003).

Table 2. Jewish Population in the Russian Federation According to the 2002 Russian Census<sup>(a)</sup>

Jewish population	Number, thousands
Total	233 <sup>(b)</sup>
Of these registered as:	
Jews	230
Mountain Jews	3
Georgian Jews	0.1
Central Asian (Bukharan) Jews	0.1
Krymchaks	0.2

<sup>(</sup>a) As of October 9.

(b) Total does not equal the sum for Jewish registered groups due to rounding. Source: 2002 Russian census.

The 2002 Russian census according to its first released partial data recorded about 233,000 Jews in the Russian Federation as a whole (Table 2). This figure covered Ashkenazi, Georgian, Mountain and Central Asian (Bukharan) Jews, as well as Krymchaks, and depends entirely on the self-declaration of respondents in the census.

However, in the 2002 Russian census there about 1.5 million people were counted whose ethnicity was not stated or not known. Most of these people (approximately two-thirds of the total number of this group) were recoded in Moscow city and Moscow oblast, and in St. Petersburg. Clearly, there were some Jews among them, and we should adjust the census data accordingly. At the same time, the data on ethnicity by region had not yet been made available when this paper was completed. In absence of such information as a first necessary step for any evaluation of the 2002 Russian census results for Jews, we prepared three variants of estimates of Russia's "core" Jewish population for the beginning of 2003 based on the 1989 Soviet census, the 1994 Russian microcensus, and vital and migration statistics (see Table 3).

Table 3. Estimate of the "Core" Jewish Population in the Russian Federation, 2003<sup>(a)</sup>

Source of data	Number, thousands
Estimate based on the 1989 Soviet	
census	
Variant I <sup>(b)</sup>	251
Estimate based on the 1994 Russian	
microcensus	
Variant I <sup>(b)</sup>	255
Variant II <sup>(c)</sup>	252

- (a) At the beginning of the given year.
- (b) Based on census/microcensus data including "Tats".
- (c) Based on microcensus data not including "Tats", with subsequent partial adjustment for this group.

Source: Appendix 1.

Our estimates remain in a very narrow range from 251,000 to 255,000, and we see our intermediate estimate (252,000) as being a rather conservative and well grounded figure of the "core" Jewish population: its base is the 1994 Russian microcensus (not including "Tats", with subsequent partial adjustment for this group) which much more closely resembles the 2002 Russian census than the 1989 Soviet census.

The 2002 Russian census presented figures as of October 9, 2002, and for purposes of comparison we should the adjust above cited estimates to the census date. Comparison of the first partial census data of about 233,000 with our adjusted intermediate estimate of 254,000 shows a gap of about 21,000.

This gap clearly demonstrates a growing process of Jewish assimilation in contemporary Russia, and shows that a sizable group of Jews in the country does not want to be recorded as Jewish in the census. This fits our previous findings from analysis of the recent dynamics of birth statistics which revealed that in present-day Russia a sizable segment among the former "officially recognized" Jews (Jewish

according to Soviet passports) now prefer not to declare their ethnicity even if they are not part of a mixed marriage (Tolts, 2002).

Thus, despite all recent changes in the Jewish situation in the Russian Federation and the FSU as a whole, such as greater investment in Jewish education, we see a continuation of assimilation. Dynamics of the "core" Jewish population showing its numerical decrease in the results of the 2001 Ukrainian census (see above) also confirm this conclusion. Moreover, emigration is selective by level of Jewish identity, and is obviously higher among the more strongly identifying Jews (see, e.g.: Brym and Ryvkina, 1996; Chervyakov, V. et al., 2003). These are the ones who have left – and are still leaving – the FSU.

There is probably only one large group of people of mixed origin interested in ethnic reaffiliation with the Jewish people, namely, those who made the decision to emigrate, particularly to Israel. These people have been leaving the FSU very rapidly; that is, they have joined the Jewish population abroad, especially in Israel.

The estimated figures show that during the first 14 years of the contemporary mass emigration (1989-2002), the total number of "core" Jews in the entire FSU dropped from 1,480,000 to about 412,000, or by 72 percent (Table 4).

A comparison of the dramatic numerical decline of the "core" Jewish population in Russia with the other FSU countries shows great differences. By the beginning of 2003 the number of "core" Jews in the Russian Federation had decreased to approximately 252,000 (according to our evaluation of the first partial results of the 2002 Russian census, see above); that is, since 1989, the "core" Jewish population fell by 56 percent. Between 1989 and 2003, the number of "core" Jews in the FSU outside Russia dropped by 82 percent – from 910,000 to 160,000.

Table 4. The "Core" Jewish Population<sup>(a)</sup> in the FSU, by Country, 1989 and 2003, Thousands

Country <sup>(b)</sup>	1989	2003	2003
			as % of
			1989
Russian Federation	570	252	44
Ukraine	487	95	20
Belorussia	112	23	21
Latvia	23	9.2	40
Azerbaidzhan	41	7.5	18
Uzbekistan	95	5.5	6
Moldavia	66	5.2	8
Kazakhstan	20	4.2	21
Georgia	25	4.0 <sup>(c)</sup>	16
Lithuania	12	3.5	29
Estonia	4.6	1.8	39
Kirgiziia	6.0	0.8	13
Turkmenistan	2.5	0.5	20
Tadzhikistan	15	0.1	1
Armenia	0.7	0.0	-
FSU <sup>(d)</sup>	1,480	412	28

- (a) At the beginning of the given year; including "Tats" in 1989.
- (b) FSU countries are listed in the order of the number of "core" Jews in 2003.
- (c) De facto population (Tsuladze et al., 2003)
- (d) Total for the FSU does not equal the sum for countries due to rounding. Sources: 1989 Soviet census; recent Post-Soviet censuses (see Table 1); vital and migration statistics; and evaluation of the first partial results of the 2002 Russian census (see text).

Armenia and Tadzhikistan experienced an unusually dramatic numerical decline, and their Jewish communities have almost disappeared. The numerical decline was also impressive in Moldavia and Uzbekistan: by 92 and 94 percent, respectively.

At the start of the contemporary mass emigration, Russia's Jews made up 39 percent of the total number of "core" Jews in the FSU. However, between 1989 and 2003 the population decline of Russia's Jewry was only approximately 30 percent of

the total Jewish population decline in the FSU.<sup>2</sup> As a result, by the beginning of 2003 the Jews in Russia accounted for about 61 percent of the total number of "core" Jews in the FSU.

### 2. Causes of Jewish Demographic Decrease

The great difference between the Jewish numerical decrease in the Russian Federation and other FSU countries was coupled with the different roles of negative migratory and vital balances in population dynamics. A comparison of causes of Jewish demographic decrease in the Russian Federation and Ukraine clearly show these differences.

A negative balance of births and deaths appeared among the Jews in the Russian Federation at the end of the 1950s, and despite the sizable emigration in the 1970s, it remained the main reason for Jewish population decline till the start of the recent emigration (for the period between 1970 and 1989, only about 20 percent of the Jewish population decrease in the Russian Federation was attributed to emigration; see: Tolts, 1993).

This situation changed in 1989-1993 when the negative vital balance was estimated at only about 34 percent of the total decrease (Table 5). In the next three year period 1994-1996 as well as in 1999-2000 (when there was a newly increased emigration wave), this factor accounted for 46 percent of the total decrease. However, in 1997-1998 and in 2001-2002 (when a pronounced decrease in emigration occurred), the negative vital balance accounted for most of the total decrease – 56 and 61 percent, respectively. Thus, the negative vital balance became again, as it was before 1989, the main reason for Jewish population decline. For the period from 1989

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<sup>&</sup>lt;sup>2</sup> This corresponds to Russia's lower share in FSU aliya and Jewish emigration as a whole (see DellaPergola, 1998; Tolts, 2003a).

to 2002 as a whole, about 42 percent of the Jewish population decrease in the Russian Federation was due to the negative vital balance.

Table 5. Causes of Jewish Demographic Decrease in the Russian Federation, 1989-2002, Thousands

Period	Migratory	Vital	Total decrease	Vital
	balance <sup>(a)</sup>	balance <sup>(b)</sup>		balance as
				% of total
				decrease
1989-1993	-108	-56	-164	34
1994-1996	-35	-30	-65	46
1997-1998	-14	-18	-32	56
1999-2000	-19	-16	-35	46
2001-2002	-9	-14	-23	61
1989-2002	-185	-134	-319	42

<sup>(</sup>a) Registered statistics data for 1989-1998 (Tolts, 1996; Tolts, 1999); in 1999 and after according to the author's estimate, the number of Jews who emigrated without relinquishing their residence status in the Russian Federation, based on combined Israeli and Russian statistics; not including tourists who took on immigrant status (Tolts, 2003b).

Sources: Computations based on Russian vital and migration statistics.

In 1989-1991, the negative vital balance was estimated at only about 18 percent of the total "core" Jewish population decrease in Ukraine (Table 6). In 1992-1998, this factor accounted for 25 percent of the total decrease. In 1999-2001, the share of the negative vital balance was slightly higher – 26 percent of the total decrease. For the period from 1989 to 2001 as a whole about 22 percent of the Jewish population decrease in Ukraine was due to the negative vital balance. Thus, in this period, in comparison with the Russian Federation, the role of the negative vital balance in Ukraine was rather small.

<sup>(</sup>b) "Effectively Jewish" births minus registered Jewish deaths for 1989-1998 (Tolts, 1996; Tolts, 1999) in 1999 and after, we applied the rate of the vital balance per 1,000 "core" Jews in 1998. "Effectively Jewish" births are the newborns who are identified as Jews.

Table 6. Causes of Jewish Demographic Decrease in Ukraine, 1989-2001, Thousands

Period	Migratory balance	Vital balance <sup>(a)</sup>	Total decrease	Vital balance as % of total decrease
1989-1991	-122	-27	-149	18
1992-1994	-75	-25	-100	25
1995-1998	-71	-23	-94	25
1999-2001	-31	-11	-42	26
1989-2001	-299	-86	-385	22

(a) "Effectively Jewish" births minus registered Jewish deaths for 1989-1995; in 1996 and after, we applied the rate of the vital balance per 1,000 "core" Jews in 1994-1995. "Effectively Jewish" births are the newborns who are identified as Jews. Sources: Computations based on the 1989 Soviet census, the 2001 Ukrainian census, and Ukrainian vital and migration statistics.

This was caused by the greater scale of Ukrainian Jewish emigration, and not by a more favorable vital balance there. In 1988-1989, the Jews of Russia had the highest negative vital balance in the FSU. This was no longer true six years later: in 1994-1995, the negative balance was greater among the Jews of Ukraine (Tolts, 2003a). This change was due to the fact that the crude Jewish death rate in Ukraine (33 per 1,000) was now higher than that in Russia (30 per 1,000).

## 3. Aliya and Emigration

Since 1989 mass aliya and emigration played a decisive role in the fate of the Jews in the former Soviet Union. According to our estimates, in 1989-2002 more than 1,500,000 (ex-) Soviet Jews and their relatives emigrated to countries outside the FSU (Table 7).

Table 7. Emigration of Jews and Their Non-Jewish Relatives from the FSU, 1989-2002, Thousands

Year	Total <sup>(a)</sup>	Thereof:	Percent of
		to Israel	total to Israel
1989	72	12.9	18
1990	205	185.2	90
1991	195	147.8	76
1992	123	65.1	53
1993	127	66.15	52
1994	116	68.1	59
1995	114	64.85	57
1996	106	59.0	56
1997	99	54.6	55
1998	83	46.0	55
1999	99	66.85	67
2000	79	50.8	64
2001	60	33.6	56
2002	44	18.5	42
1989-2002	1,522	939.65 <sup>(b)</sup>	62

<sup>(</sup>a) Emigration to all destinations, including assumed illegal.

Sources: Statistics of the countries of destination and author's guesstimates (Israel CBS data; HIAS, 2003; Tress, 1998; Dietz, 2002; Tolts, 2003a).

Most of this movement (just about 940,000, or 62 percent in 1989-2002) was directed toward Israel,<sup>3</sup> whereas the rest was divided mostly between the USA and Germany. During this period the number of Jews and their non-Jewish household

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<sup>(</sup>b) Total does not equal the sum for years due to rounding.

<sup>&</sup>lt;sup>3</sup> For detailed data by countries for 1989-2002 on emigration of Jews and their non-Jewish relatives from the FSU to Israel, see Appendix 2.

members who emigrated from the FSU to the USA may be roughly estimated at more than 310,000; the number of Jews and their non-Jewish household members who emigrated to Germany was lower, about 180,000.

Between 1990 and 1996 the USA ranked second as a receiving country for (ex-) Soviet Jews and their relatives. From 1997 to 2001, more emigrants went to Germany than to the USA, and Germany became the second ranking receiving country. In 2002, only about 2,500 newcomers from the FSU were assisted by HIAS, and in 2003 this number was probably smaller by about 1,000. Thus, after September 11, 2001, the USA ceased to exist as a major destination for post-Soviet Jewish emigration. At the same time, in 2002, more emigrants went to Germany (19,300) than to Israel, and Germany became the first ranking receiving country.

According to official Russian data, in 1992-1998 and 2000 about half the Jews who emigrated to countries outside the FSU chose Israel, as was the case after the peak of 1990-1991. Only in 1999 did the share of aliya among the Jewish emigrants temporarily jump, and according to official Russian data, 68 percent of the total number of Russia's Jews who emigrated to countries outside the FSU chose Israel. However, in 2001 this share decreased to about 39 percent and in 2002 it dropped to 36 percent (Table 8).

In Ukraine these changes preceded those in the Russian Federation: according to official Ukrainian data until 2000 about half the Jews who emigrated to countries outside the FSU chose Israel. In 1997 for the first time more registered Jewish emigrants went to Germany than to the USA, and from this year to 2000 Germany ranked second as a receiving country. From 2001 onwards, more emigrants went to Germany than to Israel, and Germany became the first ranking receiving country for Jewish emigration from Ukraine.

Table 8. Registered Emigration of Jews from the Russian Federation and Ukraine to Outside the FSU, by Country of Destination, 1996-2001/2002, Percent

Country and	Total	Israel	USA	Germany	Other
year					countries
Russian					
Federation					
1996	100	51	25	22	2
1997	100	48	25	24	3
1998	100	55	16	26	3
1999	100	68	14	16	2
2000	100	54	19	24	3
2001	100	39	23	36	2
2002	100	36	16	44	4
Ukraine					
1996	100	52	25	21	2
1997	100	53	21	24	2
1998	100	50	13	36	1
1999	100	55	10	34	1
2000	100	51	10	38	1
2001	100	44	9	46	1

Sources: Russian and Ukrainian governmental migration statistics (Goskomstat of Russia, 1997-2002a; IOM, 1997; IOM, 1999; IOM, 2002; Shulga et al., 2001; Zissels, 2003; Zubkova, 2000); author's computations.

From 1998 onwards Germany's share of the emigration of Jews from Ukraine to outside the FSU was consistently higher than that from the Russian Federation. At the same time, from 1997 onwards the USA's share of the emigration of Jews from Ukraine to outside the FSU was consistently lower than that from the Russian Federation. According to official Russian and Ukrainian data emigration to all other countries has not been high.

## 4. Out-Migration from Israel of FSU Immigrants

Immigration from Israel to the Russian Federation was registered in Russian statistics, and these data are available since 1997 for analysis. The statistics of Goskomstat are based on neighborhood passport office registration of immigrants who resumed residence status in Russia.<sup>4</sup>

Table 9. Comparison of Immigration from Israel with Emigration to Israel, the Russian Federation and Ukraine, 1997-2001/2002, Thousands

Country and year	Immigration from Israel <sup>(a)</sup>	Emigration to Israel (b)	Immigration as % of emigration
Russian Federation			
1997	1.6	15.3	11
1998	1.5	14.5	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
Ukraine			
1997	1.05	24.1	4
1998	1.2	20.1	6
1999	1.1	23.2	5
2000	1.0	20.3	5
2001	0.9	14.1	6

<sup>(</sup>a) According to the Goskomstat of Russia and the Ministry of Statistics of Ukraine, respectively.

Sources: See sources to Table 8.

In 1997 the registered number of immigrants from Israel to the Russian Federation was 1,626. If we compare these immigrants with emigrants to Israel of the same year we see that the ratio between the two movements is 11 percent. In 1999,

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<sup>(</sup>b) According to Israel CBS data.

<sup>&</sup>lt;sup>4</sup> These data also include some people who previously emigrated to Israel from other parts of the FSU.

the number of immigrants to Russia from Israel decreased to 1,400, whereas the number of emigrants from Russia to this country more than doubled. Accordingly, the ratio between them decreased to 5 percent (Table 9).

In Ukraine the registered number of immigrants from Israel was consistently lower than that in the Russian Federation. In 1997-2001, in Ukraine it was 4-6 percent of the aliya from this country. In 2002, the registered number of immigrants to Russia from Israel was 1,670, or only 2.7 percent higher than in 1997. However, the number of emigrants from the Russian Federation seriously decreased, thus increasing the ratio between them to 26 percent.

In any interpretation of the above-cited indicators, we must remember that many people who immigrate from Israel to the Russian Federation and Ukraine in any given year emigrated to Israel in a different year. However, the length of time between the date of their arrival and of their departure is unknown and, indeed, varies from one individual to the next.

At the same time, for the immigrants from the FSU as a whole who arrived in Israel since 1990 and were still living here we can compute the rate of their out-migration for each year up to 2001 (Table 10). This indicator is based on the number of FSU immigrants who left Israel for all destinations in any given year and stayed abroad for more than one year. According to this data, the rate was highest in 1992 (17 per 1,000) after the greatest number of FSU immigrants arrived in Israel in this wave of aliyah during the previous two years. Over the following years, the rate decreased rather steadily, and in 1999 it fell to 8 per 1,000. By 2001, the last year for which we have data, it was only slightly higher – 10 per 1,000.

Table 10. Out-Migration from Israel of FSU Immigrants, 1990-2001

Year	Rate, per 1,000 (a)
1990	8
1991	13
1992	17
1993	13
1994	12
1995	13
1996	11
1997	10
1998	10
1999	8
2000	9
2001	10

(a) For each given year, the rate was computed on the basis of the number of FSU immigrants who left Israel for all destinations in this year and stayed abroad for more than one year; the rate is per 1,000 FSU immigrants who arrived in Israel since 1990 and were still living here by this date.

Source: Author's computations based on Israel CBS data.

Of all FSU immigrants to Israel since 1990, 68,000 had left the country by the end of 2001 and stayed abroad for more than one year. However, a sizable part of these returned to Israel by the start of 2003 – 9,600, and this return is continuing. By the start of this year the registered number of FSU immigrants who left Israel and had not returned to the country was 58,400. In 1990-2001, 908,200 immigrants arrived in Israel from the FSU. Thus, about 6 percent of this number left Israel without returning to it. For all immigrants from North America since 1989 this indicator reached almost 25 percent, and for France, 16 percent (Cf. *Ha'aretz*, August 15, 2003, 1A, 10A.).

### 5. FSU Vital Crises, Aliya and Jewish Emigration

In 1988-1989 the total fertility rate<sup>5</sup> of Russia's Jewish population was 1.49 (Statkomitet SNG, 1995). For 1993-1994 this fertility indicator was estimated at about 0.8 (Tolts, 1996); that is, it fell dramatically by 46 percent. This coincides with the general negative dynamics of fertility in Russia at this time (see, e.g.: DaVanzo and Grammich, 2001; Feshbach, 2003). Between 1988 and 1994, the fertility indicator for the total urban population fell by 34 percent, from 1.9 to 1.25. And in 1994, in the two major cities of Russia – Moscow and St. Petersburg – the total fertility rates were low: 1.1 and 1.0, respectively. By 1999 the total fertility rate for the entire general urban population of the Russian Federation had fallen to 1.07, and it was as low as 0.9 in St. Petersburg.

In 1988-1989 the total fertility rate of the Jewish population in the Soviet Union as a whole was only slightly higher than in the Russian Federation – 1.56 (Andreev, et al., 1993). We have no direct information on the dynamics of this indicator for Jews in other parts of the FSU, but the fertility reduction in the post-Soviet period was very pronounced also outside Russia (see, e.g.: Katus and Zakharov, 1997; Vishnevsky, 1999). For example, by 1995 in Ukraine the total fertility rate of the total urban population fell to 1.2, and it was as low as 0.9 in the city of Kiev; by 1999-2000 this indicator was as low as 0.9 in the total urban population of the country. Thus, for the FSU as a whole we would conservatively guesstimate the total fertility rate of the Jewish population at 0.9 in the mid-1990s, and we assume that it would not have risen subsequently.

<sup>&</sup>lt;sup>5</sup> The total fertility rate is the average number of children that a woman would bear in her lifetime if current age-specific fertility rates remain stable.

Table 11. Births Among the Jewish Population in the Russian Federation and the Entire FSU, 1988-2001

	Russian Federation	FSU
Children born to		
endogamous Jewish		
couples		
1988	1,562	6,849
1998	224	
2001	185 <sup>(a)</sup>	
Children born to Jewish		
mothers		
1988	3,710	11,591
1998	875	
2001	725 <sup>(a)</sup>	
Children born to at least		
one Jewish parent (b)		
1988	8,006	21,075
1998	2,177	$3,900^{(c)}$
2001	1,805	3,000 <sup>(c)</sup>

<sup>(</sup>a) Applied percentage of children born to non-Jewish fathers and the rate of children born to Jewish mothers per 1,000 "core" Jews as in 1998.

Sources: Vital statistics data; author's computations.

Since 1989, as a result of the mass emigration and the above noted reduction in the fertility rate the number of births in the Jewish population decreased dramatically (Table 11). Based only on the different categories of births (to endogamous Jewish couples, to Jewish mothers, and to at least one Jewish parent), one can reconstruct the dynamics of fertility decline among Jews in the FSU.

<sup>(</sup>b) The (unknown) number of children born to non-Jewish mothers and Jewish fathers was assumed twice the (known) number of children born to Jewish mothers and non-Jewish fathers, see note 7 to text.

<sup>(</sup>c) Guesstimate corresponding to the percentage of Jews in the Russian Federation among entire FSU Jewish population.

However, the figures for each category relate to quantitatively different aspects of internal processes among the Jews.<sup>6</sup>

Although all the birth categories showed dramatic decline, this was greatest among the children born to endogamous Jewish couples, and smallest among those born to at least one Jewish parent. Compared with 1988 in the Russian Federation the number of births to endogamous Jewish couples had fallen by 1998 a full 86 percent, and by 2001 this percentage had grown to 88 percent. The decline in the number of births to Jewish mothers was less pronounced – by 76 and 80 percent, respectively. In the same period in the Russian Federation the drop in the number of births to at least one Jewish parent can be estimated at 73 and 77 percent respectively. In the entire FSU this category of births, which is the figure for Jewish fertility as a whole, was even more pronounced – by 81 and 86 percent, respectively. According to our estimate only 1,805 children were born to at least one Jewish parent in 2001 in the Russian Federation if we assume the number of children born to non-Jewish mothers and Jewish fathers to be twice that born to Jewish mothers and non-Jewish fathers. In the FSU as a whole in the same year this category of births can be estimated according to the same assumption at 3,000.

Analysis of the birth dynamics shows that the Jews and their relatives who emigrated to Israel escaped the dramatic fertility reduction which was characteristic of

<sup>&</sup>lt;sup>6</sup> Births to endogamous Jewish couples form the basis (in Soviet conditions in most of the republics, actually about the only source) of reproduction for the "core" Jewish population. Births to at least one Jewish parent by definition of course include endogamous births, as well as births to Jewish mothers with non-Jewish fathers and births to non-Jewish mothers with Jewish fathers; these are the figures for Jewish fertility as a whole. Only births to Jewish mothers are considered Jewish according to Jewish religious law ("Halakha").

<sup>&</sup>lt;sup>7</sup> Corresponding to our estimate that according to the 1989 Soviet census and the 1994 Russian microcensus approximately twice as many Jewish males were currently married to non-Jewish females as were Jewish females currently married to non-Jewish males (see: Tolts, 1996).

the FSU population as a whole and Jews in particular. One special aspect of the interrelationship between emigration and Jewish fertility should be noted here. According to Israeli statistics, the level of fertility among immigrants (*olim*) from the FSU was rather high during their first year in the country: some Jewish women obviously preferred to give birth in Israel (Table 12).

Table 12. Total Fertility Rate Among FSU Immigrants in Israel, by Year of Aliya

Year					Year o	f aliya				
in										
Israel	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999
1990	1.58									
1991	1.23	1.48								
1992	1.22	1.25	2.24							
1993	1.46	1.36	1.61	2.23						
1994	1.70	1.51	1.52	1.68	2.09					
1995	1.87	1.73	1.65	1.55	1.49	1.93				
1996	• • •		• • •							
1997	1.85	1.90	1.84	1.79	1.69	1.49	1.19	1.46	·	
1998	1.82	1.90	1.97	1.95	1.80	1.70	1.29	1.19	1.32	
1999	1.82	1.81	1.78	1.76	1.79	1.69	1.40	1.24	1.06	1.41

Sources: Adapted from Israel CBS data.

Usually in the next two years in Israel there was some reduction in the level of fertility, but the rate did not fall as low as among Jews in the FSU in the mid-1990s and onwards. According to some advanced data by duration of residence in Israel the total fertility rate among FSU immigrants rose to 1.8-2.0; that is, it doubled the post-Soviet level of Jewish fertility in the FSU (about 0.9; see above) and approached the level of the total fertility rate of Israeli non-religious Jews (2.0-2.2; see: Friedlander, 2002; Friedlander and Feldmann, 1993).

An estimate shows that if in 1999 the total fertility rate among this immigrant group had been as low as that found for FSU Jews as a whole in the period of the mid-1990s and onwards (0.9) the number of births among them would have been lower by

4,100. Moreover, if in 1999 the life expectancy at birth among this immigrant group had been as low as that found for FSU Jews (70.1 years for males and 73.7 years for females as in life tables for Soviet Jewish population in 1988-1989) the number of deaths among them would have been higher by 4,000. Thus, they would have had a decisively negative balance of births and deaths (Table 13).

Table 13. Guesstimated and Actual Births and Deaths for FSU Emigrants to Israel, (a) 1999, Thousands

	Births	Deaths	Balance
1. Guesstimated			
according			
to indicators of			
contemporary			
FSU Jews	$5.2^{(b)}$	10.3 <sup>(c)</sup>	-5.1
2. Actually			
registered			
in Israel	9.3 <sup>(d)</sup>	$6.3^{(e)}$	+3.0
3. Discrepancy			
[(3)=(1)-(2)]	-4.1	+4.0	X

- (a) Since 1990.
- (b) Total fertility rate at 0.9.
- (c) Life expectancy at birth 70.1 years for males and 73.7 years for females as in life tables for Soviet Jewish population in 1988-1989.
- (d) According to Israel CBS registered data (total fertility rate at 1.63).
- (e) According to Israel CBS registered data (life expectancy at birth of the immigrant population is close to that of the Israeli Jewish population as a whole which was 77.1 years for males and 80.7 years for females in 1999).

Source: Author's computations; Israel CBS data.

The vital balance of these immigrants in Israel is decisively positive. Summing up, aliya led to tens of thousands of additional births and postponed about the same number of deaths. This demonstrates the great positive role of aliya in the demography of FSU Jewry.<sup>8</sup>

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<sup>&</sup>lt;sup>8</sup> Adaptation of FSU immigrants in Israel is generally successful; see, e.g.: Sicron and Leshem, 1998; Leshem and Sicron, 2004.

In the Russian Federation, from 1988 to 1998, the decline in the number of births to at least one Jewish parent was much faster than that of Jewish deaths, and as a result the estimated negative balance of these vital events increased by 1,100, from about –5,800 to –6,900 (Table 14).

Table 14. Balance of Births and Deaths among Jewish Population in Russia, FSU Immigrants in Israel and the Jews in Germany, 1988/1990-2001

Year	Births	Deaths	Balance
Jewish Population			
in Russia			
1988	8,006 <sup>(a)</sup>	13,826	-5,820
1998	2,177 <sup>(a)</sup>	9,103	-6,926
2001	1,805 <sup>(a)</sup>		•••
FSU Immigrants in Israel (b)			
1998	8,926	5,967	2,959
2001	10,333		
Jews <sup>(c)</sup> in Germany			
1990	109	431	-322
1998	123	782	-659
2001	117	990	-873

- (a) Children born to at least one Jewish parent (see Table 11).
- (b) Since 1990, according to Israel CBS data.
- (c) Mostly FSU immigrants (DellaPergola, 2003a; Polian, 2000).

Sources: Vital statistics data (see sources above); author's computations.

In Germany, despite the sizable immigration of Jews from the FSU, in the 1990s the vital balance significantly worsened. There was no sizable increase in the number of births in the Jewish community, but the number of deaths increased by 2.3 times from 1990 to 2001. As a result of this development, the negative vital balance increased from –322 in 1990 to –659 in 1998 and –873 in 2001. The attempt to revitalize the German Jewish community through FSU immigration was hardly a great success. At the same time, the number of births among FSU immigrants in Israel

continues its growth, and in 2001 it exceeded 10,300; according to the most recent data for 2002 it reached about 10,600.

#### 6. Concluding Remarks

At the start of the recent mass aliya and 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 5th in the Diaspora, and Ukrainian Jewry is number 10 (DellaPergola, 2003b).

Results of the recent censuses of the FSU countries empirically confirmed the previously predicted demographic decline of the Jewish communities there. First partial data from the 2002 Russian census and an evaluation of them show the continuation of the process of Jewish assimilation in contemporary Russia. Our study revealed that in present-day Russia a sizable segment among the former "officially recognized" Jews (Jewish according to Soviet passports) now prefer not to declare their ethnicity.

This analysis has revealed the important role of the negative vital balance in Jewish demographic decline in the Russian Federation and the FSU as a whole. At the same time, the birth dynamics show that the Jews and their relatives who emigrated to Israel escaped the dramatic fertility reduction which was characteristic of the FSU population as a whole and the Jews in particular. Out-migration of FSU immigrants from Israel is much lower than that from Western countries.

# Acknowledgements

This paper is part of a broader research project being carried out by the author at the Division of Jewish Demography and Statistics of the Avraham Harman Institute of Contemporary Jewry of the Hebrew University of Jerusalem. The author wishes to express his appreciation to Sergio DellaPergola for his general advice. The author is grateful to Evgeny Andreev, Zvi Eisenbach, Zinaida Palyan, Rafi Pizov, Emma Trahtenberg and Sergei Zakharov for providing materials, information, and suggestions. The author wishes 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.

# Appendix 1. Estimates of Russia's "Core" Jewish Population, 2003

An estimate, based on the 1989 Soviet census data (including "Tats"), of the "core" Jewish population in the Russian Federation in 2003, gave us the figure of about 251,000 (Table 1A).

Table 1A. Estimate of the "Core" Jewish Population in the Russian Federation for 2003 Based on 1989 Soviet Census Data (Including "Tats")

Year	Thousands
1. "Core" Jewish population at the	
beginning of 1989	570
2. Decrease during the period <sup>(a)</sup>	-319
3. "Core" Jewish population at the	
beginning of 2003	251

## (a) As computed in Table 5.

Sources: 1989 Soviet census; vital and migration statistics.

Table 2A. Estimate of the "Core" Jewish Population in the Russian Federation for 2003 Based on the 1994 Russian Microcensus Data (Including "Tats")

Year	Thousands
1. "Core" Jewish population at the	
beginning of 1994	410 <sup>(a)</sup>
2. Decrease during the period	-155 <sup>(b)</sup>
3. "Core" Jewish population at the	
beginning of 2003	255

- (a) Microcensus figure adjusted to the beginning of the year.
- (b) As computed in Table 5.

Sources: 1994 Russian microcensus; vital and migration statistics.

Table 3A. Estimate of the "Core" Jewish Population in the Russian Federation for 2003 Based on the 1994 Russian Microcensus Data (Not Including "Tats")

Year	Thousands
1. "Core" Jewish population (not	(0)
including "Tats") at the beginning of	402 <sup>(a)</sup>
1994	4)
2. Decrease during the period 1994-1998	-97 <sup>(b)</sup>
3. "Core" Jewish population (not	
including "Tats") at the beginning of	305
1999	
4. "Core" Jewish population (including	
"Tats") at the beginning of 1999	310 <sup>(c)</sup>
5. Decrease during the period 1999-2002	-58 <sup>(b)</sup>
6. "Core" Jewish population at the	
beginning of 1999	252

- (a) Microcensus figure adjusted to the beginning of the year.
- (b) As computed in Table 5; for the period from 1994 to 1999, see also detailed computation in: Tolts, 1999.
- (c) Adjusted accordingly.

Sources: 1994 Russian microcensus; vital and migration statistics.

An alternative estimate, based on the 1994 Russian microcensus data (also including "Tats"), of the "core" Jewish population in the Russian Federation for the same year, gave us the highest figure – in the next two year period about 255,000 (Table 2A).

In our computation based on the 1994 Russian microcensus data not including "Tats", with subsequent partial adjustment for this group we arrived at an intermediate figure for the beginning of 2003 – 252,000 (Table 3A).

No other corrections of the Russian migration statistics were made to reach these estimates. Of course, some Jews immigrated to the Russian Federation without being registered in Russian migration statistics. However, the emigration data for minors over-represented the Jews as compared with the census/microcensus data (Tolts, 1996). These factors work in opposite directions (of unknown size), and thus somewhat offset each other.

Table 1B. Migration of Jews and Their Non-Jewish Relatives from the FSU to Israel, by Country, 1989-2002

Country	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002
Russian														
Federation	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	6,540
Ukraine	3,575	58,936	39,769	13,149	12,833	22,733	23,556	23,447	24,103	20,083	23,231	20,321	14,082	6,640
Belorussia	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
Moldavia	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
Latvia	294	4,393	1,852	866	1,399	845	541	709	599	447	326	390	300	166
Lithuania	322	2,737	1,052	369	333	245	353	339	332	194	198	300	308	176
Estonia	30	391	225	81	110	61	60	99	75	40	55	100	60	27
Georgia	263	1,346	1,407	2,595	3,750	3,295	2,275	1,493	1,107	944	1,050	858	751	513
Azerbaidzhan	466	7,833	5,676	2,625	3,133	2,285	3,090	2,627	1,876	1,134	1,240	854	614	475
Armenia	10	162	108	132	387	370	114	97	82	125	121	126	101	80
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
Tadzhikistan	202	2,389	2,736	2,286	1,581	413	455	317	138	97	72	47	48	30
Kirgiziia	73	992	572	250	449	447	367	347	203	214	247	472	274	219
Turkmenistan	3	33	0	79	54	59	359	465	400	279	246	193	157	110
Kazakhstan	67	1,313	998	475	536	699	2,736	2,034	2,350	1,948	1,861	1,757	992	654
Unknown	211	3,175	439	4,289	5,589	692	2,436	843	603	222	202	30	40	25
Total	12,932	185,230	147,839	65,093	66,145	68,079	64,847	59,049	54,618	46,032	66,848	50,816	33,600	18,525

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

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