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Data Documentation 1

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**Documentation of Sample Sizes
and Panel Attrition in the
German Socio Economic Panel (SOEP)
1984 – 2003**



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1 Development of sample sizes

General comment: The sample sizes of the English public use version of the GSOEP and the German DIW version differ by approximately five percent. The exclusion of 5 percent of the original data from the GSOEP was necessary to meet the requirements of the German data protection laws. Technically, this was done by dropping randomly 5 percent of the original wave 1 households. All persons and households which stem from these root households are excluded from the English public use version. Hence the difference in sample sizes is not always exactly 5 percent. The sample sizes documented below refer to the original DIW data base.

With respect to the development of sample sizes our focus is on:

- Comparison of the number of successful interviews by cross-section.
- Longitudinal development of panel attrition.
- Entrants by birth or move-ins and their participation behavior.

1.1 Development of the number of successful interviews by cross-section

The following figures display the number of successful interviews considering different aspects:

Figure 1 Comparison for individuals and households (subsamples A and B), waves 1 to 20 (1984 – 2003).

Figure 2 Comparison between subsamples A and B on the individual level, waves 1 to 20 (1984–2003).

Figure 3 Comparison for individuals and households (subsample C), waves 1 to 14, (1990–2003)

Figure 4 Comparison between the subsamples A, B and C on the individual level, waves 1 to 14.

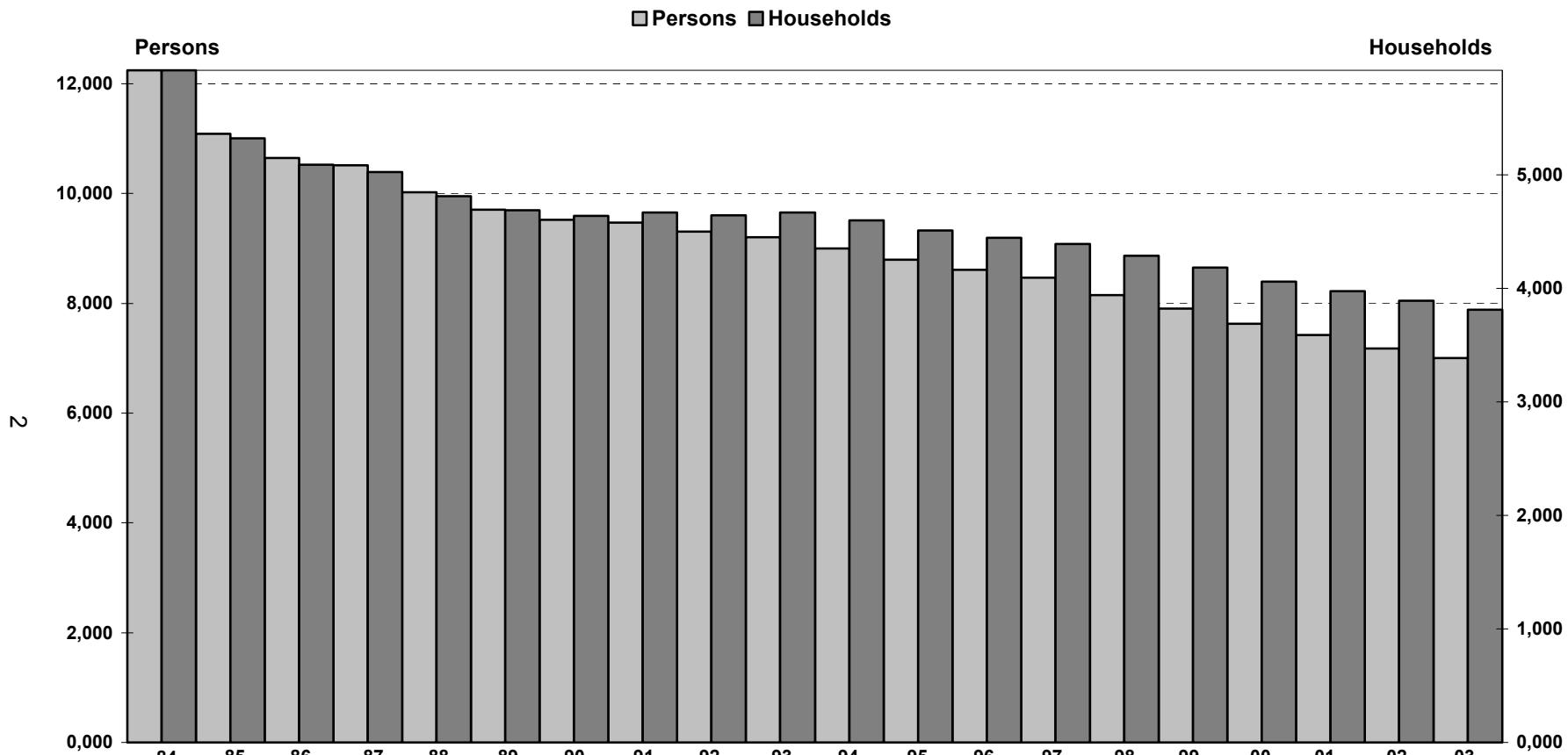
Figure 5 Comparison for individuals and households in Subsample D, waves 1 to 9, (1995–2003).

Figure 6 Comparison for individuals and households in Subsample E, waves 1 to 6, (1998–2003).

Figure 7 Comparison for individuals and households in Subsample F, waves 1 to 4, (2000–2003).

Figure 8 Comparison for individuals and households in Subsample G, waves 1 to 2, (2002-2003)

Figure 1:
Comparison of successful interviews with persons and households (subsample A and B), waves 1 to 20.



Persons	12,245	11,090	10,646	10,516	10,023	9,710	9,519	9,467	9,305	9,206	9,001	8,798	8,606	8,467	8,145	7,909	7,623	7,424	7,175	6,999
Households	5,921	5,322	5,090	5,026	4,814	4,690	4,640	4,669	4,645	4,667	4,600	4,508	4,445	4,389	4,285	4,183	4,060	3,977	3,889	3,814

Figure 2:
Comparison of successful interviews between subsamples A and B (individual level), waves 1 to 20.

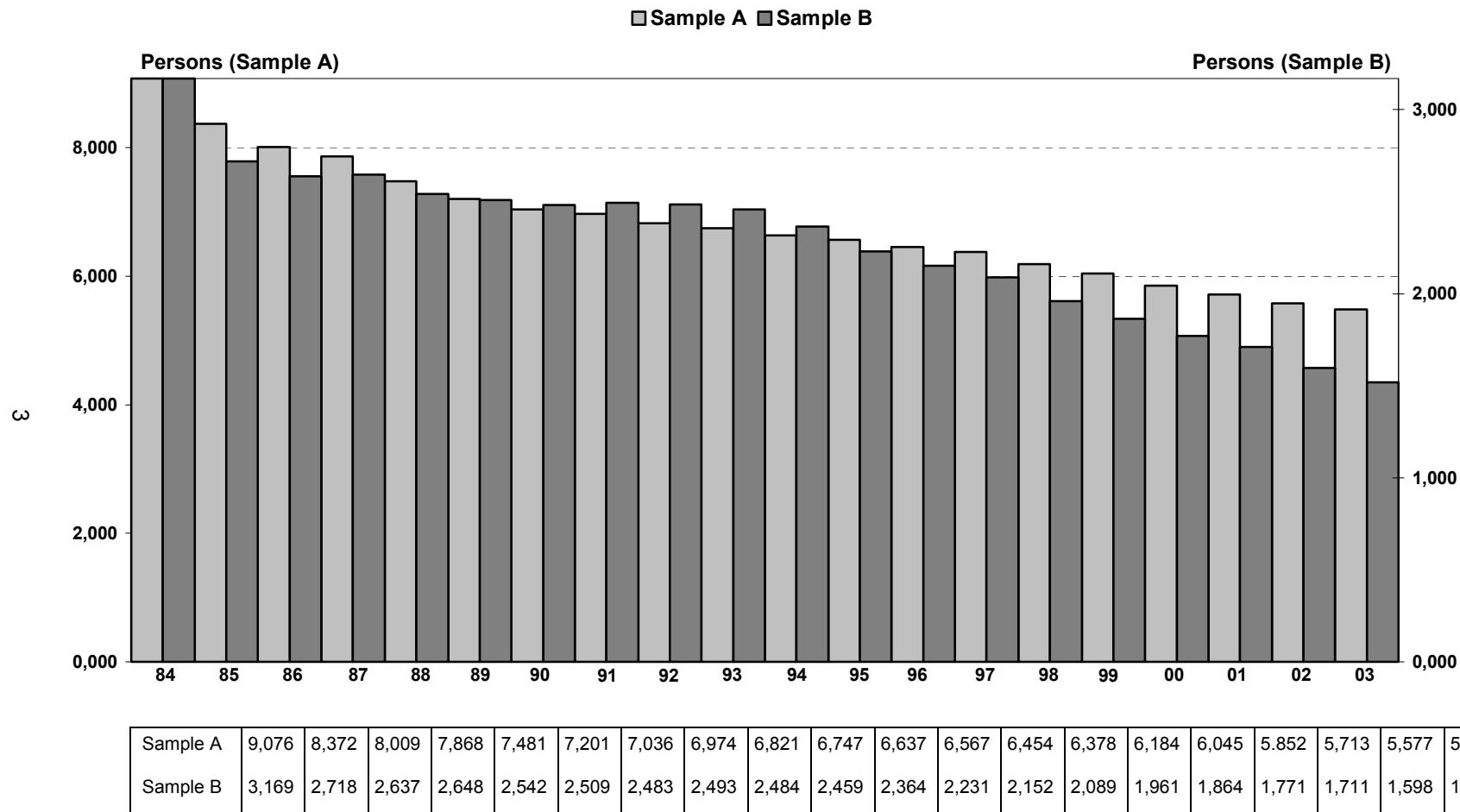
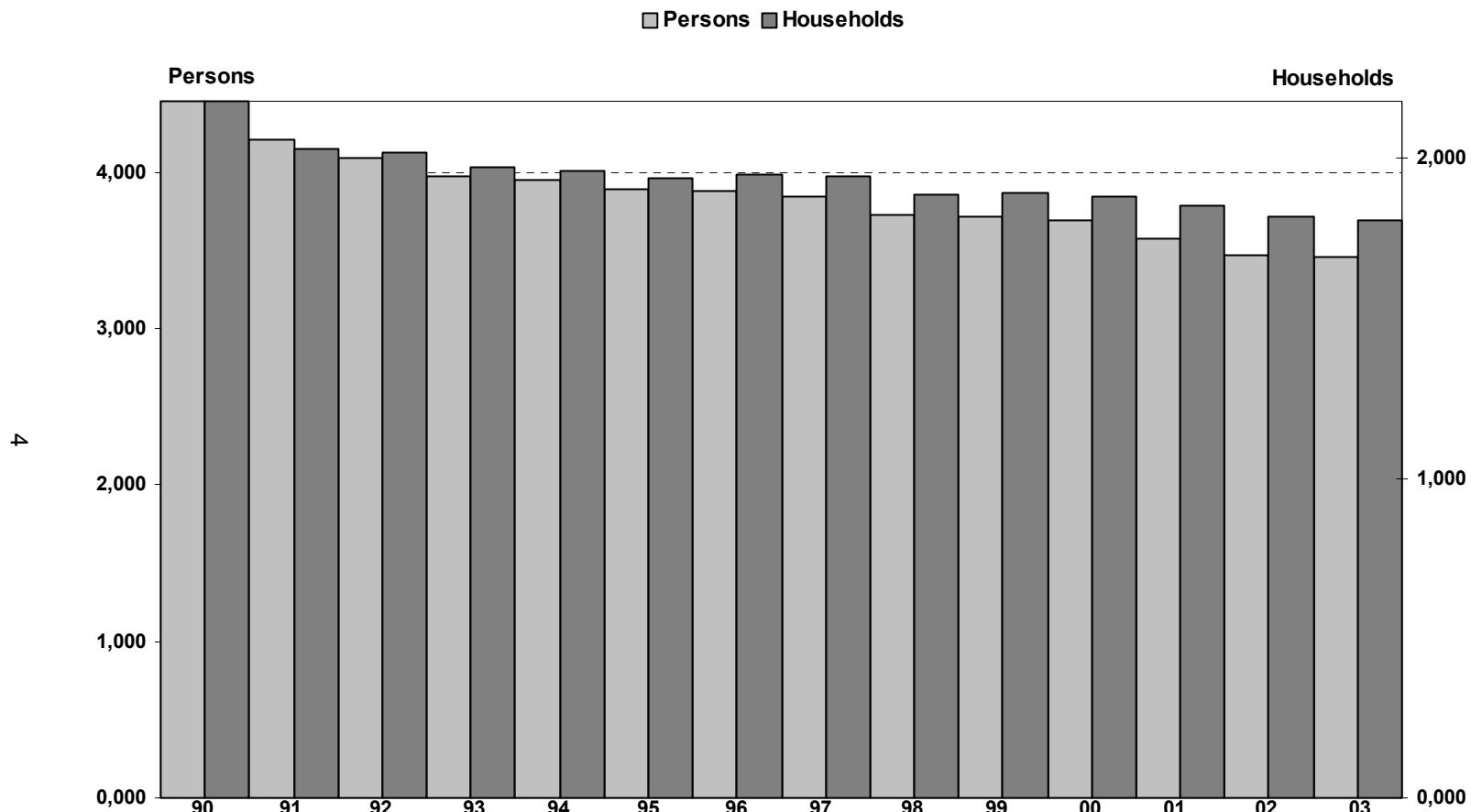
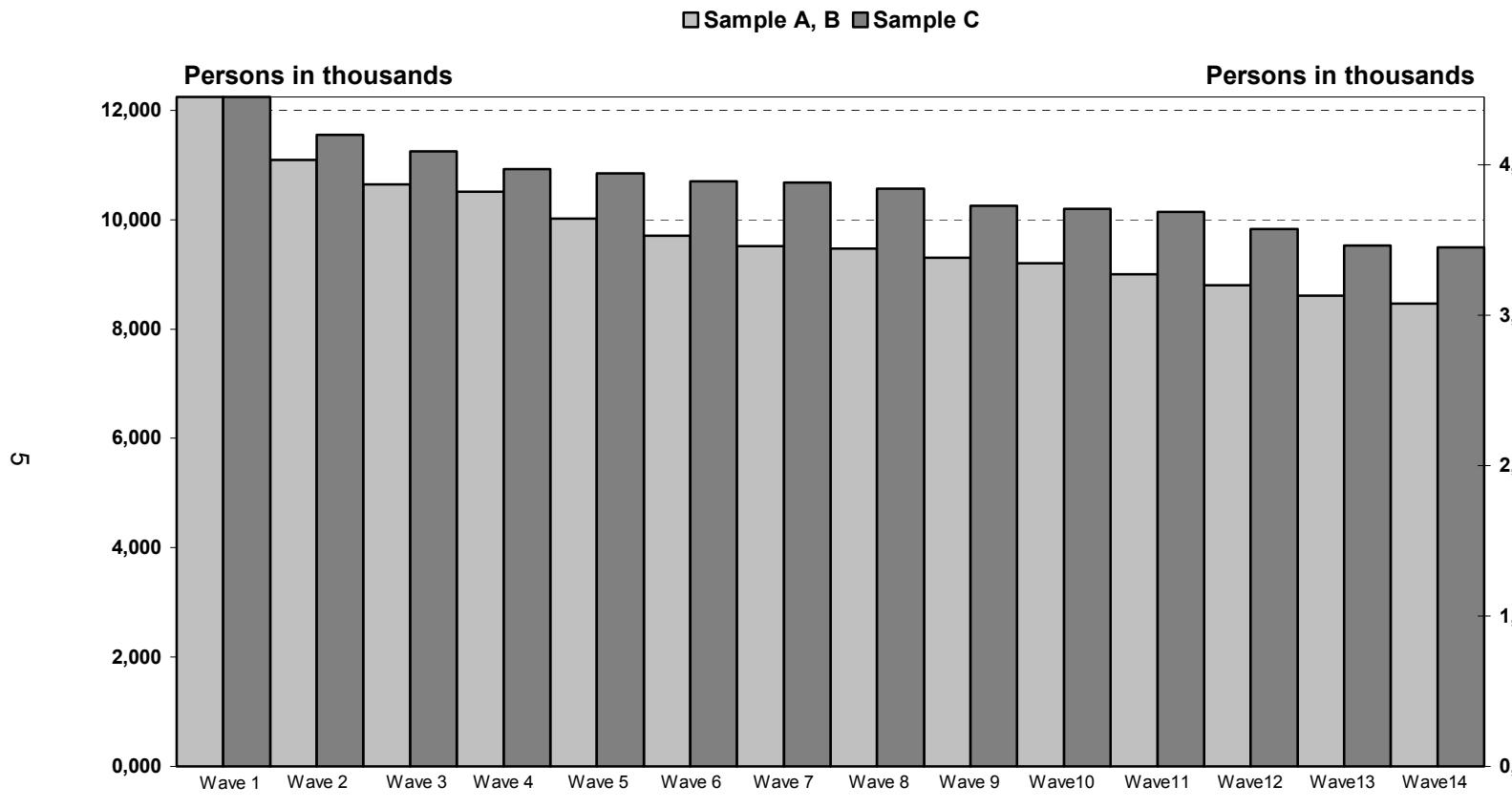


Figure 3:
Comparison of successful interviews with persons and households (subsample C), waves 1 to 14.



Persons	4,453	4,202	4,092	3,973	3,945	3,892	3,882	3,844	3,730	3,709	3,687	3,576	3,466	3,453
Households	2,179	2,030	2,020	1,970	1,959	1,938	1,951	1,942	1,886	1,894	1,879	1,850	1,818	1,807

Figure 4:
Comparison of successful interviews between subsamples A and B vs. subsample C (individuals), waves 1 to 14.



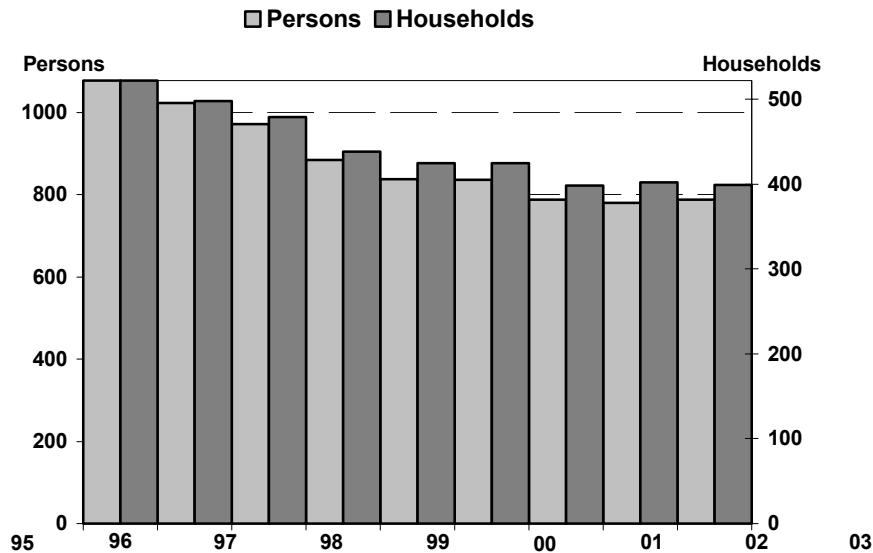
Sample A, B	12,245	11,090	10,646	10,516	10,023	9,710	9,519	9,467	9,305	9,206	9,001	8,798	8,606	8,467
Sample C	4,453	4,202	4,092	3,973	3,945	3,892	3,882	3,844	3,730	3,709	3,687	3,576	3,466	3,453

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1 Development of sample sizes

Figure 5:

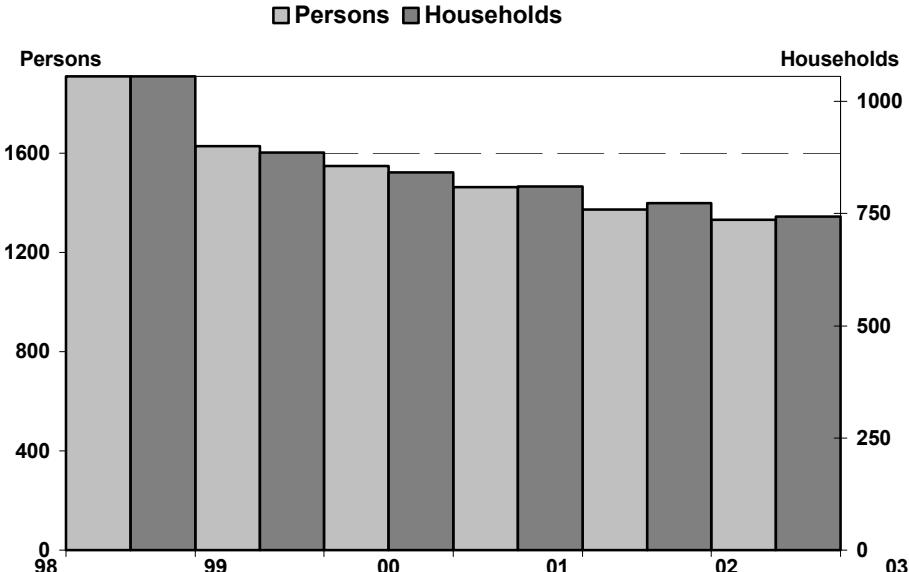
Comparison of successful interviews with individuals and households (subsample D), waves 1 to 9.



Persons	1078	1023	972	885	838	837	789	780	789
Households	522	498	479	441	425	425	398	402	399

Figure 6:

Comparison of successful interviews with individuals and households (subsample E), waves 1 to 6.



Persons	1910	1629	1549	1464	1373	1332
Households	1056	886	842	811	773	744

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1 Development of sample sizes

Figure 7:
Comparison of successful interviews with individuals and households (subsample F), waves 1 to 4.

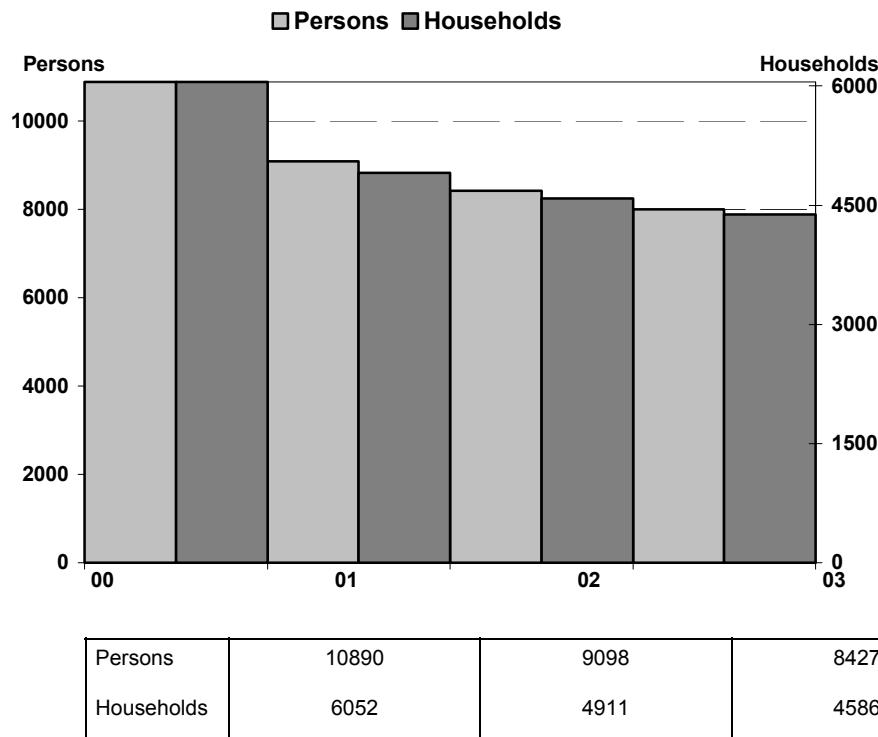
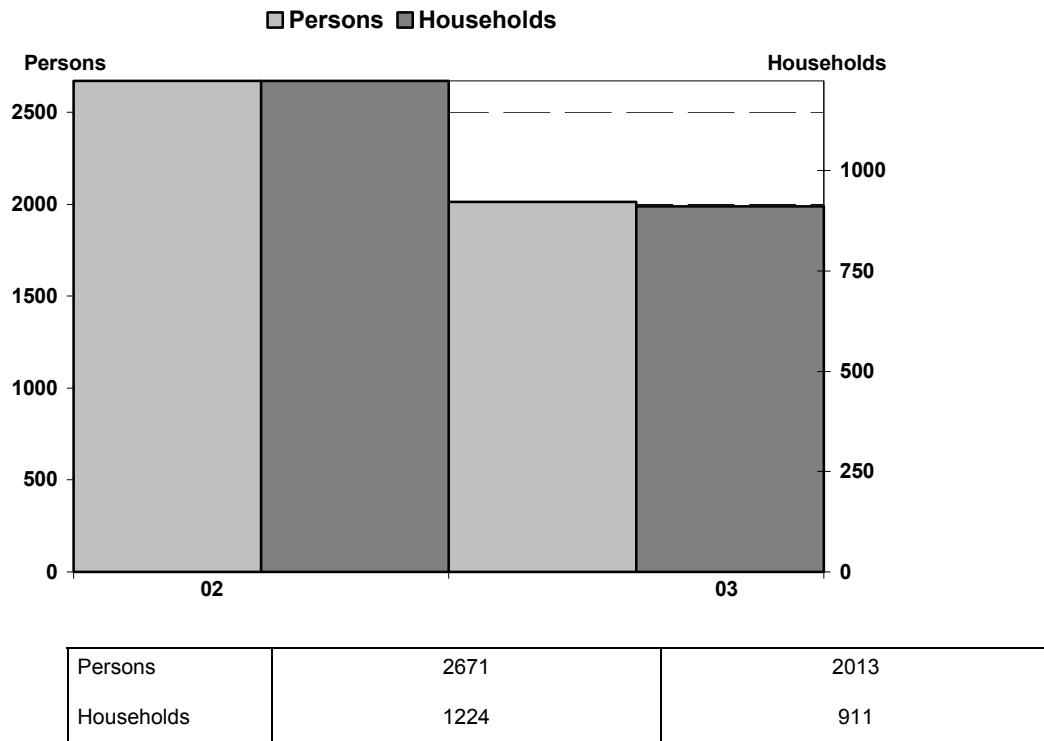


Figure 8:
Comparison of successful interviews with individuals and households (subsample G), waves 1 to 2.



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1 Development of sample sizes

Due to the individual regional mobility the power of the initial subsample indicator to predict the actual sampling region vanishes in course of time.

Table 1a displays the actual sampling region of the GSOEP households since 1990 for subsample A, B and C.

Table 1b shows the same information for the immigrant sample D since 1995.

Table 1c displays current sample regions for subsample E since 1998.

Table 1d displays current sample regions for subsample F in 2000.

Table 1a:

Development of sample sizes (sample A, B, C) by sampling region and institutional status 1990 to 2003.

n = Number of successful interviews, N = Estimated population total in thousands. Population margins for the number of households and individuals living in private households by sampling region are taken from the German microcensus. Because of the different definitorial concepts the figures for the institutional population are not comparable to the microcensus.

Survey year		Sampling region							
		West				East			
		Sample A+B	Sample C	Sample C	Sample A+B	1*	2*	1*	2*
Households									
1990	n	4592	48	-	-	2158	21	-	-
	N	28176	399	-	-	6769	90	-	-
1991	n	4620	49	22	-	1988	20	-	-
	N	28475	395	110	-	6672	109	-	-
1992	n	4598	46	58	3	1946	13	1	-
	N	28743	388	300	19	6655	78	2	-
1993	n	4609	53	78	5	1878	9	5	-
	N	29085	442	411	30	6678	56	56	-
1994	n	4545	47	93	5	1850	11	8	-
	N	29420	444	487	23	6667	83	121	-
1995	n	4451	45	111	3	1814	10	12	-
	N	28339	449	558	10	6620	83	165	-
1996	n	4383	48	118	3	1820	10	14	-
	N	28562	546	680	8	6641	79	150	-
1997	n	4316	54	128	3	1797	14	19	-
	N	28631	582	727	8	6606	117	219	-
1998	n	4212	51	125	3	1742	16	22	-
	N	24058	592	610	8	5562	136	213	-
1999	n	4111	49	139	5	1735	15	23	-
	N	24420	590	722	17	5548	111	217	-
2000	n	3986	51	146	7	1710	16	23	-
	N	13424	298	437	12	3063	82	140	-

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1 Development of sample sizes

Table 1a: continued

Survey year		Sampling region									
		West				East					
		Sample A+B		Sample C		Sample A+B		Sample C			
		Households									
2001	n	3906	46	161	6	1666	17	25	-		
	N	13447	318	468	12	3080	100	162	-		
2002	n	3820	40	175	4	1624	15	28	1		
	N	12516	227	371	8	2881	81	128	5		
2003	n	3743	41	187	2	1607	11	28	2		
	N	13501	183	516	3	3136	46	151	26		
		Persons (including children)									
1990	n	12151	59	-	-	6014	30	-	-		
	N	62365	445	-	-	16313	120	-	-		
1991	n	12100	61	44	-	5613	26	-	-		
	N	62988	439	221	-	15807	129	-	-		
1992	n	11884	58	133	3	5331	18	2	-		
	N	63400	439	601	11	15620	92	3	-		
1993	n	11726	63	182	5	5078	11	7	-		
	N	63938	466	837	25	15477	62	68	-		
1994	n	11468	55	225	5	4938	13	11	-		
	N	64046	454	1082	16	15296	89	164	-		
1995	n	11194	54	277	3	4769	12	23	-		
	N	60339	478	1269	10	15055	91	304	-		
1996	n	10952	55	291	3	4670	12	29	-		
	N	60583	591	1457	8	14965	87	302	-		
1997	n	10742	61	311	3	4526	21	32	-		
	N	60714	623	1563	8	14881	137	351	-		
1998	n	10315	63	291	3	4349	24	41	-		
	N	50699	778	1284	8	12417	162	389	-		
1999	n	10027	60	321	5	4244	23	42	-		
	N	51352	752	1526	17	12238	138	357	-		
2000	n	9639	64	339	7	4143	24	49	-		
	N	28158	395	919	12	6626	92	274	-		
2001	n	9461	59	358	6	3976	26	56	-		
	N	28311	413	954	12	6510	116	300	-		
2002	n	9458	59	383	5	3950	28	57	2		
	N	28374	346	985	14	6476	116	290	14		
2003	n	8907	48	392	2	3723	17	59	2		
	N	28335	191	1071	3	6426	54	257	26		

1*: Private households

2*: Institutionalized population

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1 Development of sample sizes

Table 1b:

Development of sample sizes by sampling region and institutional status 1995 to 2003 for Sample D.

n = Number of successful interviews with weighting factor greater than zero (**hrf > 0). N = estimated population total in thousands.

Survey year		Sampling region								
		West				East				
		Standard Weights		D-specific Weights		Standard Weights		D-specific Weights		
		1*	2*	1*	2*	1*	2*	1*	2*	
Households										
1995	n	307	13	362	14	2	-	2	-	
	N	1247	88	1875	96	9	-	9	-	
1996	n	291	7	347	8	4	-	4	-	
	N	1230	54	1931	63	18	-	22	-	
1997	n	278	4	327	4	4	-	5	-	
	N	1251	32	1890	27	22	-	32	-	
1998	n	253	4	295	4	2	-	3	-	
	N	1017	42	1874	33	11	-	28	-	
1999	n	246	4	282	4	2	-	4	-	
	N	1048	22	1927	27	10	-	36	-	
2000	n	242	4	278	4	3	-	7	-	
	N	596	13	1986	29	8	-	59	-	
2001	n	227	4	263	4	3	-	6	-	
	N	572	13	1991	30	10	-	58	-	
2002	n	237	4	273	4	3	-	8	-	
	N	620	7	2240	27	10	-	73	-	
2003	n	241	4	279	5	3	-	6	-	
	N	644	7	2458	45	3	-	59	-	
Persons (including children)										
1995	n	977	30	1139	32	6	-	6	-	
	N	3794	194	5773	211	26	-	27	-	
1996	n	909	12	1068	14	9	-	9	-	
	N	3665	96	5724	114	37	-	49	-	
1997	n	857	11	1006	11	6	-	9	-	
	N	3675	91	5632	82	31	-	53	-	
1998	n	759	9	884	9	4	-	7	-	
	N	2940	98	5380	80	18	-	65	-	
1999	n	715	11	826	11	4	-	9	-	
	N	2917	72	5397	86	23	-	87	-	
2000	n	688	11	791	11	6	-	15	-	
	N	1629	43	5385	93	18	-	131	-	
2001	n	639	11	738	11	6	-	13	-	
	N	1559	45	5337	96	23	-	133	-	
2002	n	636	8	735	8	6	-	17	-	
	N	1631	10	5785	66	22	-	166	-	
2003	n	648	8	756	9	4	-	12	-	
	N	1738	19	6417	84	13	-	118	-	

1*: Private households / 2*: Institutionalized population

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Table 1c:

Development of sample sizes by sampling region and institutional status from 1998 to 2003 for Sample E.

n = Number of successful interviews, N = Estimated population total in thousands.

Survey Year		Sampling region			
		West		East	
		1*	2*	1*	2*
Households					
1998	n	861	1	194	-
	N	4951	7	1110	-
1999	n	712	4	170	-
	N	4632	52	1196	-
2000	n	673	6	162	1
	N	2618	46	682	7
2001	n	650	8	151	2
	N	2728	58	684	14
2002	n	619	7	146	1
	N	2473	54	620	7
2003	n	601	5	137	1
	N	2790	22	678	4
Persons (including children)					
1998	n	1956	3	417	-
	N	11008	20	2355	-
1999	n	1657	6	372	-
	N	10287	71	2509	-
2000	n	1548	8	353	2
	N	5762	57	1367	14
2001	n	1468	11	331	2
	N	5763	81	1386	14
2002	n	1469	10	331	2
	N	5786	77	1367	14
2003	n	1318	7	289	1
	N	5720	29	1395	4

1*: Private households
2*: Institutionalized population

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1 Development of sample sizes

Table 1d:

Sample sizes by sampling region and institutional status for Sample F from 2000 to 2002.

n = Number of successful interviews, N = Estimated population total in thousands.

Survey Year		Sampling region			
		West		East	
		1*	2*	1*	2*
Households					
2000	n	4829	45	1176	2
	N	13970	346	3185	15
2001	n	3881	29	997	4
	N	14085	276	3220	25
2002	n	3607	31	943	5
	N	12354	238	2941	28
2003	n	3412	28	938	8
	N	14279	142	3247	29
Persons (including children)					
2000	n	11223	52	2599	9
	N	29837	399	6779	69
2001	n	9265	37	2202	6
	N	29935	338	6725	33
2002	n	9279	47	2175	9
	N	29935	384	6671	41
2003	n	7886	42	1976	10
	N	30161	207	6620	33

1*: Private households

2*: Institutionalized population

Considering the estimated population for sample A and B since 1995 (West) at the household and the personal level, we have to take into account that beginning with wave 12 (1995), the A and B weights are reduced to reflect the fact that immigrants are contained now in sample D (see Rendtel/Pannenberg/Daschke 1997 for details). Moreover since 1998 the estimates for samples A, B, C and D are reduced due to the incorporation of sample E (see Spiess/Rendtel 2000 for details). Since 2000 the estimates for samples A, B, C, D and E are reduced due to the incorporation of sample F (see Spiess 2001).

1.2 Longitudinal development of losses due to panel attrition

The following figures display the development of the number of losses due to panel attrition:

- Figure 9:** All first wave persons of subsamples A and B. Whereabout until wave 20.
- Figure 10:** All first wave persons of subsample A. Whereabout until wave 20.
- Figure 11:** All first wave persons of subsample B. Whereabout until wave 20.
- Figure 12:** All first wave persons of subsample C. Whereabout until wave 14.
- Figure 13:** All first wave persons of subsample D. Whereabout until wave 9.
- Figure 14:** All first wave persons of subsample E. Whereabout until wave 6.
- Figure 15:** All first wave persons of subsample F. Whereabout until wave 4.
- Figure 16:** All first wave persons of subsample G. Whereabout until wave 2.
- Figure 17:** All first wave persons (A, B, C). Comparison of the development until wave 14.
- Figure 18:** All first wave persons (A, B, C, D). Comparison of the development until wave 9.
- Figure 19:** All first wave persons (A, B, C, D, E). Comparison of the development until wave 6.
- Figure 20:** All first wave persons (A, B, C, D, E, F). Comparison of the development until Wave 4.
- Figure 21:** All first wave persons (A, B, C, D, E, F, G). Comparison of the development until Wave 2.
- Figure 22:** Entrants by birth or move-in and their participation behavior (subsamples A, B).

The figures in the center display the percentage of records that are without survey related attrition until the corresponding wave. These percentages may be taken as an indicator for panel stability.

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1 Development of sample sizes

Figure 9:

All first wave persons (subsample A+B). Development until wave 20.

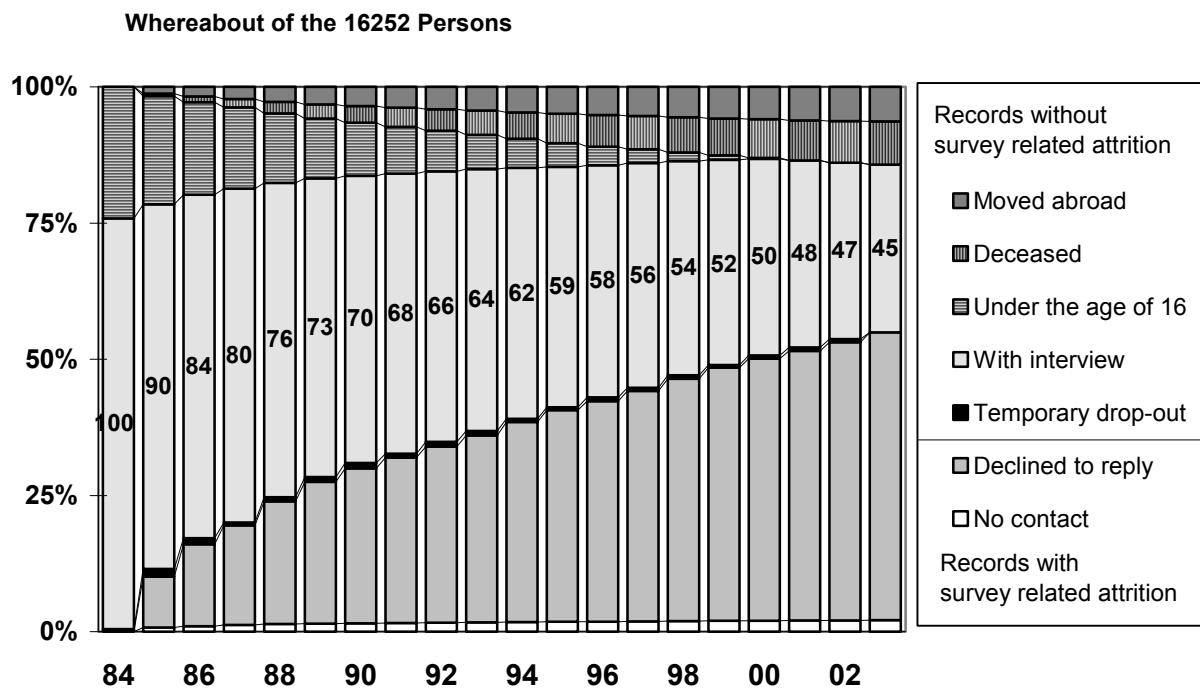


Figure 10:

All first wave persons (subsample A). Development until wave 20.

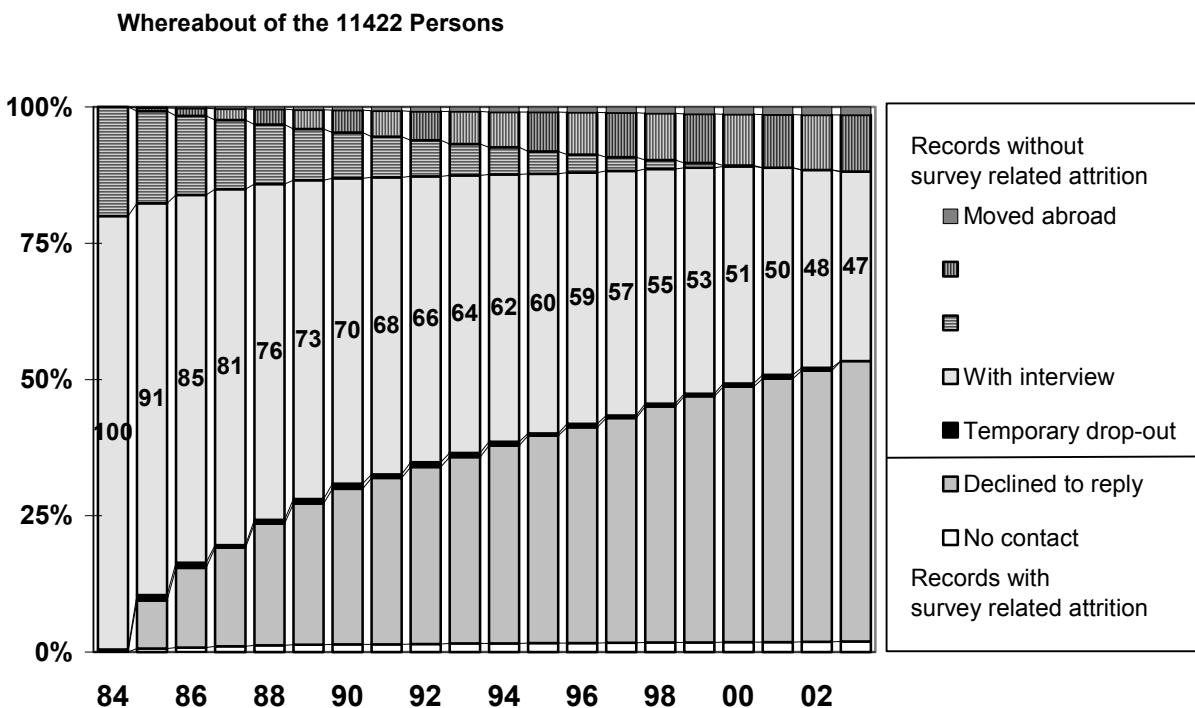


Figure 11:

All first wave persons (subsample B). Development until wave 20.

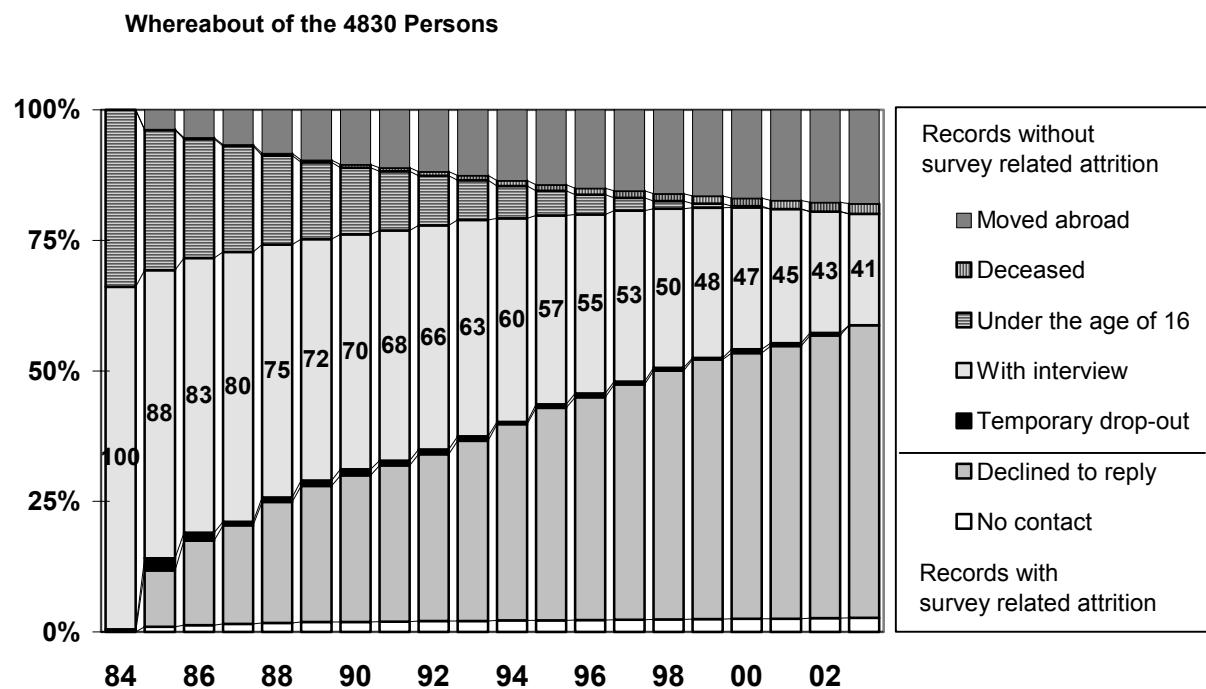
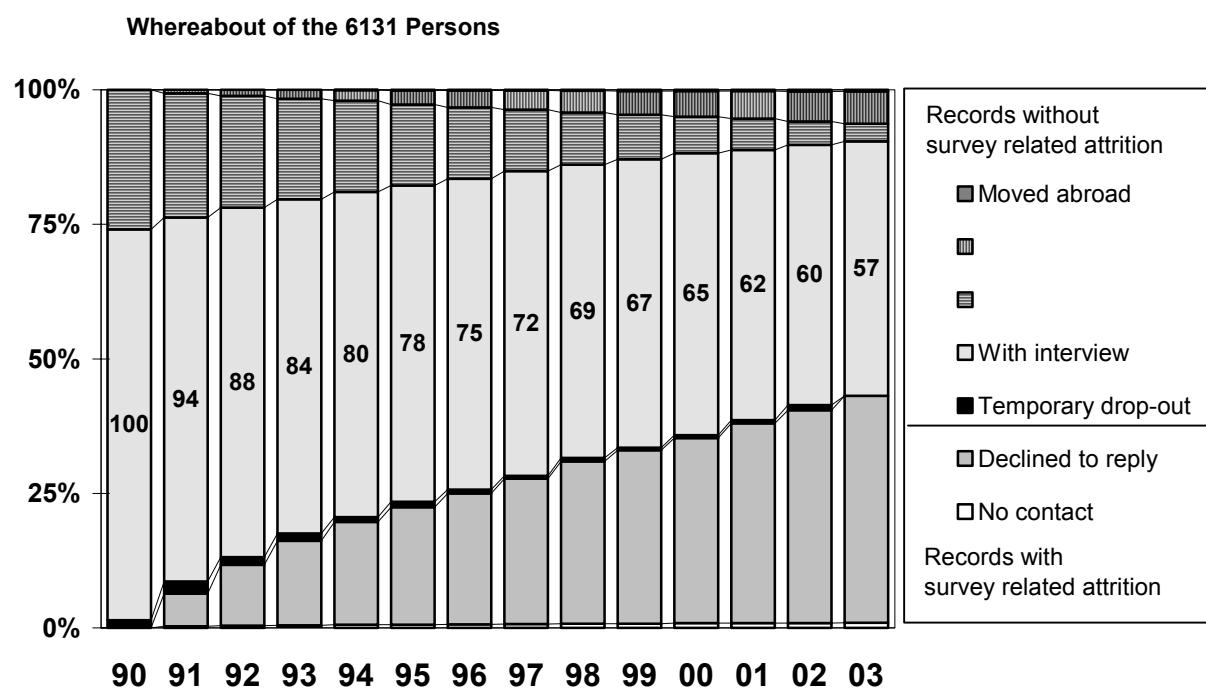


Figure 12:

All first wave persons (subsample C). Development until wave 14.



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1 Development of sample sizes

Figure 13:
All first wave persons (subsample D). Development until wave 9.

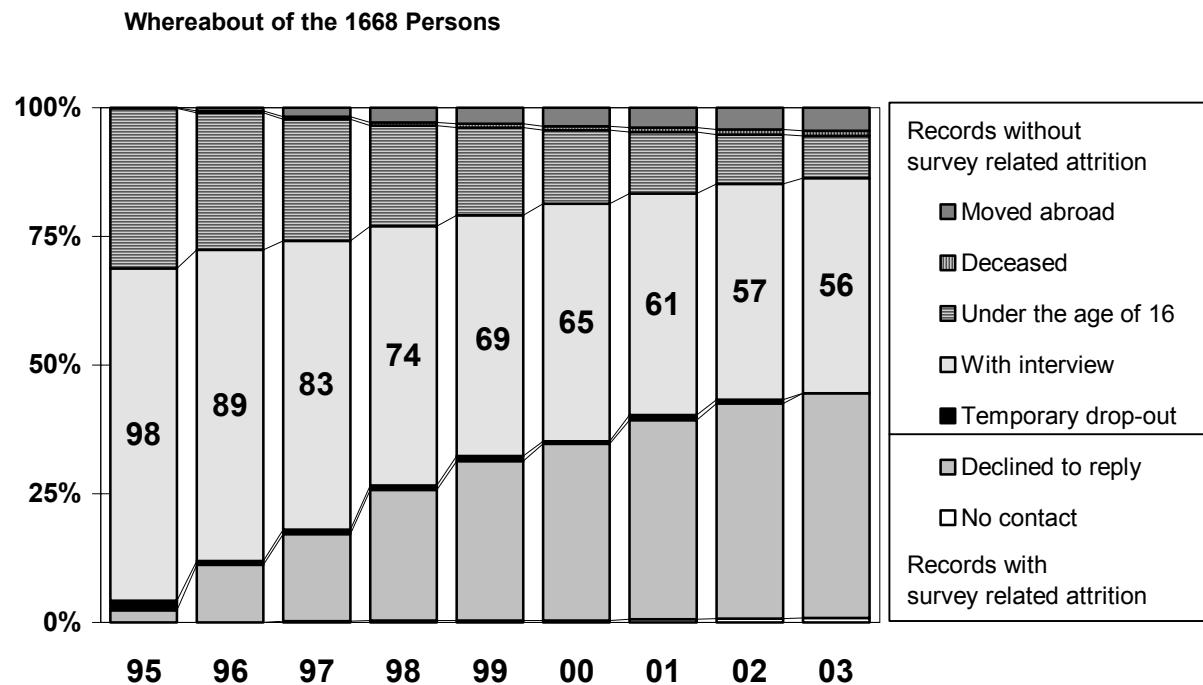


Figure 14:
All first wave persons (subsample E). Development until wave 6.

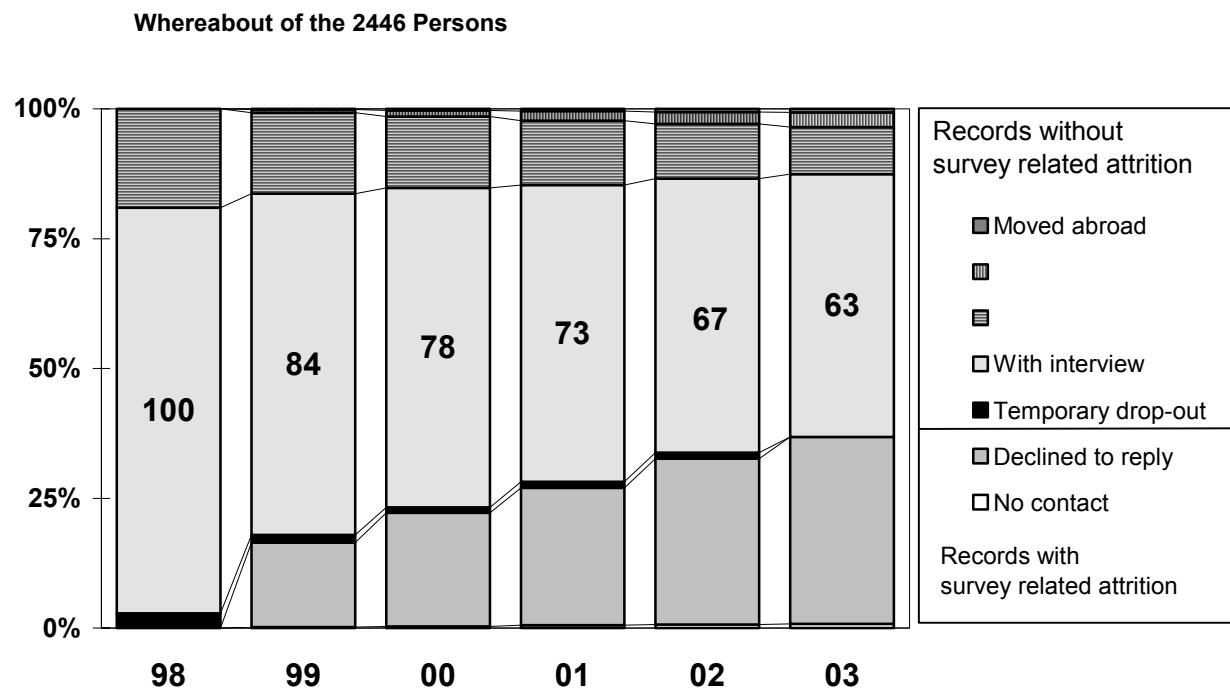


Figure 15:
All first wave persons (subsample F). Development until wave 4.

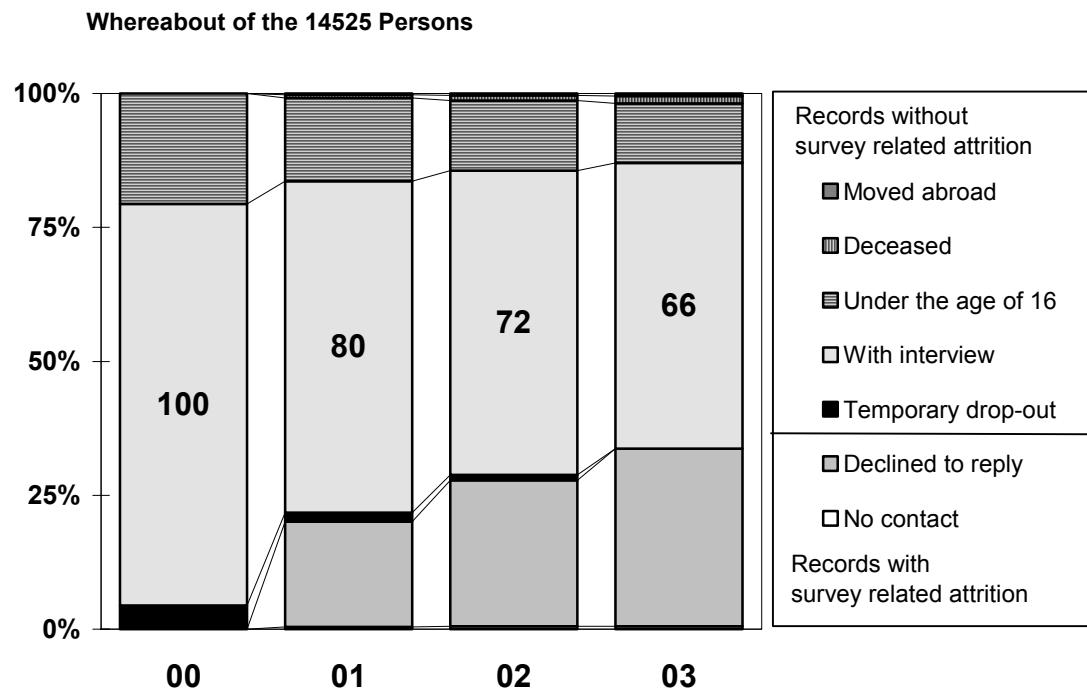


Figure 16:
All first wave persons (subsample G). Development until wave 2.



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Figure 17:

All first wave persons (A, B, C). Comparison of the development until wave 14.

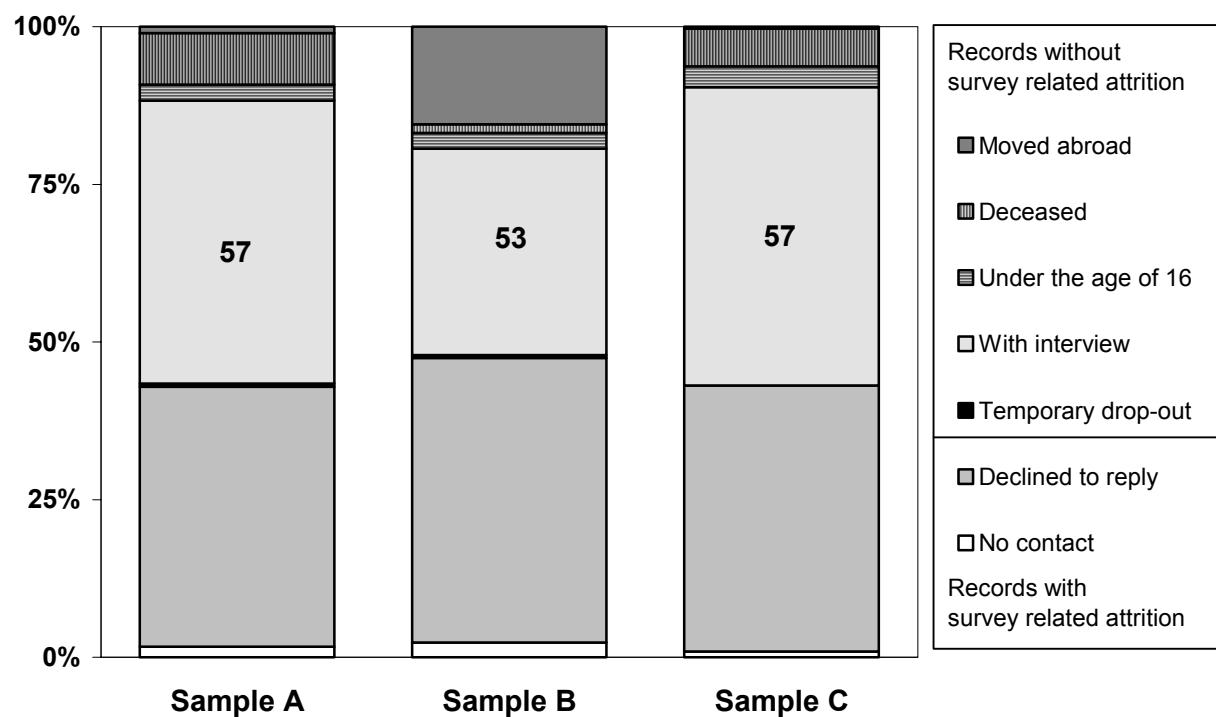


Figure 18:

All first wave persons (A, B, C, D). Comparison of the development until wave 9.

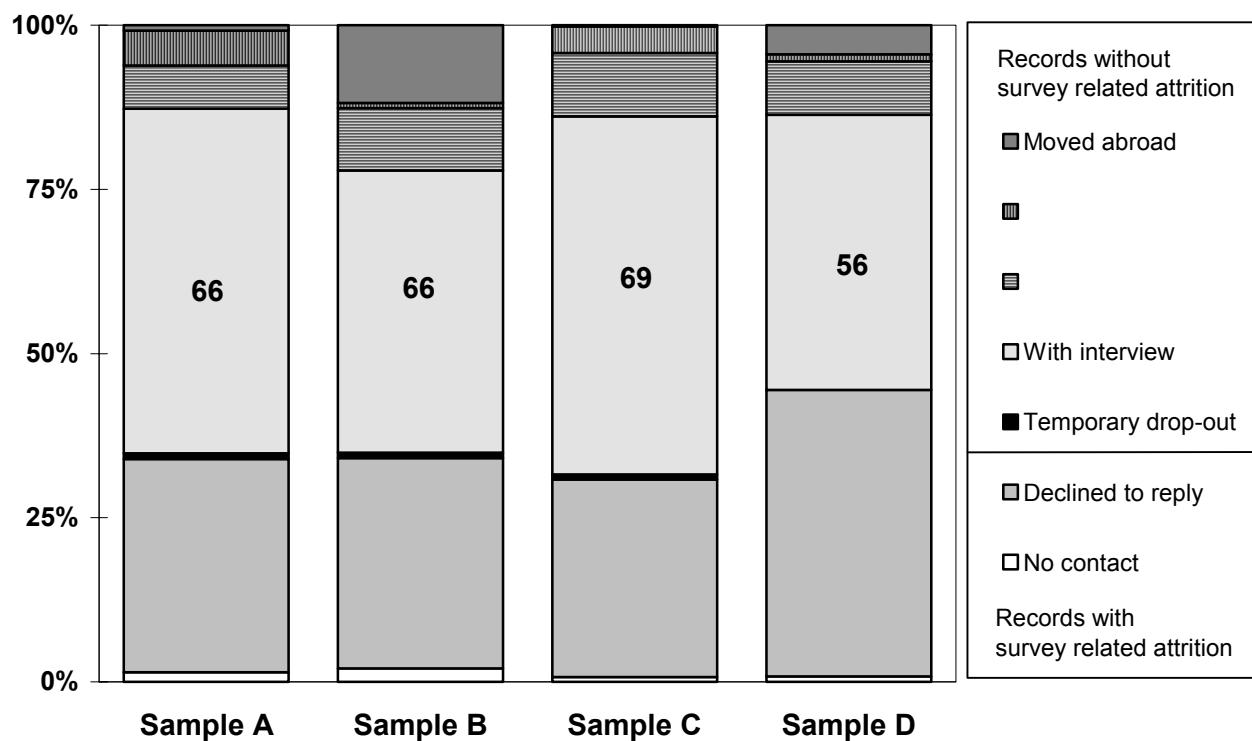


Figure 19:
All first wave persons (A, B, C, D, E). Comparison of the development until wave 6.

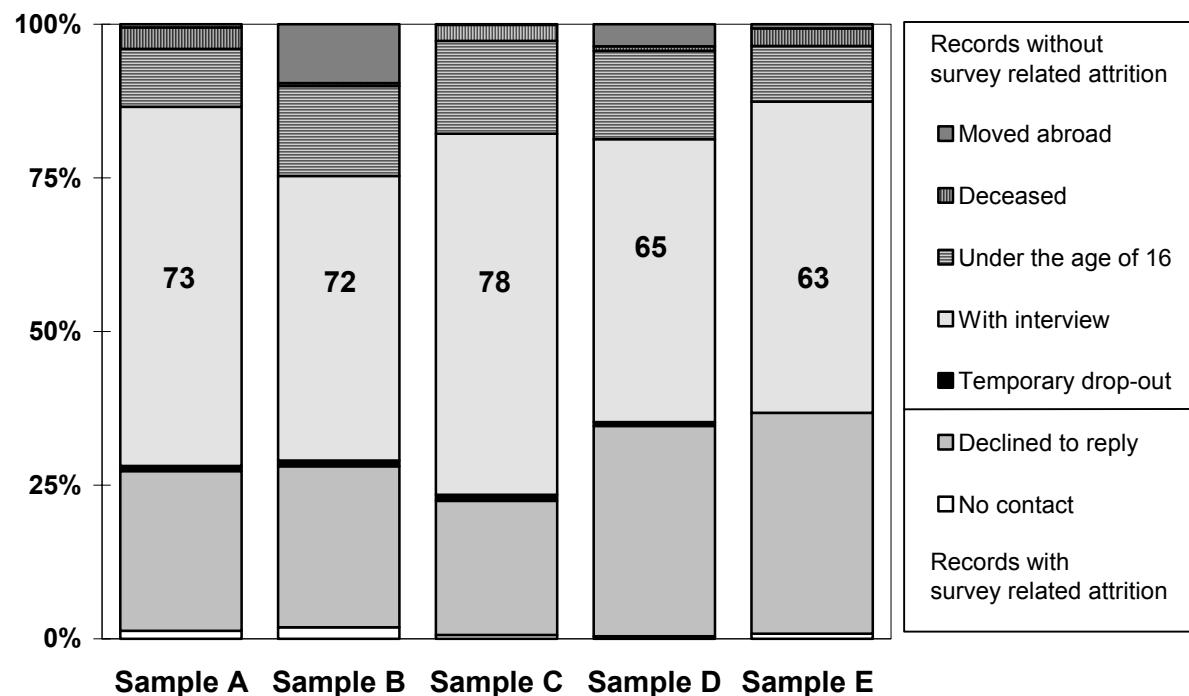
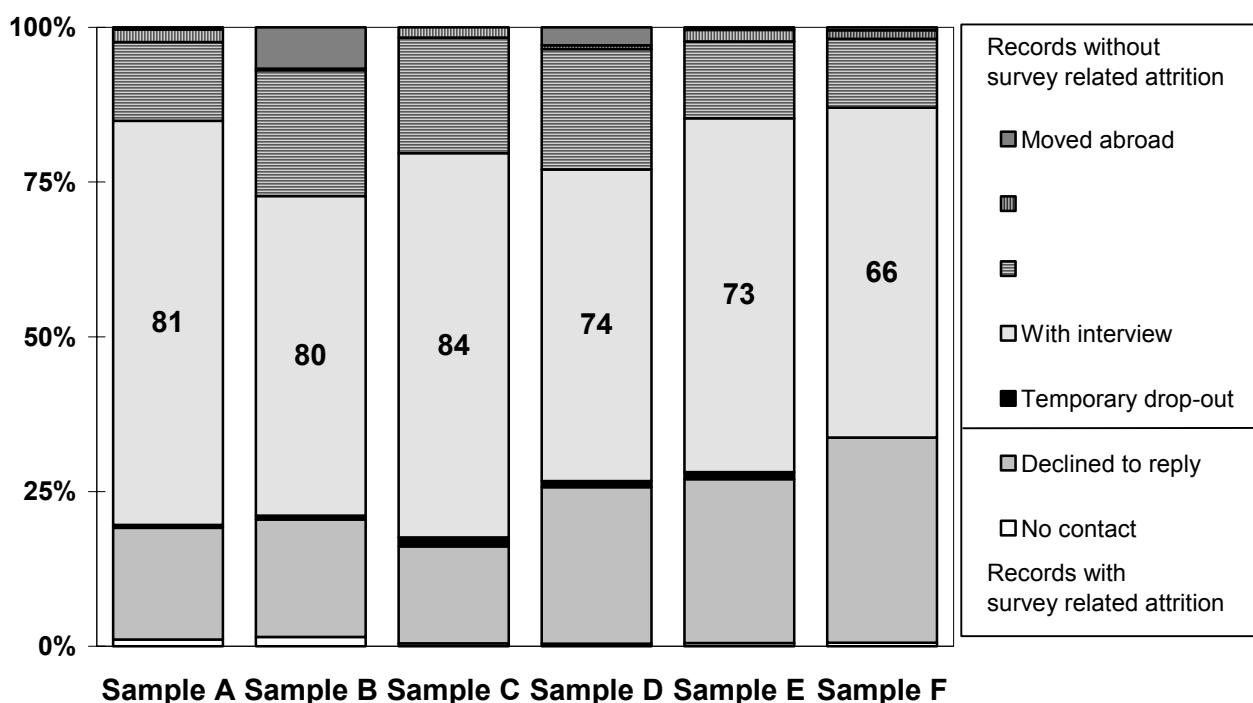


Figure 20:
All first wave persons (A, B, C, D, E,F). Comparison of the development until wave 4.

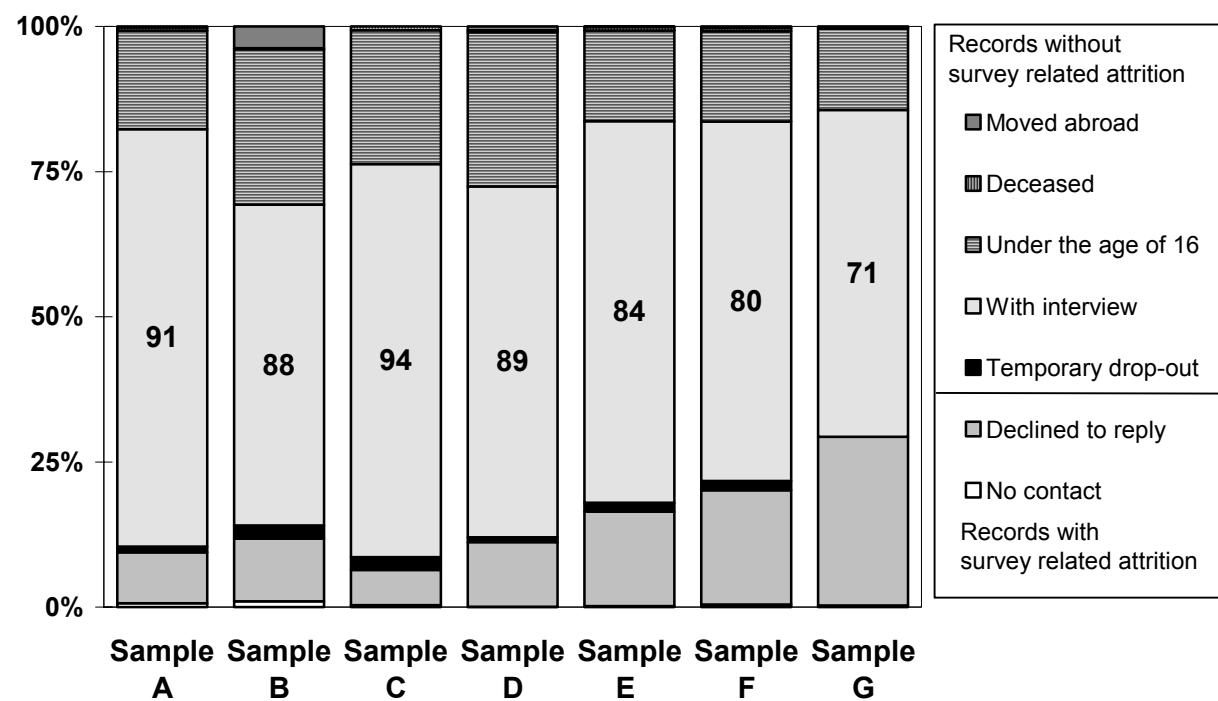


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1 Development of sample sizes

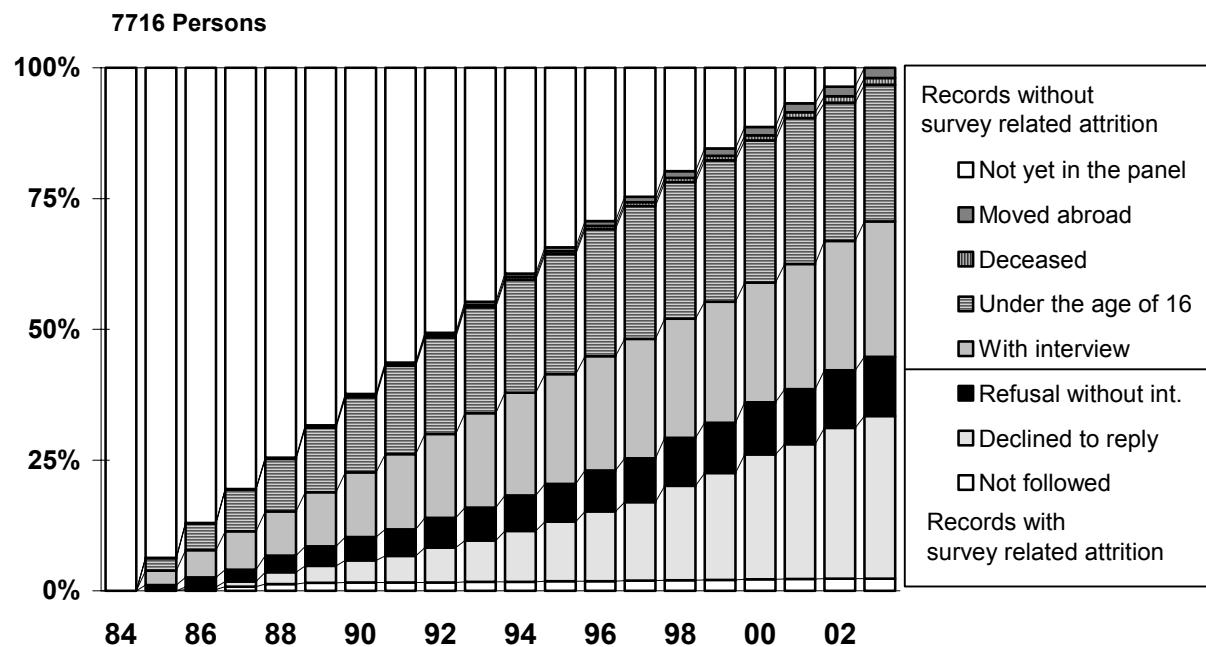
Figure 21:

All first wave persons (A, B, C, D, E, F, G). Comparison of the development until wave 2.



1.3 Entrants by birth or move-ins and their participation behavior

Figure 22:
Entrants by birth or move-in and their participation behavior (subsamples A, B).



2 Losses due to unsuccessful follow-up

In each panel wave it is necessary to re-contact the households of the preceding wave. Therefore we have to check whether:

- the household still lives at the old address,
- the entire household has moved,
- all household members deceased,
- all household members left the sampling area,
- all household members returned into an existing panel household.

2.1 Drop-out rates by mobility behavior

Table 2 to 7 display the success of the field work with respect to recontacting of households for Sample A, B, C, D, E, F and G. The drop-out rates refer to all households of the previous wave that still exist in the sampling area plus split-off households. A contact is regarded to be successfully established if the interviewer recorded an interview or a refusal in the address protocol. Moreover, if the household members returned into an existing panel household, this is classified as a successful follow-up.

Data Documentation 1**2 Losses due to unsuccessful follow-up**

Table 2:

Drop-out rates due to unsuccessful follow-up in the GSOEP subsamples A and B.

N = Number of households to be recontacted; % = percentage of households without contact.

Wave	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
Total																			
N	6051	5814	5465	5342	5156	5044	5029	5006	5049	5008	4900	4817	4733	4695	4616	4495	4371	4290	4170
%	1.9	1.4	1.0	0.9	0.9	0.9	0.5	0.4	0.9	0.8	0.6	0.4	0.5	0.6	0.5	0.4	0.5	0.4	0.4
Households without move																			
N	5413	5039	4808	4683	4545	4472	4448	4447	4395	4359	4292	4178	4153	4022	3965	3927	3807	3749	3692
%	0.8	0.4	0.1	0.1	0.2	0.0	0.04	0.0	0.02	0.1	0.07	0.02	0.05	0.0	0.05	0.00	0.01	0.0	0.03
Moved multi-person households																			
N	298	307	272	274	228	186	197	195	231	239	264	301	249	281	265	236	242	240	206
%	7.4	3.6	4.0	5.5	0.5	1.6	0.5	0.5	0.9	0.0	1.9	1.7	0.8	1.1	1.1	2.5	1.24	1.67	1.46
Moved single-person households																			
N	119	180	142	143	126	122	94	90	105	146	127	120	121	157	159	117	143	121	107
%	21.0	14.4	7.7	5.6	4.7	5.7	1.1	0.0	7.6	6.2	0.8	0.0	0.8	3.2	0.6	1.7	3.5	0.8	0.9
Split-off households																			
N	221	295	242	242	246	263	290	273	317	264	217	218	210	235	227	215	179	180	165
%	11.7	8.4	10.4	7.4	11.8	12.9	7.6	7.3	10.7	9.9	9.2	6.9	8.6	8.5	6.6	5.1	5.6	7.2	6.1

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2 Losses due to unsuccessful follow-up

Table 3:

Drop-out rates due to unsuccessful follow-up in the GSOEP subsample C.

N = Number of households to be recontacted;

% = percentage of households without contact.

Wave	2	3	4	5	6	7	8	9	10	11	12	13	14
	Total												
N	2246	2304	2227	2136	2113	2104	2091	2081	2041	2028	2036	2010	1982
%	1.5	0.5	0.9	0.6	0.4	0.5	0.5	0.6	0.3	0.4	0.3	0.5	0.4
	Households without move												
N	2062	2043	2021	1904	1862	1796	1771	1732	1750	2028	1740	1702	1716
%	0.0	0.05	0.05	0.0	0.1	0.0	0.1	0.0	0.06	0.4	0.0	0.06	0.06
	Moved multi-person households												
N	81	106	82	92	119	142	153	175	132	161	132	133	108
%	11.1	0.0	3.7	2.2	0.0	1.4	0.0	0.6	0.0	0.6	1.5	0.8	0.9
	Moved single-person households												
N	21	43	14	39	30	45	60	64	56	63	52	65	62
%	14.3	9.3	0.0	2.6	3.3	4.4	1.7	1.6	0.0	0.0	0.0	0.0	0.0
	Split-off households												
N	82	112	110	104	102	121	107	110	103	107	112	110	96
%	25.6	6.3	13.6	8.6	6.9	5.8	8.4	10.0	5.8	5.6	3.6	6.4	6.3

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2 Losses due to unsuccessful follow-up

Table 4:

Drop-out rates due to unsuccessfull follow-up in the GSOEP subsample D.

N = Number of households to be recontacted;

% = percentage of households without contact.

Wave	2	3	4	5	6	7	8	9
	Total							
N	544	542	498	529	467	454	450	434
%	0.4	0.7	0.6	0.9	0.2	0.9	0.2	0.5
	Households without move							
N	431	424	394	409	396	381	370	374
%	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Moved multi-person households							
N	74	65	60	65	41	43	38	30
%	0.0	0.0	1.7	3.1	0.0	2.3	0.0	0.0
	Moved single-person households							
N	16	16	15	18	7	11	13	11
%	6.3	6.3	6.7	5.6	0.0	27.3	0.0	0.0
	Split-off households							
N	23	37	29	37	23	19	29	19
%	4.4	8.1	3.5	5.4	4.4	0.0	3.5	10.5

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2 Losses due to unsuccessful follow-up

Table 5:

Drop-out rates due to unsuccessful follow-up in the GSOEP subsample E.

N = Number of households to be recontacted;

% = percentage of households without contact.

Characteristic	Wave 2		Wave 3		Wave 4		Wave 5		Wave 6	
	N	%	N	%	N	%	N	%	N	%
Total	1100	0.5	968	0.8	922	0.87	875	0.57	834	0.72
Households without move	996	0.0	869	0.1	814	0.1	775	0.0	740	0.1
Moved multi- person households	36	0.0	40	7.5	33	3.0	41	0.0	41	2.4
Moved single- person households	32	3.1	19	0.0	25	4.0	25	8.0	19	0.0
Split-off households	36	11.1	40	10.0	50	10.0	34	8.8	34	11.8

Table 6:

Drop-out rates due to unsuccessful follow-up in the GSOEP subsample F.

N = Number of households to be recontacted;

% = percentage of households without contact.

Characteristic	Wave 2		Wave 3		Wave 4	
	N	%	N	%	N	%
Total	6172	1.0	5451	0.5	4965	0.3
Households without move	5557	0.0	4915	0.0	4441	0.0
Moved multi- person households	275	7.6	208	0.0	204	0.5
Moved single- person households	176	10.8	127	3.2	128	3.1
Split-off households	164	13.4	201	10.5	192	4.7

Table 7:

Drop-out rates due to unsuccessfull follow-up in the GSOEP subsample G.

N = Number of households to be recontacted;

% = percentage of households without contact.

Characteristic	Wave 2	
	N	%
Total	1056	0.9
Households without move	963	0.0
Moved multi- person households	35	2.9
Moved single- person households	4	0.0
Split-off households	54	14.8

2.2 Definition of the regressors for a Logit analysis

The estimation of the probability that a household is lost by unsuccessful follow-up is done by means of a Logit model with the following characteristics:

Characteristic	Abbreviation	Code	Values
Moved	MOVE	1	household, not moved
		2	Moved multi-person household
		3	Moved single-person household
		4	Split-off household
Large City	LARGE	0	Else
		1	More than 100 thousand inhabitants
Household size	SIZE	1	Single-person household
		2	2 person household
		3	3 person household
		4	4 or more persons household
Single-person Household	SINGLE	0	Else
		1	Single-person household
Type of house	TYP	1	Single house or rural area
		2	Multi storey house
		3	Else
Split-off household	SPLIT	1	Moved multi-person household
		2	Moved single-person household
		3	Split-off household
Interview mode in first wave	ECAPI	0	PAPI
		1	CAPI
Type of residential area	SUBURB	0	Else
		1	Suburban area

2.3 Estimated coefficients of the Logit model

The regressors defined in the previous section were employed in a Logit analysis. The model estimates the probability $P_c = (\text{contact} = \text{no})$. For the computation of the GSOEP weighting schemes only model specifications with all regressors being significant were used. The specification is:

$$\ln \frac{P_{c,i}}{1 - P_{c,i}} = \text{const} + X' \beta$$

Thus, positive estimated parameters indicate an increased drop-out rate compared to the sample average.

Table 8 uses a simple symbolic notation for the models and their estimated parameters. Here „+„ means the addition of a main effect, an „*„ indicates an interaction term. Variable 1 (Variable 2 = c) symbolizes a conditional main effect which is linked to cases where variable 2 = c. The estimated coefficients are displayed under the model equation. The notation uses the convention: variable (value 1: coefficient 1/value 2: coefficient 1/...).

The estimated drop out rates due to unsuccessful follow-up may be easily calculated from table 6. For example: In wave 2, subsample A, we find for a multiple-person household, that moved (MOVE=2) from a large city (LARGE=1) the logit value $-2.87+0.24+0.11=-2.52$. Thus we get

$$\Pr(\text{contact} = \text{no}) = \frac{e^{-2.52}}{1 + e^{-2.52}} = 0.074.$$

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2 Losses due to unsuccessful follow-up

Table 8:

The estimates of a Logit model for the probability of a drop-out due to unsuccessful follow-up in the GSOEP.

Description of coefficients: variable (value 1: coefficient 1/value 2: coefficient 1/...).

Subsample A (West-Germans)	
Wave	Model and coefficients
2	Model = CONST + LARGE + MOVE CONST (-2.87), LARGE (0: -0.24 / 1: 0.24) MOVE (1: -2.52 / 2: 0.11 / 3: 1.53 / 4: 0.84)
3	Model = CONST + LARGE + MOVE CONST (-3.62), LARGE (0: -0.36 / 1: 0.36), MOVE (1: -1.79 / 2: -0.49 / 3: 1.48 / 4: 0.80)
4	Model = CONST + MOVE CONST (-3.42), MOVE (1: -3.01 / 2: 0.78 / 3: 0.98 / 4: 1.25)
5	Model = CONST + MOVE + SINGLE (MOVE) CONST (-3.76), MOVE (1: -3.09 / 2,3: 1.34 / 4: 1.75) SINGLE (MOVE = 1) (0: -1.35 / 1: 1.35) SINGLE (MOVE = 2,3) 0: -0.28 / 1: 0.28 SINGLE (MOVE = 4) (0: -0.63 / 1: 0.63)
6	Model = CONST + MOVE + SINGLE (MOVE) CONST (-3.48), MOVE (1: -2.33 / 2,3: 0.64 / 4: 1.69) SINGLE (MOVE = 1) (0: -0.75 / 1: 0.75) SINGLE (MOVE = 2,3) (0: -0.76 / 1: 0.76) SINGLE (MOVE= 4) (0: -0.26 / 1: 0.26)
7*	Model = CONST + LARGE + SPLIT CONST (-2.97), LARGE (0: -0.39 / 1: 0.39), SPLIT (1: -1.10 / 2: -0.07 / 3: 1.17)
8	Model = CONST + MOVE CONST (-5.03) MOVE 1: -2.79 / 2: -0.24 / 3: 0.50 / 4: 2.53)
9	Pr (contact = no) = 0 if MOVE = 1,2,3 / =0.06 if MOVE =4
10	Model = CONST + LARGE + MOVE CONST (-4.44), LARGE (0: -0.44 / 1: 0.44), MOVE (1: -3.65 / 2: 0.10 / 3: 1.12 / 4: 2.42)
11	Model = CONST + SINGLE + MOVE CONST (-6.01), SINGLE (0: -1.06 / 1: 1.06) MOVE (1: -0.99 / 2: -5.13 / 3: 1.84 / 4: 4.28)

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2 Losses due to unsuccessful follow-up

Table 8: continued (1)

Subsample A (West-Germans)	
Wave	Model and Coefficients
12	Model = CONST + SINGLE + MOVE CONST (-4.61), SINGLE (0: -0.72 / 1: 0.72) MOVE (1: -2.68 / 2: 0.78 / 3: -0.83 / 4: 2.73)
13	Model = CONST + MOVE CONST (-6.89) MOVE (1: -1.21 / 2: 2.30 / 3: -5.31 / 4: 4.22)
14	Model = CONST + MOVE + SINGLE CONST (-6.95) SINGLE (0: -0.73 / 1: 0.73) MOVE (1: -9.09 / 2: 2.56 / 3: 1.62 / 4: 4.91)
15	Model = CONST + MOVE + SINGLE CONST (-3.97) MOVE (1,2,3: -2.15 / 4: 2.15) SINGLE (0: -0.76 / 1: 0.76)
16	Model = CONST + MOVE CONST (-4.82) MOVE (1,2,3: -2.23 / 4: 2.23)
17	Model = CONST + MOVE CONST (-4.64) MOVE (1,2,3: -1.70 / 4: 1.70)
18	Model = CONST + MOVE CONST (-4.44) MOVE (1,2,3: -1.73 / 4: 1.73)
19	Model = CONST + MOVE CONST (-5.1) MOVE (1,2,3: -2.29 / 4: 2.29)
20	Model = CONST + MOVE CONST (-4.77) MOVE (1,2,3: -2.20 / 4: 2.20)

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2 Losses due to unsuccessful follow-up

Table 8: continued (2)

<p>* In wave 7 all households that did not move were successfully re-contacted. The drop-out analysis is therefore based only on households with an observed move.</p>	
Subsample B (Foreigners)	
Wave	Model and coefficients
2	Model = CONST + LARGE + MOVE + SIZE CONST (-2.28), LARGE (0: -0.50 / 1: 0.50), MOVE (1: -1.66 / 2: 0.69 / 3: -0.07 / 4: 1.04) SIZE (1: 1.23 / 2: 0.26 / 3: -0.82 / 4: -0.67)
3	Model = CONST + LARGE + MOVE CONST (-2.65), LARGE (0: -0.72 / 1: 0.72), MOVE (1: -3.06 / 2: 0.16 / 3: 1.64 / 4: 1.26)
4	CONST (-3.34), MOVE (1: -3.60 / 2: -0.46 / 3: 2.19 / 4: 1.87)
5	like Subsample A
6	like Subsample A
7*	Model = CONST + LARGE + SPLIT + TYPE CONST (-2.93), LARGE (0: 0.64 / 1: -0.64), SPLIT (1: -1.65 / 2: 0.58 / 3: 1.07), TYPE (1: -0.73 / 2: 1.32 / 3: -0.59)
8	Like Subsample A
9	$\Pr(\text{contact} = \text{no}) = 0$ if $\text{MOVE} = 1,2,3$ / $= 0.10$ if $\text{MOVE} = 4$
10	Model = CONST + LARGE + MOVE CONST (-7.98), LARGE (0: -0.81 / 1: 0.81), MOVE (1: -7.63 / 2: -4.69 / 3: 6.50 / 4: 5.82)
11	Model = CONST + SINGLE + MOVE CONST (-5.39), SINGLE (0: -1.5 / 1: 1.54), MOVE (1: -1.19 / 2: -4.26 / 3: 2.07 / 4: 3.39)
12	Model = CONST + MOVE CONST (-5.34), MOVE (1: -1.52 / 2: 2.21 / 3: -3.86 / 4: 3.17)
13	Model = CONST + MOVE CONST (-8.32), MOVE (1: -7.08 / 2: 4.83 / 3: -3.61 / 4: 5.86)
14	Model = CONST + MOVE CONST (-5.69), MOVE (1: -0.40 / 2: 1.31 / 3: -4.51 / 4: 3.60)
15	Model = CONST + MOVE CONST (-4.72), MOVE (1,2,3: -2.14 / 4: 2.14)
16	Model = CONST + SINGLE + MOVE CONST (-3.90) SINGLE (0: -0.93 / 1: 0.93) MOVE (1,2,3: -1.47 / 4: 1.47)

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2 Losses due to unsuccessful follow-up

Table 8: continued (3)

Subsample B (Foreigners)	
Wave	Model and coefficients
17	Model = CONST + MOVE CONST (-4.47) MOVE (1,2,3: -1.62 / 4: 1.62)
18	Model = CONST + MOVE CONST (-4.42) MOVE (1,2,3: -1.2 / 4: 1.2)
19	Model = CONST + MOVE CONST (-3.77) MOVE (1,2,3: -1.86 / 4: 1.86)
20	Model = CONST + MOVE CONST (-4.80) MOVE (1,2,3: -1.19 / 4: 1.19)
*	In wave 7 all households that did not move were successfully re-contacted. The drop-out analysis is therefore based only on households with an observed move.
Subsample C (East-Germans)	
Wave	Model and coefficients
2	$\text{Pr}(\text{contact}=\text{no}) = \text{MOVE} (1: 0.0 / 2: 0.11 / 3: 0.14 / 4: 0.25)$
3	$\text{Pr}(\text{contact}=\text{no}) = \text{MOVE} (1,2: 0.0 / 3: 0.09 / 4: 0.07)$
4	$\text{Pr}(\text{contact}=\text{no}) = \text{MOVE} (1: 0.0 / 2: 0.04 / 3: 0.0 / 4: 0.14)$
5	$\text{Pr}(\text{contact}=\text{no}) = \text{MOVE} (1: 0.0 / 2: 0.02 / 3: 0.03 / 4: 0.09)$
6	$\text{Pr}(\text{contact}=\text{no}) = \text{MOVE} (1: 0.0 / 2: 0.0 / 3: 0.03 / 4: 0.07)$
7	$\text{Pr}(\text{contact}=\text{no}) = \text{MOVE} (1: 0.0 / 2: 0.01 / 3: 0.04 / 4: 0.06)$
8	$\text{Pr}(\text{contact}=\text{no}) = \text{MOVE} (1: 0.0 / 2: 0.0 / 3: 0.02 / 4: 0.08)$
9	Model = CONST + MOVE + SIZE CONST (-4.80) MOVE (1,2,3: -2.55 / 4: 2.55) SIZE (1,2: -0.96 / 3,4: 0.96)
10	Model = CONST + MOVE + SINGLE CONST (-4.80) MOVE (1,2,3: -2.61 / 4: 2.61) SINGLE (0: -1.00 / 1: 1.00)
11	Model = CONST + MOVE CONST (-5.19) MOVE (1,2,3: -2.37 / 4: 2.37)

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2 Losses due to unsuccessful follow-up

Table 8: continued (4)

Subsample C (East-Germans)	
Wave	Model and coefficients
12	Model = CONST + MOVE CONST (-5.08) MOVE (1,2,3: -1.79 / 4: 1.79)
13	Model = CONST + MOVE CONST (-4.77) MOVE (1,2,3: -2.08 / 4: 2.08)
14	Model = CONST + MOVE CONST (-4.78) MOVE (1,2,3: -2.07 / 4: 2.07)
Subsample D (Immigrants)	
Wave	Model and coefficients*
2	$\Pr(\text{contact}=\text{no}) = \text{MOVE} (1: 0.0 / 2: 0.0 / 3: 0.07 / 4: 0.05)$
3	$\Pr(\text{contact}=\text{no}) = \text{MOVE} (1: 0.0 / 2: 0.0 / 3: 0.08 / 4: 0.08)$
4	$\Pr(\text{contact}=\text{no}) = \text{MOVE} (1: 0.0 / 2: 0.04 / 3: 0.08 / 4: 0.04)$
5	Model = CONST + MOVE CONST (-4.24) MOVE (1,2,3: -1.46 / 4: 1.46)
6	Pr(contact=no)=0 / all households successfully followed-up.
7	Model = CONST CONST (-2.83)
8	Model = CONST CONST (-2.85)
* excluding households with $*\text{hhffd} \leq 0$.	
Subsample E (Refreshment)	
Wave	Model and coefficients
2	Model = CONST + MOVE CONST (-4.52) MOVE (1,2,3: -2.44 / 4: 2.44)
3	Model = CONST + MOVE CONST (-3.96) MOVE (1,2: -2.80 / 3: 1.04 / 4: 1.76)
4	Model = CONST + MOVE + LARGE CONST (-4.00) MOVE (1,2,3: -1.80 / 4: 1.80) LARGE (0: -0.99 / 1: 0.99)

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2 Losses due to unsuccessful follow-up

Table 8: continued (5)

Subsample E (Refreshment)	
Wave	Model and coefficients
5	Model = CONST + MOVE CONST (-4.19) MOVE (1,2,3: -1.85 / 4: 1.85)
6	Model = CONST + MOVE + SINGLE + ECAPI CONST (-4.17) MOVE (1,2,3: -2.74 / 4: 2.74) SINGLE (0: -1.29 / 1: 1.29) ECAPI (0: 1.32 / 1: -1.32)
Subsample F (Innovation)	
Wave	Model and coefficients
2*	Model = CONST + SPLIT CONST (-2.16) SPLIT (1: -0.34 / 2: 0.05 / 3: 0.29)
3	Model = CONST + MOVE + SINGLE CONST (-4.30) MOVE (1,2,3: -2.35 / 4: 2.35) SINGLE (0: 0.52 / 1: -0.52)
4	Model = CONST + MOVE + SINGLE + LARGE CONST (-4.64) MOVE (1,2,3: -2.11 / 4: 2.11) SINGLE (0: -0.64 / 1: 0.64) LARGE (0: -0.56/ 1: 0.56)
* In wave 2 all households that did not move were successfully re-contacted. The drop-out analysis is therefore based only on households with an observed move.	
Subsample G (High Income)	
Wave	Model and coefficients
2	Model = CONST + MOVE + SUBURB CONST (-4.12) MOVE (1,2,3: -2.66 / 4: 2.66) SUBURB (0: -0.90 / 1: 0.90)

3 Losses due to refusals

3.1 Drop-out rates by different household characteristics

Table 9 displays the drop-out rates due to refusal by different household characteristics. In general the characteristics are drawn from the previous wave. However, the survey related characteristics refer to the actual sampling wave.

The individual attributes refer to the head of the household in the previous wave. However, for split-off households the attributes refer to the person that moved from the panel household (in case of several persons that moved from a panel household: the person first mentioned in the address protocol).

No differences were made between various reasons for the refusal like explicit denial or refusal because of lack of time, bad health conditions, etc..

Considering the type of interview (CAPI vs. PAPI) we do not observe any significant impact of the type of interview itself or of interactions of the interview type with other household characteristics in our subsequent logit estimates for all subsamples.

**Table 9:
Comparison of drop-out rates between subsamples A/B, C, D, E, F and G. Current wave.**

N = Number of households to be recontacted;

% = percentage of households without interview.

Characteristic		Sample					
		AB	C	D	E	F	G
All recontacted households	N	4155	1974	296	828	4951	1047
	%	8.21	8.46	5.07	10.14	11.41	12.99
Temporary dropouts previous wave	N	174	93	-	39	236	-
	%	60.92	56.99	-	66.67	72.46	-
		Households with participation in inHouseholds previous wave					
		Gender					
Male	N	2460	913	187	493	3062	806
	%	5.98	5.81	4.81	8.11	8.88	12.53
Female	N	1521	968	109	296	1653	241
	%	5.79	6.30	5.50	6.08	7.38	14.52

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3 Losses due to refusals

Table 9: continued

		Type of household						
		N	3563	1647	256	705	4247	963
Characteristic		%	5.05	4.74	4.30	6.24	7.79	11.84
Old household not moved		N	296	160	28	57	309	38
		%	8.78	10.00	3.57	12.28	6.15	13.16
		Sample						
Split-off household		N	121	74	12	27	159	46
		%	23.97	27.03	25.00	25.93	27.67	36
		Interviewer has changed						
Yes		N	350	152	18	134	610	16
		%	22.57	13.82	16.67	10.45	28.85	17
No		N	3436	1456	260	616	4093	88
		%	3.78	4.26	3.85	6.01	5.11	12
Special cases		N	195	273	18	39	12	0
		%	13.33	11.36	11.11	17.95	75.00	0.
		CAPI-Interview						
Yes		N	942	221	96	444	1761	32
		%	3.93	3.62	2.08	4.28	8.06	10
No		N	3039	1660	200	345	2954	72
		%	6.52	6.39	6.50	11.30	8.53	14
		Telephone number available for Infratest						
No		N	254	166	14	44	316	12
		%	14.17	19.28	0.00	25.00	18.99	66
Yes		N	3727	1715	282	745	4399	10
		%	5.34	4.78	5.32	6.31	7.59	12
		E-mail-address available						
Yes		N	689	296	44	149	821	35
		%	3.48	3.38	2.27	4.70	7.31	8.
No		N	3292	1585	252	640	3894	69
		%	6.41	6.56	5.56	7.97	8.58	15

3.2 Definition of the regressors for a Logit analysis

The characteristics used in the descriptive statistics in the preceding section were employed in a Logit analysis of the refusal rate. However, we use only model specifications where all included regressors are significantly different from zero. The definition of the regressors is given in the list below:

Characteristic	Abbreviation	Code	Values
Age of the head Of household	AGE	1	Older than 75 years
		2	65-74 years
		3	55-64 years
		4	35-54 years
		5	25-34 years
		6	Younger than 25 years
Gender of the head	SEX	0	Male
		1	Female
Type of the household	HTYP	1	Old household without move
		2	Old household moved
		3	Split-off household
Change of Interviewer	INTW	0	No change
		1	Change since previous wave
		2	Not regular interviewer number
Number of interviews	NINT		Number of interviews with the interviewer of the present wave
Starting from the Beginning	BEGINN	0	Else
		1	Heads participation since wave 1
Person moving out	AUSZUG	0	Else
		1	A respondent left the household since the previous wave
Separation of a couple	SEPAR	0	Else
		1	The head or the spouse (cohabita- tor) of the previous wave left the household
Interaction of household Type and separation of The couple	TYP	0	HTyp = 1,2 and SEPAR = 1
		1	HTyp = 1 and SEPAR = 0
		2	HTyp = 2 and SEPAR = 0
		3	HTyp = 3 and SEPAR = 0
		4	HTyp = 3 and SEPAR = 1

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3 Losses due to refusals

List: continued (1)

East-Berlin	OSTB	0 1	Else household is located in East-Berlin
Marital status	FAMSTD	1 2 3 4 5	Married living together Married living separately Single Divorced Widowed
Characteristic	Abbreviation	Code	Values
Household income East, quantiles	INCE**	0 1	No Yes
Jobless	ALOS	0 1	Else Head is jobless
Loss of job (subjective notion)	VERLUST	0 1	Else Loss expected or probable
Occupational status Of the head	STATUSH	0 1	Else High status
Social aid	SOZH	0 1	Else Household is recipient of social aid payments
Household income West-Germany	EINKW	1 2 3 4	Income not reported \leq 2000 DM 2000 - 4000 DM \geq 4000 DM
Household income (East-Germany)	EINKO	1 2 3 4 5 6	Income not reported \leq 800 DM 800-1200 DM 1200-1800 DM 1800-2500 DM \geq 2500 DM
Income quartiles	EINKQU	0 1 2 3 4	Income not reported \leq 25 % 50 % 75 % \geq 75 %

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3 Losses due to refusals

List: continued (2)

Household income Not reported	KAEINK	0 1	Else Income not reported
Balance of assets Not reported	KAVB	0 1	Else Balance not reported in wave 5
Number of different Kinds of assets in the Households	ANZASSET	0 1 2 3	No assets reported Number = 0 Number = 5 (Maximum) Else
Firm assets	BETRIEB	0 1	Else Household owns firm assets
Savings reported As one kind of assets	SPAR	0 1	No Yes
Household migrated From East to West Germany	OSTWEST	0 1	No Yes
Member of D-Subsamples	MIGRANT	1 2	Subsample D1 Subsample D2
Telephone	TELEPHON	0 1	No Yes
Characteristic	Abbreviation	Code	Values
Subtenant	UNTMIEITE	0 1	No Yes
Apprenticeship	APPRENT	0 1	No Yes
University	UNI	0 1	No Yes
Change of interview Type (t-2 => t-1)	INTWTYPE	0 1	No Yes
Satisfaction with life	NSAT	0 1	No Yes
Housing subsidy	RENTPAY	0 1	No Yes
Type of interview	INTWART	0 1	Written form Verbal form
Household size	SIZE	1 2 3 4	Single-person household 2 person household 3 person household 4 or more persons household

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3 Losses due to refusals

List: continued (3)

Telephone number available for Infratest	TELINFRA	0 1	No Yes
E-mail-address available for Infratest	EMAIL	0 1	No Yes
Head of household: state of health	HANDICAP	0 1	No Yes
Head of household: foreign nationality	FOREIGN	0 1	No Yes
Sample Region	REGIONF	0 1	West Germany East Germany
Person moving in	MOVE_IN	0 1	Else A respondent moved into the new household since previous wave
Health state	SICK	0 1	Else Strongly limits everyday life
Computer assisted interview	CAPI	0 1	Else Computer assisted personal interview
Residential area	RESID	0 1	Else Rural
Change of interview type (PAPI (t-2) => CAPI (t-1))	PAPCAP	0 1	Else PAPI => CAPI
Type of interview	FACE	0 1	Else Face-to-face-interview
Cooperation of respondent in t-1	COOP	0 1	Else Poor / very poor cooperation
Characteristic	Abbreviaton	Code	Values
Duration of interview (househ. questionnaire)	INTDUR	0 1	Else Less than 15 minutes
Age below 35	AGE34	0 1	Else Age less than 35
Vocational degree	VOCDEG	0 1	Missing Not missing
Large City	CITY	0 1	Else More than 100.000 inhabitants

3.3 Estimated coefficients of the Logit model

The regressors defined above were used in a multiple Logit analysis. The model estimates the probability $P_R = P$ (Response = no). For the computation of the GSOEP weighting schemes only model specifications with all regressors being significant were used. The specification is:

$$\ln \frac{P_{R,i}}{1 - P_{R,i}} = \text{const} + X' \beta$$

Thus, positive estimated parameters indicate an increased drop-out rate compared to the sample average.

Table 10 uses a simple symbolic notation for models and their estimated parameters. Here „+“ means the addition of a main effect, an „*“ indicates an interaction term. Variable 1 (Variable 2 = c) symbolizes a conditional main effect which is linked to cases where variable 2 = c. The estimated coefficients are displayed under the model equation. The notation uses the convention: variable (value 1: coefficient 1/value 2: coefficient 1...).

The estimated drop-out rates due to refusals may be easily calculated from the estimated parameters displayed in table 12. For example: In wave 2, subsample A, we find for a household with no change of the interviewer (INTW = 0) and age of the head between 35 and 74 years (AGE = 2,3,4) and the reported household income below 2000 DM (EINKW = 2), which did not move (HTYP = 1) the logit value $-1.53 - 0.25 + 0.03 - 0.68 + 0.12 = -2.31$. Thus we have

$$\Pr(\text{Response=no}) = \frac{e^{-2.31}}{1 + e^{-2.31}} = 0.09.$$

Table 10:

The estimates of a Logit model for the probability of a drop-out due to refusal in the GSOEP. Representation of coefficients: variable (value 1: coefficient 1/value 2: coefficient 1/...).

Subsample A (West-Germans)	
Wave	Model and coefficients
2	Model = CONST + INTW + AGE + HTYP + EINKW CONST (-1.53), INTW (0: -0.25 / 1: 0.25), AGE (1: 0.66 / 2,3,4: 0.03 / 5: -0.39 / 6: -0.30), HTYP (1: -0.68 / 2: -0.19 / 3: 0.87), EINKW (1: 0.61 / 2: 0.12 / 3: -0.35 / 4: -0.38)
3	Model = CONST + INTW + AGE + INTW * AGE + HTYP + ALOS + KAEINK CONST (-1.22), INTW (0: -0.39 / 1: 0.39), AGE * (INTW =0) (1: -0.13 / 2: -0.11 / 3,4: -0.39 / 5: 0.26 / 6: 0.37), AGE * (INTW =1) (1: 0.13 / 2: 0.11 / 3,4: 0.39 / 5: -0.26 / 6: -0.37), AGE (1: 0.59 / 2: 0.16 / 3,4: -0.06 / 5: -0.53 / 6: -0.16) HTYP (1: -0.52 / 2: 0.10 / 3: 0.42), ALOS (0: -0.21 / 1: 0.21), KAEINK (0: -0.39 / 1: 0.39)
4	Model = CONST + AGE + INTW (AGE) + HTYP + KAEINK CONST (-1.83), INTW (AGE = 1) (0: -0.44 / 1: 0.44), INTW (AGE =2) (0: -0.74 / 1: 0.74), INTW (AGE =3,4) (0: -0.59 / 1: 0.59), INTW (AGE =5) (0: -0.41 / 1: 0.41), INTW (AGE =6) (0: -0.32 / 1: 0.32), AGE (1: 0.21 / 2: -0.38 / 3,4: -0.24 / 5: 0.06 / 6: 0.35), HTYP (1: -0.46 / 2: 0.28 / 3: 0.18), KAEINK (0: -0.39 / 1: 0.39)

Table 10: continued (1)

5	Model = CONST + NINT + AGE (INTW =1) + HTYP + KAEINK + ANZASSET CONST (-1.60), NINT (1: 1.15 / 2: 0.41 / 3: 0.18 / 4: -0.71 / 5: -1.03), AGE (INTW = 1) (1,2: 0.52 / 3,4,5: -0.11 / 6: -0.40), HTYP (1: -0.49 / 2: 0.11 / 3: 0.38), KAEINK (0: -0.45 / 1: 0.45), ANZASSET (0,2,3: -0.38 / 1: 0.38)
6	Model = CONST + NINT + AGE (INTW = 1) + HTYP + KAEINK + KAVB + BETRIEB CONST (-2.44), NINT (1: 0.75 / 2: 0.58 / 3: 0.21 / 4: -0.59 / 5: -0.43 / 6: -0.52), AGE (INTW = 1) (1,2: 0.26 / 3,4,5: 0.05 / 6: -0.31), HTYP (1: -0.32 / 2: -0.04 / 3: 0.37), KAEINK (0: -0.26 / 1: 0.26), BETRIEB (0: 0.41 / 1: -0.41)
7	Model = CONST + HTYP + INTW (HTYP) + KAEINK + STATUSH CONST (-1.34), INTW (HTYP = 1) (0: -0.75 / 1: 0.75), INTW (HTYP = 2) (0: -0.56 / 1: 0.56), INTW (HTYP = 3) (0: -0.12 / 1: 0.12), HTYP (1: -0.66 / 2: -0.24 / 3: 0.90), KAEINK (0: -0.58 / 1: 0.58) STATUSH (0: -0.30 / 1: 0.30)
Subsample A (West-Germans)	
Wave	Model and coefficients
8	Model = CONST + INTW + HTYP + KAEINK + ANZAHL CONST (-1.15), INTW (=: -0.55 / 1: 0.55), HTYP (1: -0.83 / 2: -0.14 / 3: 0.97), KAEINK (0: -0.57 / 1: 0.57), ANZAHL (1: -0.08 / 2: 0.70 / 3: -0.62)

Table 10: continued (2)

9	Model = CONST + INTW (BEGINN) + BEGINN (AGE) + HTYP + AUSZUG (HTYP =1) + KAEINK + ANZASSET + SEX CONST (-1..31), INTW (BEGINN = 0) (0: -0.17 / 1: 0.17), INTW (BEGINN = 1) (0: -0.68 / 1: 0.68), BEGINN (AGE = 1) (0: -0.09 / 1: 0.09), BEGINN (AGE = 2) (0: 0.70 / 1: -0.70), BEGINN (AGE = 3) (0: 1.20 / 1: -1.20), BEGINN (AGE = 4) (0: 0.49 / 1: -0.49), BEGINN (AGE = 5) (0: 0.48 / 1: -0.48), BEGINN (AGE = 6) (0: 0.10 / 1: -0.10), HTYP (1: -0.53 / 2: 0.07 / 3: 0.46), AUSZUG (HTYP=1) (0: -0.47 / 1: 0.47), KAEINK (0: -0.25 / 1: 0.25), ANZASSET (0,2,3: -0.29 / 1: 0.29), SEX (0: 0.15 / 1: -0.15)
10	Model = CONST + HTYP + BEGINN (HTYP) + INTW (HTYP) + SEPAR (HTYP=1) + AGE (HTYP=1) CONST (-1.89), HTYP (1: -0.12 / 2: -0.39 / 3: 0.51), INTW (HTYP=1) (0: -0.95 / 1: 0.08 / 2: 0.88), INTW (HTYP=2) (0: -0.24 / 1: -0.06 / 2: 0.30), INTW (HTYP=3) (0: 0.16 / 1: -0.47 / 2: 0.31), BEGINN (HTYP=1) (0: 0.43 / 1: -0.43), BEGINN (HTYP=2) (0: 0.21 / 1: -0.21), BEGINN (HTYP=3) (0: -0.07 / 1: 0.07), SEPAR (HTYP=1) (0: -0.58 / 1: 0.58), AGE (HTYP=1) (1: 0.41 /2: -0.26 /3: -0.08 /4: -0.50 /5: 0.01 /6: 0.42)

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3 Losses due to refusals

Table 10: continued (3)

11	Model = CONST + HTYP + BEGINN + INTW + KAEINK + TELEPHON (INTW=1) CONST (-1.68) HTYP (1: -0.39 / 2: -0.09 / 3: 0.48) BEGINN (0: 0.27 / 1: -0.27) INTW (0: -0.63 / 1: -0.10 / 2: 0.73) KAEINK (0: -0.35 / 1: 0.35) TELEPHON (INTW=1) (0: 0.49 / 1: -0.49)
12	Model = CONST + HTYP + INTW + AGE (HTYP = 1) CONST (-1.92) HTYP (1: -0.36 / 2: -0.52 / 3: 0.88) INTW (0: -1.10 / 1: 0.03 / 2: 1.07) AGE (HTYP =1) (1: 0.57 / 2,3,4,5,6: -0.57)
Subsample A (West-Germans)	
Wave	Model and Coefficients
13	Model = CONST + HTYP + INTW + BEGINN + AGE + KAEINK + SEPAR (HTYP = 1) CONST (-1.42) HTYP (1: -0.39) / 2: -0.23 / 3: 0.62 INTW: (0: -0.75 / 1: 0.25 / 2: 0.5) BEGINN (0: 0.35 / 1: -0.35) AGE (1: 0.61 / 2: -0.29 / 3: 0.42 / 4: -0.20 / 5: -0.15 / 6: -0.39) KAEINK (0: -0.26 / 1: 0.26) SEPAR (HTYP = 1) (0: -0.64 / 1: 0.64)
14	Model = CONST + HTYP + INTW +EINKQU + NINT + SEPAR (HTYP = 1) + INTWTYPE + NSAT CONST (-0.48) HTYP (1: -0.79 / 2: -0.05 / 3: 0.84) INTW (0: -0.59 / 1: -0.11 / 2: 0.70) EINKQU (0: 0.60 / 1: -0.08 / 2,3,4: -0.52) NINT (0[=3]: 0.5 / 1[=4]: 0.5) SEPAR (HTYP = 1) (0: -0.41 / 1: 0.41) INTWTYPE (0: -0.42 / 1: 0.42) NSAT (0: -0.38 / 1: 0.38)

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3 Losses due to refusals

Table 10: continued (4)

15	Model = CONST + INTW + HTYP + APPRENT + INTWTYPE + INTWART + TELINFRA CONST (-1.80) INTW (0: -1.20 / 1: 0.03 / 2: 1.17) HTYP (1: -0.62 / 2: -0.32 / 3: 0.94) SEX (0: -0.19 / 1: 0.19) APPRENT (0: -0.21 / 1: 0.21) INTWTYPE (0: -0.30 / 1: 0.30) INTWART (0: 0.59 / 1: -0.59) TELINFRA (0: 0.32 / 1: -0.32)
16	Model = CONST + INTW + HTYP + SEPAR + INTWTYPE + TELINFRA CONST (-1.25) INTW (0: -0.78 / 1: 0.08 / 2: 0.7) HTYP (1: -0.59 / 2: -0.27 / 3: 0.86) SEPAR (0: -0.30 / 1: 0.30) INTWTYPE (0: -0.31 / 1: 0.31) TELINFRA (0: 0.33 / 1: -0.33)
17	Model = CONST + BEGINN + INTW + HTYP + UNTMIETE + TELINFRA CONST (-1.35) BEGINN (0: 0.23 / 1: -0.23) INTW (0: -0.87 / 1: 0.39 / 2: 0.48) HTYP (1: -0.63 / 2: -0.15 / 3: 0.78) UNTMIETE (0: -0.33 / 1: 0.33) TELINFRA (0: 0.25 / 1: -0.25)
Subsample A (West-Germans)	
Wave	Model and Coefficients
18	Model = CONST + BEGINN + INTW + HTYP + UNTMIETE + TELINFRA + INTWTYPE + SEPAR CONST (-0.06) BEGINN (0: 0.16 / 1: -0.16) INTW (0: -1.28 / 1: 0.70 / 2: 0.58) HTYP (1: -0.33 / 2: -0.32 / 3: 0.65) UNTMIETE (0: -0.51 / 1: 0.51) TELINFRA (0: 0.55 / 1: -0.55) INTWTYPE (0: -0.44 / 1: 0.44) SEPAR (0: -0.58 / 1: 0.58)

Table 10: continued (5)

19	Model = CONST + NINT + INTW + HTYP +MOVE_IN + INTWART + TELINFRA + INTWTYPE + EMAIL + SOZH + TYPCHANGE CONST (-1.69) NINT (-0.06) INTW (0:-2.66 / 1: 2.46 / 2: 0.20) HTYP (1: -0.24 / 2: 0.04 / 3: 0.20) MOVE_IN (0: 3.14 / 1: -3.14) INTWART (0: -1.09 / 1: 1.09) TELINFRA (0: 1.11 / 1: -1.11) INTWTYPE (0: -0.59 / 1: 0.59) EMAIL (0: 0.72 / 1: -0.72) SOZH (0: -0.96 / 1: 0.96) TYPCHANGE (0: 1.61 / 1: -1.61)
20	Model = CONST + NINT + CAPI + FACE + INTW + HTYP + EINKQU + COOP + APPRENT + EMAIL CONST (-0.16) NINT (-0.06) CAPI (0: 0.25 / 1: -0.25) FACE (0: 0.47 / 1: -0.95) INTW (1: 0.96 / 0,2: -0.96) HTYP (1,2: -0.50 / 3: 0.50) EINKQU (0: 0.34 / 1,2,3,4: -0.34) COOP (0: -0.55 / 1: 0.55) APPRENT (0: 0.20 / -0.20) EMAIL (0: 0.27 / 1: -0.27)
Subsample B (Foreigners)	
2	Model = CONST + INTW + HTYP CONST (-1.96), INTW (0: -0.55 / 1: 0.55) HTYP (1: -0.03 / 2: -0.58 / 3: 0.62)
3	Model = CONST + SEX + HTYP CONST (-1.60), SEX (0: -0.31 / 1: 0.31), HTYP (1,2: -0.46 / 3: 0.46)

Table 10: continued (6)

4	Model = CONST + INTW (AGE) + HTYP + EINKW CONST (-1.69), INTW (AGE =1,2,3) (0: -0.47 / 1: 0.47), INTW (AGE =4) (0: -0.73 / 1: 0.73), INTW (AGE =5) (0: -0.60 / 1: 0.60), INTW (AGE =6) (0: -0.26 / 1: 0.26), HTYP (1: -0.34 / 2: 0.46 / 3: -0.12), EINKW (1: 0.75 / 2: 0.10 / 3: -0.85)
Subsample B (Foreigners)	
Wave	Model and coefficients
5	Model = CONST + NINT + HTYP + KAEINK CONST (-1.87), NINT (1: 1.26 / 2: 0.14 / 3: -0.21 / 4: -0.70 / 5: -0.50), HTYP (1: -0.47 / 2: 0.89 / 3: -0.42), KAEINK (0: -0.43 / 1: 0.43)
6	Model = CONST + NINT + HTYP + KAEINK CONST (-1.89), NINT (1: 0.83 / 2: 0.37 / 3: -0.31 / 4: -0.55 / 5: 0.04 / 6: -0.37), HTYP (1: -0.41 / 2: 0.22 / 3: 0.19), KAEINK (0: -0.54 / 1: 0.54)
7	Model = CONST + HTYP + INTW (HTYP) + KAEINK CONST (-1.50), INTW (HTYP=1) (0: -0.55 / 1: 0.55), INTW (HTYP=2) (0: -0.98 / 1: 0.98), INTW (HTYP=3) (0: -1.06 / 1: 1.06), HTYP (1: -0.50 / 2: -0.88 / 3: 1.38), KAEINK (0: -0.66 / 1: 0.66)
8	Model = CONST + INTW + HTYP CONST (-2.05), INTW (0: -0.48 / 1: 0.48), HTYP (1: -0.85 / 2: 0.22 / 3: 0.63)

Table 10: continued (7)

9	Model = CONST + INTW + BEGINN + TYP + AGE+ KAEINK + ANZASSET + SOZH CONST (-1.79), INTW (0: -0.50 / 1: 0.50), BEGINN (0: 0.39 / 1: -0.39), TYP (0: 0.16 / 1: -0.59 / 2: -1.90 / 3: -0.03 / 4: 2.36), AGE 1,2,3: 0.28 / 4: -0.10 / 5: -0.65 / 6: 0.47), KAEINK (0: -0.66 / 1: 0.66), ANZASSET (0,2,3: -0.53 / 1: 0.53), SOZH (0: 0.73 / 1: -0.73)
10	Model = CONST + HTYP + SEPAR + AGE + INTW (AGE) CONST (-1.58) HTYP (1: -0.44 / 2: -0.11 / 3: 0.55), SEPAR (0: -0.63 / 1: 0.63), AGE (1,2,3: -0.79 / 4: -0.04 / 5: 0.77 / 6: 0.06), INTW (AGE = 4) (0: -1.11 / 1: -0.10 / 2: 1.21), INTW (AGE = 5) (0: -0.79 / 1: -0.22 / 2: 1.01)
11	Model = CONST + BEGINN + HTYP + INTW + ANZASSET + FAMSTD CONST (-1.43), INTW (0: -0.69 / 1: 0.01 / 2: 0.70), BEGINN (0: 0.33 / 1: -0.33), HTYP (1,2: -0.48 / 3: 0.48), ANZASSET (0,2,3: -0.31 / 1: 0.31), FAMSTD (1: 0.25 / 2,3,4,5: -0.25)
12	Model = CONST + HTYP + INTW + SEPAR + AGE CONST (-0.88) HTYP (1: -0.97 / 2: 0.36 / 3: 0.61) INTW (0: -0.67 / 1: -0.45 / 2: 1.12) SEPAR (0: -0.84 / 1 : 0.84) AGE (1,2,3: -0.35 / 4,5,6: 0.35)

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3 Losses due to refusals

Table 10: continued (8)

Subsample B (Foreigners)	
Wave	Model and coefficients
13	Model = CONST + HTYP + INTW CONST (-1.73) HTYP (1: -0.66 / 2: 0.12 / 3: 0.54) INTW (0: -0.82 / 1: -0.02 / 2: 0.84).
14	Model = CONST + INTW + SEPAR + HTYP + SOZH + UNTMIETE + BEGINN CONST (-0.14) INTW (0: -1.13 / 1: 0.49 / 2: 0.64) SEPAR (0: -0.86 / 1: 0.86) HTYP (1: -0.42 / 2: -0.20 / 3: 0.62) SOZH (0: -0.39 / 1: 0.39) UNTMIETE (0: -0.38 / 1: 0.38) BEGINN (0: 0.36 / 1: -0.36)
15	Model = CONST + HTYP + INTW + APPRENT CONST (-1.5) HTYP (1: -0.58 / 2: -0.0 / 3: 0.58) INTW (0: -0.76 / 1: 0.21 / 2: 0.55) APPRENT (0: -0.22 / 1: 0.22)
16	Model = CONST + INTW + HTYP + FAMSTD + ANZASSET + SEPAR CONST (-0.58) INTW (0: -0.92 / 1: 0.17 / 2: 0.75) HTYP (1: -0.28 / 2: -0.30 / 3: 0.58) FAMSTD (1,2,4,5: -0.34 / 3: 0.34) ANZASSET (0: -0.29 / 1,2,3 : 0.29) SEPAR (0: -0.83 / 1: 0.83)
17	Model = CONST + INTW + HTYP + KAEINK + INTWTYPE + RENTPAY CONST (-0.13) INTW (0: -0.90 / 1: 0.22 / 2: 0.68) HTYP (1: -0.74 / 2: -0.57 / 3: -1.31) KAEINK (0: -0.51 / 1: 0.51) INTWTYPE (0: -0.57 / 1: 0.57) RENTPAY (0: -0.44 / 1: 0.44)

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3 Losses due to refusals

Table 10: continued (9)

18	Model = CONST + INTW + HTYP + INTWART + UNTMIETE + TELINFRA CONST (-0.01) INTW (0: -0.70 / 1: 1.24 / 2: -0.54) HTYP (1: -0.83 / 2: -0.42 / 3: 1.25) INTWART (0: -0.91 / 1: 0.91) UNTMIETE (0: -0.89 / 1: 0.89) TELINFRA (0: 0.39 / 1: -0.39)
19	Model = CONST + INTW + HTYP + (SEPAR=1)*(HTYP=1) + INTWART CONST (-3.25) INTW (0: -2.23 / 1: 2.24 / 2: -0.01) HTYP (1: -1.7 / 2: -0.04 / 3: 1.74) (SEPAR=1*HTYP=1) (0: -1.94 / 1: 1.94) INTWART (0: -1.50 / 1: 1.50)
Subsample B (Foreigners)	
Wave	Model and coefficients
20	Model = CONST + INTW + INTDUR + EINKQU + FAMSTD + SIZE + TELINFRA CONST (-0.16) INTW (0: -2.22 / 1: 1.07 / 2: 1.15) INTDUR (0: 0.42 / 1: -0.42) EINKQU (0: 0.72 / 1: 0.56 / 2,3,4: -1.28) FAMSTD (1,2,4,5: -0.90 / 3: 0.90) SIZE (1: -1.40 / 2,3,4: 1.40) TELINFRA (0: 0.57 / 1: -0.57)
Subsample C (East-Germans)	
Wave	Model and Coefficients
2	Model = CONST + HTYP + INTW + AGE + EINKO + VERLUST + OSTB CONST (-0.91), INTW (0: -0.47 / 1: -0.04 / 2: 0.51), AGE (1: 0.41 / 2,3,4,5,6: -0.41), HTYP (1,2: -0.84 / 3: 0.84), EINKO (1: 0.24 / 2: 0.44 / 3: 0.12 / 4: 0.00 / 5: -0.37 / 6: -0.44), VERLUST (0: -0.17 / 1: 0.17), OSTB (0: -0.29 / 1: 0.29)

Table 10: continued (10)

3	Model = CONST + HTYP + INTW (HTYP) + AGE + SPAR CONST (-1.36), HTYP (1: -0.39 / 2: 0.08 / 3: 0.31), INTW (HTYP=1) (0: -0.28 / 1,2: 0.28), INTW (HTYP=2) (0: 0.42 / 1,2: -0.42), INTW (HTYP=3) (0: -0.36 / 1,2: 0.36), AGE (1: 0.02 / 2,3,4: -0.38 / 5: -0.20 / 6: 0.56), SPAR (0: 0.35 / 1: -0.35)
4	Model = CONST + HTYP + INTW + AGE + KAEINK + FAMSTD CONST (0: -0.62), HTYP (1: -0.47 / 2: 0.25 / 3: 0.22), INTW (0: -0.78 / 1: -0.04 / 2: 0.82), AGE (1: 0.47 / 2,3,4,5,6: -0.47), KAEINK (0: -0.54 / 1: 0.54), FAMSTD (1: -0.12 / 2: 1.13 / 3: 0.24 / 4: -0.73 / 5: -0.51),
5	Model = CONST + HTYP + INTW + KAEINK + VANZAHL + VERLUST CONST (-0.82), HTYP (1: -0.45 / 2: -0.32 / 3: 0.77), INTW (0: -0.67 / 1: -0.18 / 2: 0.84), KAEINK (0: -0.49 / 1: 0.49), VANZAHL (-0.32), VERLUST (0: -0.20 / 1: 0.20)
6	Model = CONST + HTYP + KAEINK + INTW (OSTWEST = 0) + BEGINN (OSTWEST = 0) CONST (-1.33); HTYP (1: -0.65 / 2: -0.32 / 3: 0.97); KAEINK (0: -0.66 / 1: 0.66); INTW (OSTWEST = 0) (0: -0.46 / 1: -0.31 / 2: 0.77); BEGINN (OSTWEST = 0) (0: 0.31 / 1: -0.31)

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3 Losses due to refusals

Table 10: continued (11)

Subsample C (East-Germans)	
Wave	Model and coefficients
7	Model = CONST + HTYP + INTW + AGE + SEPAR + EINKO CONST (-2.12) HTYP (1: -0.39 / 2: -0.35 / 3: 0.74) INTW (0: -0.68 / 1: 0.19 / 2: 0.49) AGE (1,2: 0.12 / 3: -1.25 / 4,5: 0.33 / 6: 0.8) SEPAR (0: -0.42 / 1: 0.42) EINKO (1,2,3,4,5: 0.32 / 6: -0.32)
8	Model = CONST + INTW + HTYP + AGE + BEGINN + UNTMIETE CONST (-1.83) INTW (0: -0.53 / 1: 0.33 / 2: 0.2) HTYP (1: -0.55 / 2: -0.30 / 3: 0.85) AGE(1,2,5,6: 0.29 / 3,4: -0.29) BEGINN (0: 0.27 / 1: -0.27) UNTMIETE (0: -0.34 / 1: 0.34)
9	Model = CONST + HTYP + INTW + AGE + TELINFRA + ANZASSET CONST (-0.76) HTYP (1: -0.77 / 2: 0.23 / 3: 0.54) INTW (0: -0.94 / 1: 0.31 / 2: 0.62) AGE (2,3,4,5,6: -0.54 / 1: 0.54) TELINFRA (0: 0.47 / 1: -0.47) ANZASSET (0,1: 0.35 / 2,3: -0.35)
10	Model = CONST + INTW + HTYP + SEPAR + SEX + CONST (-1.29) INTW (0: -0.70 / 1: 0.22 / 2: 0.48) HTYP (1: -0.71 / 2: -0.11 / 3: 0.82) SEPAR (0: -0.41 / 1: 0.41) SEX (0: 0.36 / 1: -0.36) TELINFRA (0: 0.30 / 1: 0.30) INTWTYPE (0: -0.45 / 1: 0.45)

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3 Losses due to refusals

Table 10: continued (12)

11	Model = CONST + INTW + HTYP + TELINFRA + AGE+ SIZE CONST (-1.31) INTW (0: -0.78 / 1: 0.34 / 2: 0.44) HTYP (1: -0.84 / 2: 0.02 / 3: 0.82) TELINFRA (0: 0.38 / 1: -0.38) AGE (2,3,4,5,6: -0.44 / 1: 0.44) SIZE (1,3,4: -0.25 / 2: 0.25)
12	Model = CONST + INTW + HTYP + TELINFRA CONST (-1.29) INTW (0:-1.30 / 1: 0.67 / 2: 0.63) HTYP (1: -0.57 / 2: -0.14 / 3: 0.71) TELINFRA (0: 0.63 / 1: -0.63)
13	Model = CONST + INTW + HTYP + TELINFRA + EINKQU + SICK + BEGINN + SIZE CONST (-1.54) INTW (0: -3.16 / 1: 1.79 / 2: 1.37) HTYP (1: -1.14 / 2: 0.14 / 3: 1.00) TELINFRA (0: 1.38 / 1: -1.38) EINKQU (0,1,2,3: 0.68 / 4: -0.68) SICK (0: -0.64 / 1: 0.64) BEGINN (0: 0.67 / 1: -0.67) SIZE (1: -0.53 / 2,3,4: 0.53)
Subsample C (East-Germans)	
Wave	Model and coefficients
14	Model = CONST + BEGINN + INTW + INTWTYPE + SOZH + RENTPAY + SEPAR + EINKQU + VOCDEG + TELINFRA CONST (0.67) BEGINN (0: 0.40 / 1: -0.40) INTW (0: -1.33 / 1: 0.74 / 2: 0.59) INTWTYPE (0: -0.43 / 1: 0.43) SOZH (0: -0.46 / 1: 0.46) RENTPAY (0: 0.91 / 1: -0.91) SEPAR (0: -0.91 / 1: 0.91) EINKQU (0: 0.54 / 1,2,3,4: -0.54) VOCDEG (0: 0.28 / 1: -0.28) COOP (0: -0.74 / 1: 0.74) TELINFRA (0: 0.70 / 1: -0.70)

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3 Losses due to refusals

Table 10: continued (13)

Subsample D (Immigrants)	
Wave	Model and Coefficients
2	Model = CONST + HTYP (MIGRANT = 1) + AGE (MIGRANT = 2) + KAEINK CONST (-1.08) HTYP (MIGRANT = 1) (0: -1.41 / 1,2: 1.41) AGE (MIGRANT = 2) (1,2,3: -0.93 / 4,5,6: 0.93) KAEINK ((0: -0.72 / 1: 0.72)
3	Model = CONST + HTYP CONST (-2.02) HTYP (1: -0.23 / 2: -0.81 / 3: 1.04)
4	Model = CONST + HTYP + TELINFRA + INTWTYPE CONST (-0.76) HTYP (1: -0.49 / 1: -0.34 / 2: 0.83) TELINFRA (0: 0.50 / 1: -0.50) INTWTYPE (0: -0.70 / 1: 0.70)
5	Model = CONST + INTW + SEPAR CONST (-0.57) INTW (0: -1.02 / 1: 0.37 / 2: 0.65) SEPAR (0: -1.38 / 1: 1.38)
6	Model= CONST + HTYP + ANZASSET CONST (-4.57) HTYP (1: 1.74 / 2: -6.25 / 3: 4.51) ANZASSET (2,3: -0.63 / 0,1: 0.63)
7	Model = CONST + INTW + KAEINK + BEGINN + TELINFRA CONST (0.06) INTW (0: -0.85 / 1: -0.10 / 2: 0.95) KAEINK (0: -0.98 / 1: 0.98) BEGINN (0: 0.88 / 1: -0.88) TELINFRA (0: 0.86 / 1: -0.86)
8	Model = CONST + INTW + BEGINN + TELINFRA + SEX CONST (-1.31) INTW (0: -4.29 / 1: 3.75 / 2: 0.54) BEGINN (0: 2.34 / 1: -2.34) TELINFRA (0: 1.96 / 1: -1.96) SEX (0: -1.69 / 1: 1.69)

Data Documentation 1

3 Losses due to refusals

Table 10: continued (14)

Subsample D (Immigrants)	
Wave	Model and coefficients
9	Model = CONST + INTW + FACE + EINKQU + APPRENT CONST (-0.74) INTW (0,2: -0.95 / 1: 0.95) FACE (0: 0.74 / 1: -0.74) EINKQU (0: 1.10 / 1,2,3,4: -1.10) APPRENT (0: 0.81 / 1: -0.81)
Subsample E (Refreshment)	
Wave	Model and coefficients
2	Model = CONST + HTYP + APPRENT + ANZASSET + FAMSTD CONST (-1.54) HTYP (0: -0.88 / 1: -0.17 / 2: 1.05) APPRENT (0: -1.75 / 1: 1.75) ANZASSET (0,1: 0.35 / 2,3: -0.35) FAMSTD (1,2,3,4: -0.44 / 5: 0.44)
3	Model = CONST + HTYP + INTW + SIZE CONST (-1.39) HTYP (1: -1.02 / 2: 0.12 / 3: 0.90) INTW (0: -0.55 / 1: 0.50 / 2: 0.05) SIZE (1,2,3: 0.38 / 4: -0.38)
4	Model = CONST + HTYP + INTW + SEPAR + EMAIL + SIZE CONST (-1.95) HTYP (1: -0.61 / 2: 0.04 / 3: 0.57) INTW (0: -1.31 / 1: 0.17 / 2: 1.14) SEPAR (0: -0.65 / 1: 0.65) SIZE (1,2,3: 0.47 / 4: -0.47) EMAIL (0: 1.14 / 1: -1.14)
5	Model = CONST + CAPI + INTW + AGE + (INTW=1)*(SIZE=2) + (INTW=1)*(RESID=1) CONST (-3.36) CAPI (0: 1.34 / 1: -1.34) INTW (0: -2.74 / 1: 2.03 / 2: 0.71) AGE (1,2,3: -1.07 / 4,5,6: 1.07) (INTW=1)*(SIZE=2) (0: -2.36 / 1: 2.36) (INTW=1)*(RESID=1) (0: -1.64 / 1: 1.64)

Table 10: continued (15)

6	Model = CONST + HTYP + NINT + INTWTYPE + AGE + (AGE=5,6)*(HTYP=1) + TELINFRA + SIZE (CAPI=1)*(SIZE=3) CONST (2.53) HTYP (1: -1.75 / 2: 0.55 / 3: 1.20) NINT (-0.58) INTWTYPE (0: -0.70 / 1: 0.70) AGE (1,2,3,4: 0.97 / 5,6: -0.97) (AGE=5,6)*(HTYP=1) (0: -1.08 / 1: 1.08) TELINFRA (0: 0.63 / 1: -0.63) SIZE (1,2,4: -0.67 / 3: 0.67) (CAPI=1)*(SIZE=3) (0: 1.02 / 1: -1.02)
Subsample F (Innovation)	
Wave	Model and coefficients
2	Model = CONST + HTYP + INTW + SEPAR + KAEINK + APPRENT + UNI + ANZASSET + TELINFRA + EMAIL + HANDICAP + INTWART + FOREIGN + REGIONF CONST (0.10) HTYP (1: -0.24 / 2: -0.01 / 3: 0.25) INTW (0: -0.54 / 1: 1.16 / 2: -0.62) SEPAR (0: -0.31 / 1: 0.31) KAEINK (0: -0.31 / 1: 0.31) APPRENT (0: 0.13 / 1: -0.13) UNI (0: 0.12 / 1: -0.12) ANZASSET (0,1,3: -0.32 / 2: 0.32) TELINFRA (0: 0.42 / 1: -0.42) EMAIL (0: 0.59 / 1: -0.59) HANDICAP (0: -0.13 / 1: 0.13) INTWART (0: -0.52 / 1: 0.52) FOREIGN (0: -0.24 / 1: 0.24) REGIONF (0: 0.13 / 1: -0.13)

Table 10: continued (16)

3	Model = CONST + BEGINN + (INTW=1) + INTWART + FOREIGN + EMAIL + SICK + PAPCAP + (CAPI=1)* (HTYP=1) + RESID + BEGINN*(INTW=1) + KAEINK* (ANZASSET=1) CONST (-1.40) BEGINN (0: 1.59 / 1: -1.59) (INTW=1) (0: -1.27 / 1: 1.27) INTWART (0: -1.74 / 1: 1.74) FOREIGN (0: -0.81 / 1: 0.81) EMAIL (0: 0.78 / 1: -0.78) SICK (0: -0.69 / 1: 0.69) PAPCAP (0: -0.6 / 1: 0.6) (CAPI=1)*(HTYP=1) (0: 0.48 / 1: -0.48) RESID (0: -0.25 / 1: 0.25) BEGINN*(INTW=1) (0: -1.45 / 1: 1.45) KAEINK*(ANZASSET=1) (0: -1.29 / 1: 1.29)
4	Model = CONST + HTYP + NINT + FACE + (SEPAR=1)*(HTYP=1)+ EINKQU + AGE + (SEX=0)*(AGE=3,4) + (AGE=3,4)*(HTYP=1) + COOP+ TELINFRA + CITY + FOREIGN CONST (3.36) HTYP (1: -1.73 / 2: 1.04 / 3: 0.69) NINT (-0.61) FACE (0: 0.71 / 1: -0.71) (SEPAR=1)*(HTYP=1) (0: -1.05 / 1: 1.05) EINKQU (0,2,4: -0.41 / 1: 0.24 / 3: 0.17) AGE (1,2,5,6: 0.35 / 3,4: -0.35) (SEX=0)*(AGE=3,4) (0: -0.18/ 1: 0.18) (AGE=3,4)*(HTYP=1) (0: -0.50 / 1: 0.50) COOP (0: -0.55 / 1: 0.55) TELINFRA (0: 0.26 / 1: -0.26) CITY (0: 0.13 / 1: -0.13) FOREIGN (0: -0.44 / 1: 0.44)

Table 10: continued (17)

Subsample G (High Income)	
Wave	Model and coefficients
2	Model = CONST + NINT + CAPI + AGE + EMAIL + TELINFRA CONST (-0.23) NINT (0: 0.63 / 1: -0.63) CAPI (0: 0.25 / 1: -0.25) AGE (1,2,3,4: -0.56 / 5,6: 0.56) EMAIL (0: 0.28 / 1: -0.28) TELINFRA (0: 0.87 / 1: -0.87)

4 References

- Arbeitsgemeinschaft ADM-Stichproben und Bureau Wendt* 1994: Das ADM-Stichproben - System (Stand 1993). In: Gabler, S.; Hoffmeyer-Zlotnik, J.; Krebs, D. (Hg): Gewichtung in der Umfragepraxis. Westdeutscher Verlag, Opladen, S. 188-203.
- GSOEP Group* 2001: The German Socio-Economic Panel (GSOEP) after more than 15 Years. In: Vierteljahrsshefte zur Wirtschaftsforschung, 2001/1.
- Haisken-DeNew, John and Joachim Frick (eds.)* 2001: Desktop Companion to the German Socio Economic Panel (GSOEP), Version 5, Berlin.
- Rendtel, Ulrich* 1991: Die Schätzung von Populationswerten in Panelerhebungen. Allgemeines Statistisches Archiv, 75, S. 225-244.
- Rendtel, Ulrich* 1995: Panelausfälle und Panelrepräsentativität, Campus Verlag, Frankfurt/M.- New York.
- Rendtel, Ulrich, Markus Pannenberg and Stefan Daschke* 1997: Die Gewichtung der Zuwanderer-Stichprobe des Sozio-ökonomischen Panels (SOEP), in: Vierteljahrsshefte zur Wirtschaftsforschung, Heft 2, S. 271-286.
- Schupp, Jürgen and Gert Wagner* 1995: Die Zuwandererstichprobe des Sozio-ökonomischen Panels (SOEP). Vierteljahrsshefte zur Wirtschaftsforschung, Heft 1.
- Spiess, Martin; Rendtel, Ulrich* 2000: Combining an ongoing panel with a new cross-sectional sample, DIW Discussion Paper No. 198.
- Spiess, Martin* 2001: Derivation of design weights: The case of the German Socio-Economic Panel (GSOEP), DIW Research Notes No. 5.