ANALYSIS OF NONRESPONSE EFFECTS IN THE 1995 SURVEY OF CONSUMER FINANCES[1]

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This paper uses new information from the 1995 Survey of Consumer Finances (SCF) to characterize the causes and costs of unit nonresponse in the survey. The paper focuses on two issues. First, following the research of Groves and Couper [1996], the paper develops a set of models describing the interactions of interviewers, respondents, and the contextual effects of neighborhoods. An innovation here is the use of a discrete time hazard model of the resolution of the sample cases into complete or refused dispositions. Second, I present information on the gains in the survey from pursuing very difficult cases through a large number of attempts.

I. Background

The SCF is a triennial survey sponsored by the Board of Governors of the Federal Reserve System, with the cooperation of the Statistics of Income Division (SOI) at the IRS. Data for the 1995 survey, the basis of this paper, were collected by the National Opinion Research Center at the University of Chicago (NORC) between the months of June and December using computer-assisted personal interviewing. There were 246 final interviewers for the cases released to the field. The median interview required approximately 90 minutes, but some took as long as three hours. The questionnaire focuses on households' assets, liabilities, and financial relationships (see Kennickell, Starr-McCluer and Sundén [1997]). Data are also obtained on employment history, pension rights, marital history, demographic characteristics, and various attitudes and expectations.

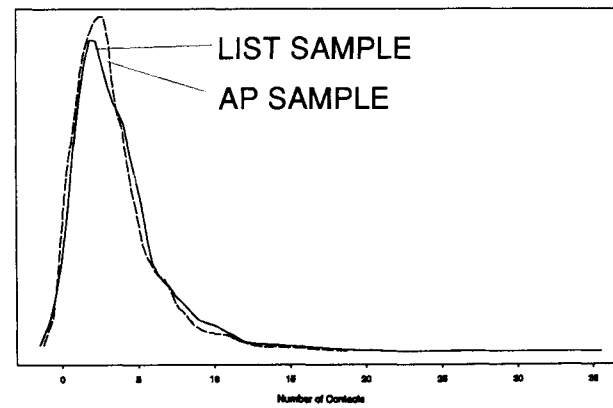
The SCF employs a dual-frame sample design, including an area-probability (AP) sample and a list sample (see Kennickell and Woodburn [1997]). The AP sample is a standard multistage design. The list sample is drawn from a special sample of tax returns selected and edited by SOI for research purposes. These data are divided into seven strata, and higher strata are sampled at higher rates. Empirically, the first three strata overlap strongly with the AP sample in terms of their wealth and the top four strata are generally substantially wealthier. List respondents are treated differently from AP respondents in that the list respondents are sent a postcard offering them an initial chance to refuse participation. List cases not returning a postcard and all AP cases are to be pursued with equal vigor. The participants in the 1995 SCF include about 2,800 AP and 1,500 list cases.

Unit nonresponse is a serious problem in the SCF In the AP part of the sample, only about 70 percent of the selected respondents agree to participate; in the relatively wealthy SCF list sample, the cooperation rate is much lower. Unsurprisingly in this light, the study of nonresponse has long been a core area of research for the project (see Woodburn [1991] and Kennickell and McManus [1993]). For the AP sample, nonresponse is a particular problem in the northeast region and in urban areas. For the list sample, response rates decline with increasing wealth from the bottom stratum (about 30 percent) to the top stratum (about 13 percent). Even removing the postcard refusals, the response rates in the lower strata are still substantially below those for the AP sample. The data also show that a significant fraction of apparently eligible observations cannot be classified as either complete or refused ("censored" cases). About 9 percent of AP cases and about 30 percent of list case have final completion codes of "no contact," "unlocatable," "unavailable," or "closed domain."

Figure 1 shows the distribution of the number of contacts as of the end of the field period. The AP and list samples are remarkably similar. The overall median number of contacts was only 3 (mean 4.1), but 10 percent of cases had eight or more contacts, and one case had 34 contacts. Similar plots by final disposition (complete, refused, censored) suggests that very similar levels of effort were applied to these cases. The distribution for refusals is shifted slightly to the right, reflecting the additional efforts made to convert refused cases.

In the 1995 SCF, several new sources of information were added to further understanding of unit nonresponse. First, new questions were added to the households enumeration folder (HEF), a document

Figure 1: ASH Plot of Number of Contacts, AP Sample and List Sample, 1995 SCF



interviewers use to determine the respondent and record their actions on a case. The coded HEF data include a description of the first interaction with a person in the selected units, some characteristics of the informant for the initial household listing used to determine the eligible respondent, characteristics of the neighborhood surrounding the dwelling, and key items from the record of calls on all attempts to contact respondents. Second, interviewers completed a questionnaire about their own work and educational background and their attitudes. Third, ZIP code data were available for every case, and this information was used to link data derived from public files for the 1990 Census of Population. Excluding the 1,070 list sample cases that refused by postcard, there is no usable information on the record of calls for only 504 observations out of about 8,740. The interviewer data and Census data are also largely complete. However, the contact-level data collected on the HEF are missing for about 4,100 cases. The missing data are roughly equally spread over complete cases, refusals, and censored cases, and widely spread across interviewers.

II. Models of Unit Nonresponse

The interactions between interviewers and respondents are at the heart of the survey process, but many of the events that occur at that level are either unmeasurable without disrupting the interview, or difficult to define in an objective way. Early research on unit nonresponse was, consequently, limited. Recent path breaking work by Groves and Couper [1996] developed a theory of response and brought a variety of information together to test the theory. Their work forms an important part of the background of this paper.

Respondents and interviewers come together usually with different information and perceptions about each other, and with very different incentives. The role of the interviewer during the negotiation stage is to communicate information to the respondent that will lead to an agreement to complete an interview. Interviewer behavior is influenced by a number of factors. Their performance is monitored along several axes, including the proportion of cases they complete, and some indications of the quality of the data collected. However, it seems likely that interviewers are driven by other less traditional incentives as well. The SCF interviewers talk about the importance of the research that gets done with the data they collect, the interest they have in other people, the adventure of visiting strangers in unusual places, and their appreciation of their independence. While it is clear that they find most respondents enjoyable, there are very stressful and unpleasant interviews. Interviewers are made aware of the nature of the survey, and they are selected based on their past performance and credentials, and at least implicitly on their ability to deal with strangers with a reasonable lack of fear. Because there is generally other work that competes in the same salary range as interviewing, experience is likely to weed out people who do not fit the profile. Extensively training for the SCF minimizes variations in technique, but many important differences likely remain.

Randomization in the SCF sample designs virtually guarantees that respondents are more varied than interviewers. Respondents are taken to have a set of preconceptions and an internal structure that determines their responses to stimuli. Prominent among the factors that might influence respondents to participate in an interview are: a desire for attention or company, a sense of the competing uses or value of their time, past experience with surveys, their faith in government, their sense of their physical security, and their feelings about privacy. Respondents' reactions to an interview may also be shaped by their education or sophistication. It may also be that respondents who understand a survey and who feel themselves to be particularly interesting in the context of the survey might also be made particularly suspicious. No doubt there are many other considerations that affect the decision to complete an interview.

Although it would be interesting to model separately the interviewers' efforts and the respondents' receptivity, we have insufficient data to do so. This paper takes a reduced form approach. A respondent's decision at each contact to participate, refuse participation, or to stop short of either fits within the framework of a discrete time hazard model, where the temporal axis is indexed by contacts. The exit states are completed and refused, and the group at risk at each contact consists of the cases that have not received a final disposition as of previous contact and who are not yet censored.

A set of models is presented in table 1. The first model uses only the "Census" variables, and some design terms. The first line for each variable shows the estimated marginal effect on the propensity to complete an interview, and the third line shows the effect on the likelihood of refusal (standard errors are given below each). The Census variables reflect three effects: (1) the pure effects of neighborhood context, (2) indirect characteristics of respondents who choose to live in such areas, and (3) other unobserved characteristics of the respondent. Respondents living in central cities of CMSAs are more likely to refuse than people living in non-MSAs (on average subjected to higher levels of stimuli?), but they are not different in their response propensity. Those in CMSAs outside the central cities are not significantly different from those in non-MSAs. Respondents in other MSAs are less likely than those in non-MSAs to give a complete interview (smaller populations may raise questions of privacy?), but are no different in their propensity to refuse. Cases in areas that are disproportionately white in their racial composition are more likely

to be resolved overall, but refusals are the more likely outcome. Neighborhoods with greater concentrations of people over the age of 65 are less likely to give an interview (suspicion?), but are no different in their refusal propensities. Neighborhoods with higher proportions of college graduates are more likely to complete an interview, suggesting that more educated respondents may be more likely to understand and approve the purpose of the survey. Two variables expected to proxy for the value of the respondents' time have significant effects: areas with higher fractions of working males and neighborhoods where people have longer commuting times to work are less likely to complete interviews, but no different in their refusal propensities. Consistent with earlier SCF findings of a wealth effect in nonresponse, cases in neighborhoods with higher housing values were significantly less likely to complete an interview. As expected, relative to AP cases the observations from the higher strata of the list sample are more likely to refuse and less likely to complete an interview; the cases from the lower strata are not significantly different from other cases in terms of their estimated propensities.

The second model adds a variable indicating whether the interviewer at a given contact is different from the one who started the interview, and variables intended to capture time effects. Cases that have been taken over by a new interviewer are more likely to be resolved overall, but refusals are more likely; this outcome likely reflects the fact that most such reassignments take place when it is believed that another interviewer might "convert" an initial refusal. Unsurprisingly, the more days a case has been "in play," the more likely it is to exit as a refusal and less likely as a complete case. The effect of "persistence" is shown in the coefficients on number of attempts: more attempts correlate with greater probability of exit in both states. Increasing numbers of contacts lessen the likelihood of exiting as a refusal; this result could be taken to suggest that the personalization of the process over repeated contacts makes it harder for a respondent to make a firm refusal, or it may simply reflect unobserved dimensions of heterogeneity.

The third model adds variables obtained from the questionnaire administered to the project interviewers. The values entered into the model are based on the responses of the particular interviewer who was working on each case at a given contact. Cases assigned to more experienced interviewers are more likely to resolve as refusals; this result likely reflects the nonrandom assignment of more difficult cases to more experienced interviewers. Previous computer experience is associated with a higher completion propensity; perhaps such interviewers appear more "professional" to respondents. Cases administered by college educated interviewers do not differ significantly in their response propensities. Older interviewers are less likely to have refusals; this result accords with survey "folklore" that respondents find it harder to say "no" to older interviewers. However, the propensity for completing an interview is not significantly different for cases approached by older interviewers. Interviewers who are confident that they can persuade reluctant respondents are actually less likely to obtain either final resolution, but refusals are relatively less likely. Outgoing interviewers are more likely overall to resolve their cases. Interviewers who think of themselves as "hams" are less likely to have refusals; this group may be particularly good at tailoring their remarks to deal with respondents' reservations. Those who favor a strategy to emphasize engagement with the respondent on the first contact do not have notably different outcomes. Interviewers who are relatively curious about other people are less likely to have lower completion rates. Curiously, interviewers who have relatively greater interest in the research are significantly more likely to have their cases resolve as refusals.

The fourth model includes variables based on HEF data interviewers recorded about the respondents on the first contact and some information about respondents' neighborhoods. Because the missing data rate is very high for these variables, the model estimates should be taken as merely suggestive. Cases with barriers (either physical ones or gatekeepers) are not significantly different from other cases; perhaps barriers are more important in determining the possibility of contact at all. According to the model, interviewers' perceptions of the relative prosperity of neighborhoods have little effect, perhaps because the Census controls already capture the important dimension. There is a counterintuitive lower propensity for cases in "rich" neighborhoods to refuse, but this may reflect characteristics of neighborhoods that have changed since the 1990 Census. Contrary to the customary presumption, male respondents appear less likely to refuse, though they are no different in their propensity to complete a case. Younger respondents tend to be less likely to achieve a final resolution of their interviews. Not surprisingly, single-person households were both more likely to refuse and less likely to complete an interview; security concerns are likely to be important for such cases. Respondents who asked informational questions or questions about possible incentives to participate do not appear to differ from other respondents. However, those who made negative comments at the time of the first contact were more likely to resolve as a refusal and less likely to resolve as a completed case. Respondents who asked questions about the length of the interview were less likely to refuse, but those who indicated that they wanted to delay the interview were less likely to resolve as completed cases.

There are some potential problems with this

approach to modeling. Unless a respondent refuses very strongly, he is pursued until he does so. If all cases are not pressed equally on refusals, then the exit state is a random variable, not a discrete state. Almost surely, there are also important dimensions of unobserved heterogeneity across the sample cases.

III. Investigation of Some Costs of Unit Nonresponse

Although there is fairly strong evidence of systematic variation in unit nonresponse across the sample, it is very difficult to integrate through to a sense of the overall effects on estimates based on the set of completed cases. Unfortunately, by the nature of the phenomenon, we cannot directly estimate the costs of unit nonresponse. One argument given for pursuing cases through many contacts is that the "difficult" cases are the ones that are most like the cases that are not eventually interviewed. If we take this conjecture at face value, we can use some information from the sample cases to draw inferences about nonrespondents.

Although there are many important variables one might examine for bias, a key variable in the SCF is net worth. To get a sense of the variation in wealth data

Figure 2: Net Worth by Number of Contacts to Completion, AP Sample; Median, Interquartile Range, Minimum, and Maximum

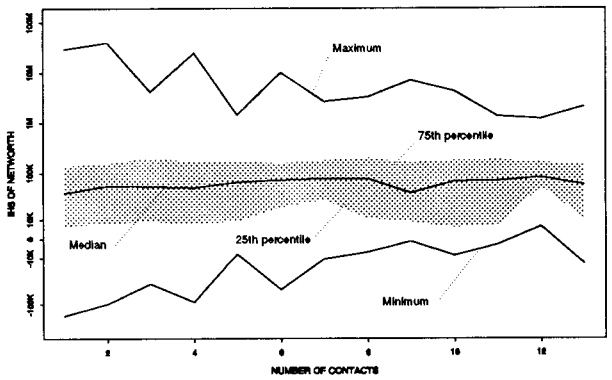


Figure 3: Net Worth by Number of Contacts to Completion, List Sample; Median, Interquartile Range, Minimum, and Maximum

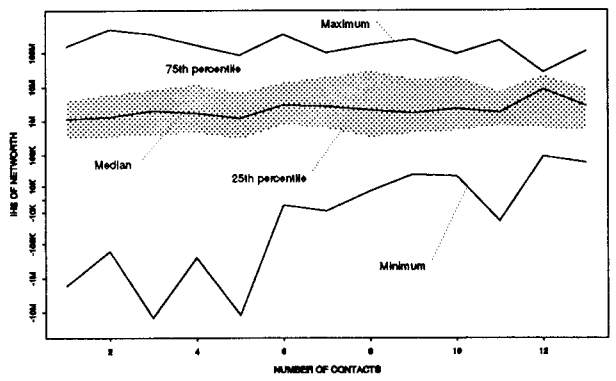


Figure 4: Q-Q Plot of Net Worth, Cases with more than 3 Contacts vs. Cases with 3 or Fewer Contacts, AP and List Samples Pooled

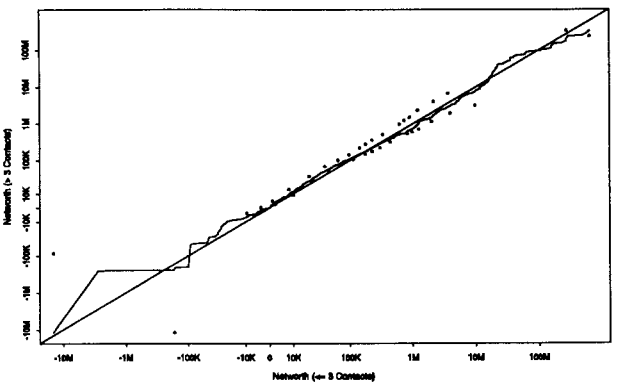
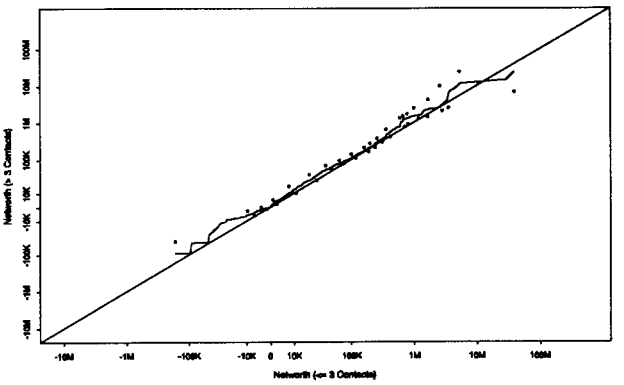


Figure 5: Q-Q Plot of Net Worth, Cases with More than 3 Contacts vs. Cases with 3 or Fewer Contacts, AP Sample Only



collected at each level of contact, figures 2 and 3 plot some key statistics of the distribution of net worth for cases completed in the two samples at different numbers of contacts. For both samples, there is surprisingly little variation, and for higher numbers of contacts, the extreme values move toward the median.

To press the question further, I generated two artificial samples of respondents, one by deleting cases that required more than three contacts to complete and one containing the complementary set of cases. For both groups, the nonresponse-adjusted weights were recomputed using only data from the survey and the frame for the sample.[2] Figure 4 shows a Q-Q plot of the distributions of net worth for the pooled AP and list cases in the two artificial samples. The distribution of wealth for the cases with more than three contacts lies a bit above that for the complementary group in the range below about $100,000, and above about $10 million. The dots in the figure mark the boundaries of an estimate of the pointwise 95 percent confidence interval around the central Q-Q plot.[3] The interval above $100,000 clearly contains the

45 degree line, and below that point the line is close to the edge of the interval. For the AP sample (figure 5), almost the entire distribution from the group with more than three contacts lies above that of its complement The confidence interval is also similar, but the lower bound more closely straddles the 45 degree line.

Although these results are suggestive, they cannot be definitive. We do not know the characteristics of the true nonrespondents, only those of the "late" respondents. Even if we could take these results literally, using them in a strict way — say, in designing an optimal cost-variance tradeoff — would almost certainly induce new problems. Had interviewers been told about a protocol involving a ceiling on the number of contacts or attempts, it is likely their behavior would have changed. Some interviewers might have been "too careful" budgeting the number of attempts on difficult cases so as not to risk losing the case; others might have moved to fill the requirement with relatively empty gestures for particularly difficult cases. In the past, the costs of monitoring interviewers' effort was prohibitive. Perhaps automation of case control records at the interviewer level will allow a more systematic treatment in the future.

Acknowledgments

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Endnotes

1. This paper is a summary of a paper available at http://www.bog.frb.fed.us/pubs/oss/oss2/scfindex.html
2. Imputations used data from the full sample.
3. Some simplifications were invoked. The bounds are computed at selected percentiles point, and at each such point a distribution of wealth estimates associated with that point is computed. The upper bound for that is given by the wealth value corresponding to the 97.5th percentile of the distribution of wealth estimates at that point for the population on the vertical axis, and the value associated with the 2.5th percentile of the wealth estimates at that point for the population on the horizontal axis. The lower bound is defined similarly.

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Variable definitions for table 1

INTRCPT: Intercept. CCCMSA: Case in center city of CMSA. OCMSA: Case in non-center-city CMSA. MSA: Case in non-CMSA MSA. BARR: Barriers to contacting R. PWHITE: Fract.R's ZIP code white. PGT65: Fract.of R's ZIP code ≥ age 65. AHHSZ: Avg. household size in R's ZIP code. PCOLL: Fract. college ed. adults in R's ZIP code. PMWK: Fract. adult males in ZIP code in labor force. PFWK: Fract. adult females in ZIP code in labor force. ATRAV: Avg. commuting time (min./10) for ZIP. MHVAL: Log(median dwelling value in ZIP code). IEXP: Log(years of iwer's experience). ICOMEX: Iwer experienced with computers. ICOLL: Iwer has some college edn. IAGE: Log(age of the iwer). ICONV: Iwer feels all Rs can be converted with enough effort (1=strongly disagree, 5=strongly agree). IOUTGO: Iwer considers self outgoing (1=str. disagree, 5=str. agree). ICURIO: Iwer curious about people (1=str. disagree, 5=str. agree). INEIGH: Iwer likes challenge of unfamiliar nghbrhds (1=str. disagree, 5=str. agree). IRES: Iwer likes being part of research (1=str. disagree, 5=str. agree). IHAM: Iwer thinks of self as a "ham" (1=str. disagree, 5=str. agree). ITALK1: Iwer believes better on 1st cont. to engage R vs. press for decision (1=str. disagree, 5=str. agree). RHRES: R's nghbrhd mostly residential. POOR: Acc. to iwer, R's nghbrhd poor. RICH: Acc. to iwer, R's nghbrhd rich. MALE: R male. ALE30: R aged ≤30. A31_40: R aged 31 to 40. A41_50: R aged 41 to 50. ONEP: R lives alone. INFOQ: R asked for info on survey on 1st cont.. TIMEQ: R asked length of interview on 1st cont.. INCENQ: R asked about incentives on 1st cont.. RNEG: R made negative comments on 1st cont.. RDELAY: R made comments to delay on 1st cont.. DAYS: Days since first attempt/10. NATT: # attempts incl curr. cont.. NCON: # contacts incl curr. cont.. NEWI: Diff. iwer since case fielded. LSSTGE4: Case in list strata ≥4. LSSTLT4: Case in list strata <4. +: Sig.at 1%. *: Sig. at 5%.

Table 1: Discrete Time Hazard Models of Completion and Refusal, 1995 SCF

INTRCPT	1.53+	1.41+	1.59*	3.06+	ITALK1	.	.	0.01	-0.01
	0.51	*0.51*	*0.72*	*1.13*		.	.	*0.02*	*0.02*
	-5.21+	-3.82+	-0.55	-7.86*		.	.	0.01	0.10
	0.77	*0.78*	*1.15*	*3.92*		.	.	*0.03*	*0.08*
CCCMSA	0.05	0.04	-0.05	0.21	BARR	.	.	.	0.04
	0.06	*0.06*	*0.07*	*0.11*		.	.	.	*0.11*
	0.37+	0.23+	0.22*	0.17		.	.	.	0.25
	0.08	*0.08*	*0.09*	*0.33*		.	.	.	*0.31*
OCMSA	-0.09	-0.09	-0.06	-0.02	RHRES	.	.	.	-0.08
	0.05	*0.05*	*0.06*	*0.09*		.	.	.	*0.11*
	0.06	0.04	0.04	-0.03		.	.	.	0.05
	0.06	*0.06*	*0.07*	*0.24*		.	.	.	*0.4*
MSA	-0.40+	-0.42+	-0.38+	-0.48+	POOR	.	.	.	0.18
	0.05	*0.05*	*0.06*	*0.08*		.	.	.	*0.10*
	0.04	-0.26*	-0.16	-0.37		.	.	.	0.00
	0.1	*0.11*	*0.12*	*0.30*		.	.	.	*0.35*
PWHITE	0.37+	0.43+	0.33+	0.37	RICH	.	.	.	-0.12
	0.12	*0.12*	*0.13*	*0.20*		.	.	.	*0.08*
	0.54+	0.56+	0.80+	0.84		.	.	.	-0.57*
	0.17	*0.19*	*0.21*	*0.66*		.	.	.	*0.25*
PGT65	-2.39+	-2.54+	-2.44+	-2.14*	MALE	.	.	.	0.02
	0.54	*0.54*	*0.61*	*1.00*		.	.	.	*0.06*
	-0.23	-1.21	-0.85	0.70		.	.	.	-0.43*
	0.76	*0.78*	*0.88*	*3.44*		.	.	.	*0.18*
AHHSZ	0.13	0.14	0.19*	0.24	ALE30	.	.	.	-0.33+
	0.08	*0.08*	*0.08*	*0.14*		.	.	.	*0.09*
	0.11	0.02	0.07	0.35		.	.	.	-0.85+
	0.1	*0.11*	*0.12*	*0.41*		.	.	.	*0.33*
PCOLL	0.53*	0.51*	0.62*	1.22+	A31_40	.	.	.	-0.31+
	0.25	*0.25*	*0.27*	*0.41*		.	.	.	*0.08*
	-0.12	0.14	0.03	-0.67		.	.	.	-0.25
	0.34	*0.35*	*0.38*	*1.24*		.	.	.	*0.25*
PMWK	-1.22+	-1.41+	-1.83+	-1.31	A41_50	.	.	.	-0.20+
	0.43	*0.43*	*0.47*	*0.73*		.	.	.	*0.07*
	0.19	-0.84	-1.54*	-1.07		.	.	.	-0.23
	0.65	*0.66*	*0.72*	*2.51*		.	.	.	*0.23*
PFWK	0.66	0.76	0.92	-0.01	ONEP	.	.	.	-0.77+
	0.43	*0.44*	*0.47*	*0.70*		.	.	.	*0.15*
	0.30	1.00	1.50*	1.45		.	.	.	1.14+
	0.61	*0.64*	*0.69*	*2.34*		.	.	.	*0.23*
ATRAV	-0.21+	-0.22+	-0.19+	-0.02	INFOQ	.	.	.	0.09
	0.04	*0.04*	*0.05*	*0.07*		.	.	.	*0.06*
	0.09	0.01	0.07	0.11		.	.	.	0.35
	0.06	*0.06*	*0.07*	*0.24*		.	.	.	*0.20*
MHVAL	-0.22+	-0.21+	-0.22+	-0.26+	TIMEQ	.	.	.	-0.10
	0.04	*0.04*	*0.05*	*0.08*		.	.	.	*0.06*
	0.11	0.00	-0.02	0.26		.	.	.	-0.56+
	0.06	*0.06*	*0.07*	*0.23*		.	.	.	*0.19*
IEXP	.	.	-0.01	-0.01	INCENQ	.	.	.	0.12
	.	.	*0.01*	*0.02*		.	.	.	*0.16*
	.	.	0.04+	0.05		.	.	.	-1.22
	.	.	*0.01*	*0.05*		.	.	.	*0.75*
ICOMEX	.	.	0.09*	0.14*	RNEG	.	.	.	-0.47+
	.	.	*0.05*	*0.07*		.	.	.	*0.07*
	.	.	-0.05	0.00		.	.	.	0.51+
	.	.	*0.07*	*0.23*		.	.	.	*0.18*
ICOLL	.	.	-0.02	0.02	RDELAY	.	.	.	-0.5+
	.	.	*0.06*	*0.08*		.	.	.	*0.06*
	.	.	0.09	-0.30		.	.	.	-0.05
	.	.	*0.09*	*0.26*		.	.	.	*0.18*
IAGE	.	.	-0.01	-0.24	DAYS	.	-0.03+	-0.03+	-0.01
	.	.	*0.10*	*0.16*		.	*0.01*	*0.01*	*0.01*
	.	.	-0.82+	-0.40		.	0.14+	0.14+	0.14+
	.	.	*0.15*	*0.54*		.	*0.01*	*0.01*	*0.02*
ICONV	.	.	-0.05*	-0.03	NATT	.	0.03+	0.03+	0.05+
	.	.	*0.02*	*0.03*		.	*0.00*	*0.01*	*0.01*
	.	.	-0.28+	-0.20*		.	0.02+	0.02*	0.04
	.	.	*0.03*	*0.10*		.	*0.01*	*0.01*	*0.03*
IOUTGO	.	.	0.07*	-0.03	NCON	.	0.01	0.01	0.00
	.	.	*0.03*	*0.04*		.	*0.01*	*0.01*	*0.01*
	.	.	0.12+	0.24		.	-0.06+	-0.04+	-0.01
	.	.	*0.04*	*0.14*		.	*0.01*	*0.01*	*0.04*
ICURIO	.	.	-0.09+	-0.08*	NEWI	.	0.18+	0.09	0.18*
	.	.	*0.02*	*0.03*		.	*0.04*	*0.05*	*0.07*
	.	.	-0.02	-0.02		.	1.09+	1.02+	0.86+
	.	.	*0.03*	*0.09*		.	*0.06*	*0.06*	*0.20*
INEIGH	.	.	0.03	0.08	LSSTGE4	-0.31+	-0.32+	-0.33+	-0.11
	.	.	*0.03*	*0.04*		*0.03*	*0.03*	*0.03*	*0.06*
	.	.	-0.03	0.19		0.10+	0.09*	0.11+	0.08
	.	.	*0.04*	*0.13*		*0.04*	*0.04*	*0.04*	*0.06*
IRES	.	.	0.03	0.07	LSSTLT4	0.04	0.10*	0.14+	0.31
	.	.	*0.04*	*0.06*		*0.04*	*0.04*	*0.05*	*0.17*
	.	.	0.22+	-0.05		-0.02	0.10	0.05	0.08
	.	.	*0.07*	*0.28*		*0.05*	*0.05*	*0.06*	*0.18*
IHAM	.	.	-0.03	0.02					
	.	.	*0.02*	*0.03*					
	.	.	-0.23+	-0.19	N_EVENTS	32434	32434	27564	10037
	.	.	*0.03*	*0.10*	N_CASES	7524	7524	6443	2111