

**Using national registrations to
correct for selective non-response.
Political preference of ethnic groups**

Discussion paper 03009

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Explanation of symbols

.	= data not available
*	= provisional figure
x	= publication prohibited (confidential figure)
–	= nil or less than half of unit concerned
–	= (between two figures) inclusive
0 (0,0)	= less than half of unit concerned
blank	= not applicable
2002–2003	= 2002 to 2003 inclusive
2002/2003	= average of 2002 up to and including 2003
2002/'03	= crop year, financial year, school year etc. beginning in 2002 and ending in 2003

Due to rounding, some totals may not correspond with the sum of the separate figures.

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USING NATIONAL REGISTRATIONS TO CORRECT FOR SELECTIVE NON-RESPONSE. POLITICAL PREFERENCE OF ETHNIC GROUPS

Hans Schmeets and Jacques P.G. Janssen¹

ABSTRACT

This paper deals with non-response bias, discussing a few approaches in this field. It is demonstrated that non-response bias as to voter turnout is lower in a survey on living conditions than in a purely political survey. In addition, auxiliary information from registrations is used to investigate non-response and its bias among ethnic groups. Response rates among ethnic minority groups are rather low, but there is no evidence that response rates are lower in lower social class areas. Unsurprisingly, correcting for limited socio-economic deviations does not affect the distributions of political preference.

Key Words: Non-response bias, voter turnout, ethnic groups

1. INTRODUCTION

Non-response is a serious problem in social statistics. Non-response rates have increased sharply in recent years and compared to other countries, the Netherlands is not doing very well (De Heer, 1999). For example, the 1997 Dutch Labour Force Survey (LFS) had a response of 56%, while in other countries response for similar surveys is substantially higher, often around 80 to 90%.² Apart from the LFS, other socio-cultural surveys in the Netherlands also show response rates between 50% and 60%. Panel-studies are even more problematic. The response rate of the two-wave Dutch Parliamentary Election Study (DPES) has been below 50% since 1981 and only 43% of the electorate participated in 1998 (Aarts, Van der Kolk & Kamp, 1999, pp. 22-24).³ Moreover, the response rates of specific groups, such as certain ethnic groups, are particularly low. As there is an increasing demand for statistical information about attitudes and behaviour of ethnic groups, non-response related to ethnic minorities has become a relevant research issue.

The main problem regarding non-response is the bias in target characteristics. This bias does not occur if non-response is random, but this is often not the case. In most social surveys the target variables are related to the willingness to co-operate. Again, this is particularly true for the DPES. For example, members of political parties hardly refuse to participate in the survey, and are consequently over-represented. Another example concerns voter turnout. This can be illustrated by the comparison between the reported turnout in the DPES and the official voter turnout, as shown in Table 1. After the abolition of compulsory voting in 1970, the voter turnout for the parliamentary election initially increased from 79.1% in 1971 to 88.0% in 1977. It subsequently decreased rapidly: from 88.0% in 1977 to 73.3% in 1998. However, the reported turnout in this period remained more or less stable. Consequently, the gap between the official turnout and reported turnout widened. In the first six election studies, overrating never exceeded 8%. Unfortunately, in the last three election studies the gap widened to 17.5%.

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² The response in the Netherlands was substantially higher in the past; in 1983, the LFS had a response of 81%.

³ If we take the first wave into account only, the response rate of the Dutch Parliamentary Election Study (DPES) fell drastically from 69.3% in 1981 to 46.1% in 1989, 47.5% in 1994 and 49.9% in 1998.

Table 1: Official and reported voting turnout in Dutch Parliamentary Election Study (DPES), 1971-1998

	1971	1972	1977	1981	1982	1986	1989	1994	1998
Official turnout	79.1	83.5	88.0	87.0	81.0	85.5	80.3	78.7	73.3
Reported turnout	86.1	89.4	91.1	93.5	89.0	93.1	92.6	92.2	90.8
Absolute difference	+7.0	+5.9	+3.1	+6.5	+8.0	+7.3	+12.3	+13.5	+17.5

Obviously, official turnout figures are useful to illustrate the bias in the response of political studies. A common approach to eliminate the non-response bias is to re-weight the data: a weight is assigned to specific categories, for instance voters and non-voters, in order to equalise the distribution of certain basic characteristics in the response and in the population. Such methods do not always solve the problem, however. Re-weighting the data is an appropriate solution only if specific groups of respondents, e.g. the non-voters, do not differ from the same groups among the non-respondents. It is usually impossible to test whether this is true, since information on non-respondents is lacking.

Apart from re-weighting, we will demonstrate other approaches to deal with non-response bias in this paper. The first encompasses the introduction of a new survey design. We will compare the bias of voter turnout in a design in which the research topic is purely political (an election study) with that in a design with a much broader thematic scope (living conditions). In the second approach, we highlight the use of auxiliary information from registrations, focusing on ethnic groups. We detail the problem of non-response bias among ethnic groups and use political preference to illustrate how information from registrations can be used to assess effects of non-response bias.

2. DEALING WITH NON-RESPONSE BIAS AS TO VOTER TURNOUT

2.1 Weighting models

Statistics Netherlands conducted the DPES in 1989 and 1994.⁴ Because of the disappointing response, additional efforts were made to tackle the problem of the response bias (Schmeets and Molin, 1990; Schmeets, 1992). A common way to approach this is to re-weight the data. In the traditional weighting models used in the DPES, the non-response bias hardly improved. The gap between reported and official turnout remained more or less stable.⁵ Consequently, the makeshift solution was to include the target variable ‘voting behaviour’ into the final weighting model.⁶ This appeared to be of importance as many other target variables, like political interest, correlate strongly with voting behaviour. For example, the DPES 1989 included the following question: ‘Are you very interested, fairly interested or not interested in political issues?’ After re-weighting, the group that was not interested increased from 20.3% to 26.7%.

However, the solution of re-weighting the data is only appropriate under the assumption that the responding non-voters are representative of the non-voters in the population. As we do not have any reliable information on this aspect, the question remains whether this is a valid assumption. As the low level of response probably causes serious bias that cannot always be neutralised by smart methods of weighting, the problem would be better tackled by trying to get more non-voters in the sample. The main reason for non-participation is a refusal. As the response rate is particularly low in the DPES, the obvious reason for this

⁴ The DPES has been conducted since 1971. Only the DPES 1989 and 1994 were conducted by Statistics Netherlands in close collaboration with the Dutch Electoral Research Foundation (SKON). The DPES 1998 was conducted by K. Aarts, H. van der Kolk and M. Kamp on behalf of the SKON.

⁵ The original model included the following five characteristics (number of categories in brackets): Sex (2); Marital status (4); Age (7); Degree of urbanisation (4); Region (4).

⁶ Voting behaviour consisted of eight categories, including non-voting.

phenomenon is that many people are not interested in politics and consequently refuse to co-operate (see also, Brehm, 1993; Van der Kolk, 2000; Schmeets, 1992; Smeets, 1995). In accordance with this interpretation, we would expect to have more non-voters in the sample if we included political questions in other than election studies. Hence, the gap between the official statistics and reported turnout would be narrowed.

2.2 Survey design effects on non-response bias

Before we deal with effects on non-response bias in detail, let us briefly outline the new design of social surveys. Statistics Netherlands has developed an integrated survey on living conditions, which started in 1997 (NOS, 1998). POLS is the Dutch acronym for the Continuous Survey on Living Conditions. POLS has been up and running since 1997; in 1997, a total of 34 thousand persons were interviewed, in 1998, data were collected on 82 thousand, and in 1999 and 2000, on 42 thousand persons. The design of POLS is based on a modular structure consisting of a joint sample frame and a joint questionnaire. The mean interview length for the joint questionnaire is fixed at 15 minutes; a theme module may take another 30 minutes.

The key question is: ‘Does the POLS design improve the non-response bias of voter turnout?’. To answer this we will compare the results based on the DPES in 1998 (second wave) and POLS 1998, both conducted shortly after the parliamentary election on 6 May in that year. In order to make the comparison, we changed the regular party preference question in POLS ‘If the election for the Second Chamber of Parliament were held today, which party would you vote for?’ into ‘Did you vote in the elections on 6 May’ and, if yes, ‘Which party did you vote for?’. This question was fielded during the period 6-31 May 1998 (N = 6,087). The response rate was 60%, which is substantially higher than the response rates in the election studies. This is also true for the DPES in 1998, in which a response of 50% (first wave) and 43% (both waves) was reached (Aarts, 1999; Van der Kolk, 2000).

Table 2: Official and reported voting turnout in Dutch Parliamentary Election Study (DPES) and Continuous Survey on Living Conditions (POLS), 1998

	DPES	POLS
Official turnout	73.3	73.3
Reported turnout	90.8	82.1
Absolute difference	+17.5	+8.8
Number of cases	1,804	6,087

Table 2 presents results from the DPES and POLS. The table shows that the absolute difference between official and reported turnout is lower in POLS (8.8%) than in DPES (17.5%).⁷ This means that the POLS design improved the non-response bias substantially. There are two main differences between the two surveys. The first is the two-wave panel design (DPES) versus the one-wave design (POLS). The interview before election day may stimulate DPES panel members to go and vote, leading to more voters in the second wave than expected. The second difference is the topic of the survey: one is a purely political study, the other a study with a broader thematic scope. According to Van der Kolk and Aarts (2001), non-response has a much smaller impact on turnout bias than the stimulus due to the interview. They concluded, based on a fresh sample among 401 respondents approached after the elections, that the 17.5% difference between official and reported turnout can be attributed to a stimulus effect (11%), non-response effect (4%) and a

⁷ Note that we do not use the weighted DPES results as voting behaviour is included in the weighting model and consequently the official and reported turnout figures are equal (73.3%). The usual weighting model in POLS in which socio-demographic characteristics are included affects the reported voter turnout only slightly (81.4%). We do not expect the weighted DPES using similar characteristics (but excluding voting behaviour) to yield different results.

misreporting-effect (2%). This would basically mean that the design-effect on the turnout bias is merely caused by a two-wave design instead of a one-way design. Consequently, this would imply that the topic of the survey is not relevant for the non-response bias, and so the broader thematic scope in POLS is not an advantage over the purely political DPES. It would benefit the non-response only and would not diminish the non response bias. However, the Van der Kolk and Aarts analysis is based on a rather small number of cases interviewed by telephone who indicated that they would be willing to participate in a face-to-face interview as well. In the next section we will demonstrate other ways of tackling the problem of non-response bias. This will be illustrated by information on ethnic minorities.

3. DEALING WITH NON-RESPONSE BIAS AS TO VOTING BEHAVIOUR OF ETHNIC GROUPS

3.1 The importance of information on ethnic minorities

According to the common definition used by Statistics Netherlands, every person residing in the Netherlands of whom one or both parents were born abroad is counted as a foreigner (allochthonous). During the 1990s, the western foreign population increased by 149 thousand, the non-western foreign population by 515 thousand. The number of refugees and asylum seekers showed the strongest increase. The yearly number of asylum seekers was limited to 20 thousand until 1992, but has increased rapidly since then. Most asylum seekers, 50 thousand, mostly from the Balkan, came in 1994. More recently, in 1998 and 1999, a total of 43 thousand immigrants applied for asylum in the Netherlands. In 2000, a total of 2.775 million persons belonging to ethnic minorities, according to above mentioned definition, lived in the Netherlands. This equals to 17.5% of the total population.

The Dutch have had a long tradition of hospitality to ethnic immigrants. By the beginning of the 1990s, there was a noticeable growing resistance among the public. At that time it became clear that an ever-growing number of immigrants were seeking safety in the Netherlands and in many other western European countries. Especially manual labourers, the self-employed and people with low educational levels support ethnocentric policies (Scheepers, Schmeets & Felling, 1997). A vast majority of the Dutch population is in favour of a reduction of the number of immigrants in contemporary Dutch society (Schmeets, 2000). In addition, many inhabitants appeal for a complete stop of asylum seekers (18%), employees coming from EU countries (10%) and non-EU countries (21%).⁸ As Dutch policy focuses on the integration of these minority groups in society, there is an increasing demand for statistical information on ethnic groups. Such information should not be based on the LFS only, but also on POLS in order to present a wide range of topics related to behaviour and opinions of ethnic groups.

However, Statistics Netherlands is reluctant to provide this eagerly desired information from POLS, because of doubts regarding the potential non-response bias. The surveys are conducted face-to-face by means of CAPI (computer-assisted-personal-interview) in Dutch. As interview by proxy is not permitted, the respondent must be able to speak Dutch, at least at a basic level. This probably creates non-response bias. Furthermore, it is to be expected that ethnic minorities are less willing to co-operate in a survey compared to the native Dutch population due to a lack of integration in the Dutch society.

3.2 Selectivity of non-response as to ethnic groups

Information on ethnicity is included in the joint questionnaire. It reveals that the native population is slightly over-represented. Out of a total of 33,147 respondents aged 15-64 years, 87.9% are native Dutch, compared to 82.3% in the actual population. Turks, Moroccans and other non-western ethnic groups in particular are under-represented in the response. According to the official registrations⁹, 1.9% of the population of the

⁸ The figures in are based on interviews in 1999. The situation in 2000 improved slightly: 16%, 9% and 19% respectively.

⁹ The distribution in the population is derived from a seven percent sample from all Dutch municipal basic administrations.

Netherlands are Surinamese, 0.6% from the Netherlands Antilles and Aruba, 1.9% Turkish, 1.5% Moroccan, 2.5% other non-western and 9.3% are western foreigners.¹⁰ In the sample, we found 1.3%, 0.5%, 1.1%, 0.7%, 1.4% and 7.4% for these groups respectively. The representation of the ethnic groups improves to some extent if the data are re-weighted by the regular weighting scheme, including age, sex, region, household composition and degree of urbanisation.

Next, we go one step further by looking into the selectivity of characteristics *within* these ethnic groups. First of all, most distributions of ethnic groups broken down by socio-demographic characteristics do not differ substantially between POLS and the population. We found an under-representation in POLS of Surinamese men: 42% in the sample, 47.1% in the population. For other ethnic groups, the distributions of gender in the sample and the population are more or less equal. Likewise, we found hardly any evidence of selectivity within ethnic groups with respect to age, marital status and region. At first glance, non-response does not seem to have a large impact on selectivity within ethnic groups. However, we may have looked at characteristics that are not relevant: instead of age, sex, region and marital status, other characteristics from registrations would show whether certain ethnic groups in the response differ from those in the 7 percent population sample frame. It is probable that the better situated among ethnic minority groups are more likely to participate in a survey, and this would result in a too rosy picture of their socio-economic situation. Hence, it would be especially interesting to look into socio-economic characteristics rather than merely demographic ones.

It appears to be difficult to obtain socio-economic information from registrations that can be matched to the survey data. We succeeded in matching a registered indicator of a person's socio-economic position, being the value of the dwelling they live in, called the WOZ value.¹¹ For statistical purposes, this information is not available on a strict micro-level, but aggregated for the postcode area in which the respondent lives. The postcode areas for which we have information concerning the WOZ value are very small, close to micro-level. The Dutch postcodes consist of four numeric digits, which are more or less on a village or city district or neighbourhood level. Next, two letters are added (e.g. 3271 KB), which brings the level as deep as a small street or a block on either the odd or even side of a street. It is on this level that we have house value information.

We distinguished six WOZ categories. The ranges of the categories and the distribution in the sample frame (which can be considered as representative of the whole population) is shown in Table 3. Most ethnic minority groups live in areas with the lowest WOZ value: roughly one in three Surinamese, Netherlands Antilleans and Arubans, Turks, Moroccans and other non-western foreigners. In contrast, fewer than one in ten of the native population live in the lowest WOZ areas. Moreover, more than half of the ethnic foreigner groups live in the combined WOZ categories 1 and 2, which is in sharp contrast with one in five of the native population.

Table 3 Distribution of ethnic groups by WOZ categories for ages 15-64

WOZ category in Dutch guilders ¹²	Native population	Surinamese	Arubans + Antilleans	Turks	Moroccans	Other non-western	Other western
1 - 89,999 (1)	9.0	35.1	36.4	41.6	36.9	31.6	13.4
90,000 - 119,999 (2)	12.1	23.0	19.8	26.8	25.5	21.4	15.3
120,000 - 149,999 (3)	15.5	15.3	15.0	17.1	19.9	17.1	16.8
150,000 - 179,999 (4)	17.0	10.1	11.4	8.7	10.3	10.9	15.9
180,000 - 219,999 (5)	17.9	8.3	7.6	3.8	5.0	8.0	14.8
220,000 and above (6)	28.5	8.2	9.8	2.0	2.4	11.0	23.9

Source: 7% sample frame for household surveys 1999, N = 739,748 and WOZ file

¹⁰ Among these are Germans, Belgians, other persons from western Europe and Indonesia (including former Dutch East-Indies).

¹¹ WOZ stands for Law on Real Estate Taxation. The WOZ value is estimated by the municipalities and is used for the annual tax on property and usage of immovables.

¹² NLG 1.00 = EURO 0.45.

We would now like to illustrate that the registered WOZ value is indeed a sensible and valid indication of the socio-economic position and that it is so not only for the native population, but for the ethnic minorities as well. For this illustration, we performed a regression analysis of the WOZ value on income (in deciles), which is the pre-eminent indicator of socio-economic position available in POLS, and on owner occupation. Income and house ownership generally have clear and significant effects on the WOZ value and, together, they explain about one quarter of the variance of the WOZ value.¹³ Furthermore, the overall results also apply to the ethnic sub-groups of natives, western non-natives and non-westerners. Hence, we may proceed and consider WOZ value as being a valid socio-economic registration characteristic, also within ethnic groups.

The question that we are interested in is how the figures based on the registration compare with the survey figures (POLS). Among ethnic minority groups, do those who live in 'better' areas respond more often? In contradiction to our expectations, this is not the case. If there is a pattern of distortion in the figures, then it is one that shows that these ethnic minority groups respond even better in areas with a lower WOZ value than in areas with a higher WOZ value. This is particularly true for persons with a Turkish background. In general, the differences were not substantial. In addition, the native population in the sample mirrors the distribution in the registration reasonably. There is a very slight under-representation (8.3% in sample; 9.0% in registration) of the native population living in the lowest WOZ areas.

3.3 Correcting for non-response bias of ethnic groups as to voting behaviour

We have found that the distributions of the ethnic groups broken down by socio-demographic and socio-economic characteristics based on the registration (population) and the sample do not differ substantially. However, taking the small differences seriously, we are interested in the effects on target variables, in our case voting behaviour. To determine these effects, we adjust the distribution of our socio-economic characteristic, WOZ value, within ethnic groups. For this purpose, the data were re-weighted in two steps. First we used the traditional weight, and then we corrected the distributions of the WOZ value *within the seven distinguished ethnic groups*. The distribution of voter turnout and voting behaviour after this correction within ethnic groups hardly changed. Consequently, we may conclude that non-response bias does not affect the results with respect to political preference within ethnic groups. This conclusion is based on (1) statistical significance (2) absolute changes in the target variables. The first argument – statistical significance – is based on the comparison between the uncorrected and corrected distributions. All corrected distributions do not differ on a 95%-level from the uncorrected results ($-1.96 < t < 1.96$). As the calculation of statistical significance based on weighted figures is rather complicated¹⁴, this approach could be challenged. To counter such criticism, we look at the size of all the changes caused by the corrections. Almost all of these changes amount to less than 1 percentage points and only two changes are between 1 to 2 percentage points. Moreover, no changes would allow us to give an alternative interpretation of the results. It is interesting to note that additional analyses show that a similar stability of results is found for the target variables political interest, education, church affiliation (in particular: not belonging to a church, Roman Catholic, Calvinist Protestant, Islamic), having paid work, and being unemployed. This goes for re-weighting on the basis of within-ethnic group and overall distributions of age, sex, marital status, urbanisation, region and WOZ value.

¹³ Adding educational level and unemployment or employment leads to similar results, but the additional explanation of the variance is very limited.

¹⁴ The weighted and corrected figures were re-scaled to the original sample size, instead of the common practice in statistical agencies to scale to population size for descriptive purposes. In this way, standard errors are not artificially blown up by the artificially raised size of the data file.

4. DISCUSSION

In this paper we have discussed non-response bias in social statistics. As Statistics Netherlands has to cope with major response problems, we have to take the bias seriously. Although smart weighting models may help to improve the statistical information, it is difficult to study the assumptions because information on non-respondents as to the target variables is often lacking. We have demonstrated two paths of studying non-response bias. The first concerns the design of the study. Using another survey design appears to substantially reduce the bias. A political study, such as the Dutch Parliamentary Election Study, introduces bias from the outset. People who are not interested in politics more often refuse to participate in a political survey. One remedy is to include political questions in another, non-political, survey. It is demonstrated that the overall response in a survey on living conditions is higher than in a political study. But, more importantly, the gap between official and reported voter turnout decreases substantially. This implies that with respect to voter turnout, the non-response bias is lower in a survey with a broader thematic scope than in a political survey. We should, however, be aware that this relation could also (partly) be spurious: not the topic of the survey is relevant, but the two-wave (DPES) instead of one-wave (POLS) design. Following this approach, the 8.7% gap between the DPES and POLS regarding turnout bias (17.5% versus 8.8%) would (partly) be caused by a stimulus-effect: part of the group that normally would not have cast their vote, will now do so as a result of their participation in a political survey. According to Van der Kolk and Aarts (2001), such a stimulus-effect is rather strong. Their conclusion is based on a telephone interview among a small sample. As the response rate was 28%, it is disputable whether this is a representative sample. We therefore still believe that – at least to some extent – the topic of a survey is relevant to reduce the voter turnout bias. Furthermore, it is to be expected that the bias in other characteristics – such as political interest – is lower in POLS than in the DPES. These findings support Brehm's belief that (1993, p. 70): "...political participation and survey participation share common underlying causes." and "...there is a good reason to consider political participation a metaphor for survey participation.". This, however, does not imply that the bias in POLS is completely abandoned. There is still a 8.8% gap between official and reported figures.

Apart from response rates, other effects may cause the discrepancy between official and reported voter turnout figures as well. One effect is misreporting: respondents do not want to admit that they did not vote. In fact, they lie about having voted, which in several countries corresponds to 25% of non-voters (Van der Kolk & Aarts, 2001). If this is the case in the Netherlands and consequently in POLS as well, 5.9% should be added to the 17.9% found for non-voters (see Table 2). Following this assumption, the actual number of non-voters in the sample corresponds with 23.8%. This would imply that that 5.9% out of the 8.8% discrepancy would be caused by a misreporting effect, and consequently only 2.9% turnout bias caused by non-response remains.¹⁵ Such 'socially desirable' answer-mechanisms would then be the main cause for the turnout gap. Likewise, an effect which has not been dealt with in this paper, is the so-called 'bandwagon effect': respondents do not want to admit that they voted for the party that did not win the election. This would imply that non-response bias partly or even substantially consists of measurement errors (see for a treatment of non-response bias and measurement errors simultaneously, Jackman, 1999). However, we did not find any evidence of widespread misreporting of party choice in the sample. Moreover, in line with Van der Kolk and Aarts (2001), we do not believe in such a significant misreporting in turnout. Naturally, this does not alter the fact that more research will be needed to investigate measurement errors more thoroughly.

The second path in this paper focused on the ethnic groups by using auxiliary information from registrations. Although there is a clear under-representation among ethnic groups, we could not find any evidence of selectivity. We expected a lower response of ethnic groups living in houses with a low WOZ value, taken as a rough proxy for the socio-economic position. The result was remarkable. The response among ethnic groups living in areas with a rather low socio-economic position was even, although slightly, better. Another approach is to investigate the relations between ethnic groups and target variables. For example, the relation

¹⁵ Note that this effect would be further reduced to 2.1% if the data were weighted according to the usual weighting model in POLS (see also note 7).

between ethnic groups and voting behaviour has been examined. Ethnic minorities vote less often than the native population. On the other hand, a vast majority of these foreigners do participate in the elections. We should be aware that foreigners in the possession of the Dutch nationality are eligible to cast their vote. Among the other foreigners the voter turnout would probably be lower. It is clear for which parties foreigners vote: Labour and GreenLeft are overwhelmingly in favour. On face-validity we have no doubts that this result is not substantially biased if it is biased at all. Besides, we tested whether correcting for selectivity with regard to socio-economic and socio-demographic characteristics (including WOZ value) would change the results. This was not the case and almost all changes amount to less than 1 percent.

Statistics Netherlands will concentrate on the Social Statistical Database as the main source of analysis for the production of social statistics in the coming years. An important issue will be the reduction of surveys as more information based on registrations is available. Obviously, there is often no need to gather information in surveys if this information already exists in a registration. Moreover, official registrations are often more valid and reliable than information based on survey research. An additional advantage is saving precious time for both respondents and, in the case of a face-to-face interview approach, field interviewers. However, many characteristics are available in surveys only and consequently cannot be replaced by information on registrations. In addition, the main reason for collecting the same information by means of a survey is to relate the target characteristics to other variables. For example, the DPES is not conducted to find out how Dutch voters vote, but basically to explain why they vote for a specific party and why they vote at all. Many variables are included in (structural equation) models to get some insights in the voting behaviour of the Dutch voter (Aarts, 2000; Schmeets & Molin, 1992; Schmeets & Otten, 1993; 1996; Smeets, 1995; Thomassen, 2000). We appeal for not discarding information based on surveys too quickly, even if the same information is available in a registration. For one thing, having the same information from two sources – based on a survey and on a registration – in a database will improve the possibilities of detecting measurement errors, and consequently provide insights in the non-response bias.

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