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# The Structure of Political Satisfaction\*

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## Abstract

In this paper we use a two-layer model in which we are able to empirically measure direct and indirect effects of satisfaction with public policies based on purely subjective preferences of citizens. We are also able to distinguish which individuals are dissatisfied the most. The estimation results suggest that the specified public policies are all significant except the respondent's attitude with respect to policies regarding social security, the amount of social benefits and immigration policy. Within the political context of 2001 left wing voters are less satisfied with policies aiming to realize a 24 hours economy than right-wing voters. Right wing voters are dissatisfied with immigration policies.

JEL Codes: I28, I38, H11

Keywords: Political satisfaction; Well-being; Economic policy

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*The general level of happiness is without any doubt seriously affected by major political events. Typically, such an event could be the assassination of a dictator, the overthrow of a constitutional government, or also the deep uncertainty created by not having any firmly established government.*

*Bruno S. Frey & Alois Stutzer (2002)*

## **1 Introduction**

Individual well-being is considered to be one of the most important topics in current behavioral economic, psychological and social science literature. Scientists have observed and tried to measure levels of well-being for the last three decades. Satisfaction levels are often measured by direct subjective questions as 'How satisfied are you with the 'following...'. These Self-Reported measures are widely used and form a broad range of assessment instruments. Through self-reported measures the respondent has the opportunity to express, in some integrated and standardized format, information that only she or he has access to (Larsen & Fredrickson, (1999)). Veenhoven (2002) states that objective indicators alone do little to inform policy makers about public preferences. Especially in policy there is a mix of subjective matters like trust or perceived safety and objective indicators. Joint use of objective and subjective measures is helpful to get a more complete picture of human behavior. For a more elaborate review of the pro- and cons of these measurements see also Kahneman, Diener & Schwarz (1999).

Van Praag, Frijters & Ferrer-i-Carbonell (2003b) and Ferrer-i-Carbonell & Van Praag (2002) developed an indirect or two-layer model where they assume that general satisfaction with life is a function of satisfaction levels regarding certain 'domains' of life, like health satisfaction, financial situa-

tion and environmental satisfaction. These 'domains' can be explained by individual characteristic variables such as age and income. The advantage of such a model is the possibility of measuring the influence of characteristic variables through different domains. Age for example can influence general satisfaction through health but also through the individual's financial situation. Age and health are likely to be negatively correlated. However, for age and financial situation the opposite is true until a certain age. Hence, estimating only the direct effect of age on general satisfaction with life may result in an information loss.

Although many authors emphasize the importance of well being with life as a whole, hardly any attention is given to political well being (which we will refer to as government satisfaction throughout the remainders of this paper). It is possible to derive a model that describes optimal behavior of political parties during election time. Since there is no information available on costs or gains when adjusting a certain public policy it is not possible to empirically test these models. The main purpose of this paper is to give insights in the structure of government satisfaction conditioned purely on the subjective preferences of the citizens.

A similar model as Van Praag et al (2003*a*, 2003*b*) is used, in which it is possible to empirically measure the direct and indirect effects of satisfaction with public policies as purely subjective preferences of the citizens. It is assumed that the structure of government satisfaction can be seen as an aggregate of satisfaction levels with certain public public policies (which we will refer to as public policy satisfaction). Such public policies can be health policy, unemployment policy, immigration policy etc. Furthermore, it

is assumed that the satisfaction levels regarding certain public policies can be explained by individual characteristics. In summary this paper examines the following two aspects:

- Which public policies have a significant influence on government satisfaction?
- Which personal characteristics are the main predictors for the satisfaction levels of the significant public policies?

The outline of this paper is as follows. Section 2 presents the two-layer government satisfaction model. Section 3 describes the data used and presents descriptive statistics of general political satisfaction. Section 4 shows which public policies have a significant influence on government satisfaction and compares the average satisfaction levels of the significant public policies. Section 5 explains which personal characteristics are the main predictors for the satisfaction levels of the significant public policies. Finally section 6 concludes.

## 2 The model

In the model it is assumed that the Government Satisfaction level ( $GS$ ) is a function of the satisfaction levels with respect to specific political policies ( $PP$ ). If individuals are very satisfied with all the specific political policies then it is also likely that these individuals are satisfied with the government itself. How satisfied individuals are with certain public policies is assumed to depend on certain individual characteristics ( $X$ ). The underlying thought is

that individual characteristics determines the social position in society which can give information on how certain policies are weighted by certain groups of individuals. More formally the model can be described as:

$$GS_n = GS(PP_{1n}, \dots, PP_{kn}) \quad (1)$$

$$PP_{jn} = PP(X_1, \dots, X_n), \text{ for } j = 1, \dots, k \quad (2)$$

The Government Satisfaction variable and the Political Policy variables are ordinal variables measured on a 1 to 5 scale. Economic literature traditionally treats models, which have an ordinal variable as dependent variable, by means of the Ordered-Probit Model (see McKelvey and Zavoina, (1975), Maddala (1983) and Greene (2000)). Following Ferrer-i-Carbonell & Van Praag (2002) a cardinalization procedure is proposed where we assume that:

$$GS = N(\beta'X + \varepsilon) \quad (3)$$

Although the satisfaction variable is a discrete variable, the responses that respondents give do have a cardinal interpretation. Therefore, the discrete responses 1 up to 5 can be translated into adjacent intervals, which constitute a partition of the unit interval. If a respondent answered 3 on the discrete scale this is a rounded-off answer within an interval. This rounding-off procedure will be efficient in the sense that for each interval the loss of accuracy by rounding-off should be the same. This is the case if the intervals are  $[1, 1\frac{1}{2}]$ ,  $(1\frac{1}{2}, 2\frac{1}{2}]$ , ...,  $(3\frac{1}{2}, 4\frac{1}{2}]$  and  $(4\frac{1}{2}, 5]$ . For all intervals it holds that the maximum rounding-off error is  $\frac{1}{2}$ . It should be noticed that the extreme intervals are asymmetric as 1 and 5 are the worst case and best case scenario.

Rescaling on the unit interval yields  $[0, \frac{1}{8}]$ ,  $(\frac{1}{8}, \frac{3}{8}]$ , ...,  $(\frac{5}{8}, \frac{7}{8}]$ ,  $(\frac{7}{8}, 1]$ , (see also Van Praag (1991)). It follows that:

$$P(\frac{1}{8} < GS < \frac{3}{8}) = P(\frac{1}{8} < N(\beta'X + \varepsilon) < \frac{3}{8}) = P(\alpha_{\frac{1}{8}} < \beta'X + \varepsilon < \alpha_{\frac{3}{8}})$$

where the  $\alpha$ 's stand for the quantiles in the standard-normal distribution. If the latent model is not known it is possible to calculate the conditional expectation of  $GS$ , given the response category (see Maddala, (1983)):

$$\widetilde{GS} = \begin{cases} E(\widetilde{GS}|0 < GS \leq \frac{1}{8}) = \frac{\phi(-N^{-1}(\frac{1}{8}))}{\frac{1}{8}} \\ E(\widetilde{GS}|\frac{1}{8} < GS \leq \frac{3}{8}) = \frac{\phi(N^{-1}(\frac{1}{8})) - \phi(N^{-1}(\frac{3}{8}))}{\frac{1}{4}} \\ E(\widetilde{GS}|\frac{5}{8} < GS \leq \frac{7}{8}) = \frac{\phi(N^{-1}(\frac{5}{8})) - \phi(N^{-1}(\frac{7}{8}))}{\frac{1}{4}} \\ E(\widetilde{GS}|\frac{7}{8} < GS \leq 1) = \frac{\phi(N^{-1}(\frac{7}{8}))}{1 - \frac{1}{8}} \end{cases} \quad (4)$$

Where  $\phi$  is the standard-normal density function and  $N$  is the standard normal cumulative distribution function. Rewriting the system in equation 1 and 2 gives:

$$\widetilde{GS}_n = \beta_0 + \beta_1 \cdot \widetilde{PP}_{1n} + \dots + \beta_k \cdot \widetilde{PP}_{kn} + \varepsilon_n \quad (5)$$

$$\widetilde{PP}_{jn} = \alpha_0 + \alpha'_j X_n + \mu_{nj}, \text{ for } j = 1, \dots, k \quad (6)$$

Note that when estimating 6 it is possible that the error-terms will be correlated, which causes an endogeneity bias. Therefore variable  $z$  is introduced, which is the first principal component of the vector  $(\mu_{1n}, \dots, \mu_{kn})$ , with respect to the covariance matrix of that vector. This covariance matrix is estimated on the residuals  $\hat{\mu}_{jn}$ . Without recognizing the endogeneity,  $z$  becomes part of both equation 5 and 5.

The model is estimated as follows. First equation 5 is estimated using the conditional expectations of the Political Public Policy variables. Secondly the error terms ( $\mu_{jn}$ ) are predicted. Then using the  $j \times j$ -error covariance matrix it is possible to determine which part of  $z$  is common to all these residuals. Adding this  $z$  variable when estimating equation 5 gives error term that is less correlated with the error terms of equation 5. It is also possible to add a second or third principal component but this will not lead to a significant change. Addition of this  $z$  term can be seen as a Heckman correction term (1976).

### **3 Data and methodology**

In November 2001 a Dutch survey was held named the 'The State of the Country'. This survey was the initiative of the Research Institute SCHOLAR of the University of Amsterdam (Schooling, Labor Market and Economic Development) and the Netherlands Press Association, a coordinating institute for regional newspapers. In this questionnaire there is information on market work, household work, and child care for both partners in the household. Moreover, there is information about the financial situation, on health, education, training, career and social environment. Finally, there is a wide spectrum of attitude questions with respect to work and life events and measures of individual well-being.

For this paper a set of questions is asked about the appreciation of public policy. Such public policies are environmental policy, the policy with respect to social security issues, etc. This study is using information of 14,572 Dutch



adults of which 9,340 are men and 5,232 are women.

– Table one around here –

Table 1 shows that approximately 40 percent of the respondents are satisfied with the government. However, most of the opinions gather around being indifferent with the government. Hence it is useful to condition the levels of government satisfaction on certain individual characteristics.

The values in table 2 show the descriptive statistics of political satisfaction divided into three subgroups: age, education and the employment status of the respondent. Respondents who are older than 56 tend to be less satisfied with the government. Furthermore they are in poorer health and on average have a lower income (Frey and Stutzer, (2002)).

– Table two around here –

Higher educated individuals tend to be more satisfied with the government. This finding is confirmed by the international literature on social capital, trust and social participation (Groot and Maassen van den Brink, (2002), Gleaser et. al, (2000(a), 2000(b)), Helliwell and Putnam, (1999)). Higher education levels lead to higher income levels. Higher educated individuals are more often employed in the public sector, which makes them possibly more satisfied with the government compared to others. Also, the general labor market policies of the government are mainly focused on individuals who are in paid employment. An additional reason is the fact that lower educated individuals have to compete on the labor market with immigrants and asylum seekers, which might have a negative influence on their level of general political satisfaction.

The employed are on average more satisfied with the government than those who are unemployed. This might indicate that the government is more concentrated towards a policy that benefits employed individuals, for example by giving an earnings tax credit for employed people.

### 3.1 Change of individual political preferences

Table 3 shows the transition matrix of respondents that voted in 1998 and planned to vote in 2002. This transition matrix indicates the shift of individual political preferences between 1998 and 2002. The total of the first column indicates the number of votes that the Labor Party (PvdA) would attain in 2002. The first element of the first column indicates that 2025 voters would vote for the Labor Party as they did in 1998. The second element of the first column indicates that 34 voters, who voted for the Liberals (VVD) in 1998 intended to vote for the Labor Party. The total of the first row indicates the total number of votes that the Labor Party received in 1998. The first three political parties formed the cabinet coalition during the period 1994- 2002. The Christian Democratic Appeal (CDA) was the largest political party in the opposition during that period.

– Table three around here –

Table 3 predicts that the number of votes for the incumbent parties would decrease with 15 percent. After the election in May 2002 the number of votes for the government parties decreased by 39 percent, which is much more. 73 percent of LPF-voters<sup>1</sup> (Lijst Pim Fortuyn) came from the incumbent par-

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<sup>1</sup>At the moment of surveying Pim Fortuyn was the leader of the political party Leefbaar Nederland. A short time after the survey was held that party split and Pim Fortuyn

ties. This implies that, at the time the GPD survey was held, i.e. November 2001, individuals shifted their political preferences from the incumbent parties mainly towards the party LPF. LPF attained 16.7 percent of the actual votes in the GPD survey, which is only 0.4 percent lower than the actual percentage in the election in May 2002. The transition matrix of preferences also shows that the quality of the data is high. The election shift in 2002 towards the LPF was already predicted by the GPD data. The shift from PvdA and VVD towards CDA was underestimated.

## 4 Empirical analysis with respect to Government Satisfaction

Table 4 presents the standardized estimation results that are corrected for the endogeneity bias (see Section 2). A principal component analysis shows that the variance of certain political domains can be explained by using the first principal component ( $> 0.75$ )<sup>2</sup>. In the empirical analysis with respect to general political satisfaction, these political domains are replaced by their standardized average. In the empirical analysis with respect to general political satisfaction, these political domains are replaced by their standardized average. We define these domains as mean privatization, mean education, mean immigration and mean international issues<sup>3</sup>.

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founded his own party Lijst Pim Fortuyn. Fortuyn was killed on 6 May, 2002 but his party succeeded in the election at 15 May and gained 26 seats in the Dutch lower house, consisting of 150 seats in total.

<sup>2</sup>The principal component analysis is available on request

<sup>3</sup>Appendix A will give more information about which public policies are used when generating the mean-variables

– Table four around here –

The estimation results suggest that the specified public policies are all significant except the respondents attitude with respect to policies regarding social security, the amount of social benefits and immigration policy. The standardized beta coefficients indicate that the top three public policies are international issues, participation in important issues and national benefits. Note, that the variation between the beta coefficients is quite small and that several several public policies have an substantial relative impact. Unfortunately, immigration policy turns out to be insignificant, while this turned out to be an important issue during the elections.

Although, the estimation results reveal the relative importance of the public policies, it gives no information about the average satisfaction levels. If the marginal effects of public policies are quite similar then adjusting a policy with a relatively low average satisfaction level might be beneficial, simply because there is more to adjust. Table 5 shows the summary statistics regarding the satisfaction levels of the defined public policies<sup>4</sup>.

– Table five around here –

Performing a t-test indicates that approximately all means are significantly different from each other<sup>5</sup>. The average observed opinions are between being 'unsatisfied' and being 'indifferent' with a certain public policy. Individuals are relatively the most dissatisfied with the public policy regarding

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<sup>4</sup>All defines public policies are on a scale from 1 up to 5. Where 1 = very unsatisfied, 2 = unsatisfied, 3 = indifferent, 4 = satisfied and 5 = very satisfied.

<sup>5</sup>This was not the case for the satisfaction levels regarding participation in important issues and the amount of social benefits. Furthermore, it was not the case for shop closing time and international issues.

privatization of the education and health system and immigration policy. It is also remarkable that respondents are on average not satisfied with one single public policy. Since the relatively low average of the public policy regarding privatization of the education and health system is accompanied with a relatively high and significant standardized beta coefficient it seems that changing this policy will increase the governmental satisfaction the most.

## **5 Relationship Public Policy Satisfaction and individual characteristics**

This section examines which individual characteristics have a significant effect on general political satisfaction, using the political domains. It is possible to examine who is (dis)satisfied the most with certain political domains according to the respondent's personal characteristics. The estimation results are printed in table 6 and 7. Since there are 13 specified public policies domains, table 6 and 7 will refer to them as pp1 up to pp13. A description of these domains is given in Appendix B.

The political domain variables are re-scaled conform the method described in section 2. Ordinary Least Squares regressions are performed in which the re-scaled conditional expected values of the 13 political domain satisfactions are explained by the following personal characteristics: marital status, gender, number of children, age, highest education level attained, net monthly wage, living in the city, living on the country side, employment status and a variable that indicates if the respondent was a left or a right wing voter in the former election.

### *Privatization policy*

As mentioned earlier, the variable privatization policy is the mean of the individual satisfaction level of two public policies. The first public policy is the privatization of the educational system. The second one is the privatization of health care. The estimation results are printed below  $PP1$ <sup>6</sup>.

Age is significant and has a parabolic-log form with a minimum at 51 years old. This indicates that individuals become less satisfied as they get older until they are 51 years old. After this age they will be marginally more satisfied as they get older.

Privatization of the health care system often means a higher private contribution to medical costs for individuals who need more medical services. Individuals over fifty years old are on average in poorer health than younger ones and therefore it is expected that these individuals will be less satisfied with the governmental policy on health care. One might argue that the marginal effect that is measured is mainly driven by the opinions of individuals regarding the privatization of the educational system. However, when the estimation is done with individual satisfaction levels of respondents regarding health care policy as dependent variable, the same result is obtained.

Regarding privatization of the educational system the significance of age seems to make more sense. Individuals older than fifty are less likely to be involved with the educational system. This might result in increasing marginal satisfaction levels for individuals who are older than 50.

The fact that right-wing voters are relatively more satisfied with the pri-

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<sup>6</sup>In the remainders of the paper the reader can use the earlier mentioned description of the public policies and match the  $PPi$  with the policy name.

vation policy is conform their opinion that a letting-the-market-work-solution will be more efficient. That left-wing voters are relatively more satisfied compared to centered voters might be explained by the fact that the largest left-wing political party, the labor party, was in the cabinet.

### *Participation in important issues*

If individuals have the opportunity to participate in important issues then these individuals have a better idea of how certain decisions are made compared to those that do not participate. Higher educated individuals and individuals who earn a higher income are more satisfied with the possibility of participation in important issues. This might be, because they have easier access to different information sources, which puts them in a position to participate more easily.

Right-wing voters tend to be less satisfied with the participation opportunities which is conform their attitude during the elections. Furthermore males and married individuals tend to be more satisfied with the opportunity to participate in important issues.

### *Employment policy*

It is straightforward that non-working individuals are on average less satisfied with the unemployment policy compare to individuals who are employed.

Married individuals tend to be more satisfied compared to those individuals who are not married. Individual who are married, on average, have

a larger household income compared to those who are not married. Van Praag, Frijters and Ferrer-i-Carbonell ((2003*b*)) mention that a larger household income gives each working member of the household more margin to be selective on his or her type of employment. In case one of the household members becomes unemployed this individual can search for a satisfactory job more easily.

Age is significant and is again parabolic-log shaped with a minimum at 40 years old.

### *Economic flexibility*

Shop closing time and the twenty-four-hour economy can be seen as indicators of individuals satisfaction towards economic flexibility.

If an individual supports a 24-hour-economy then he or she is likely to support liberalization of shop opening times. Since the imposed policy of the incumbent government aimed at increasing the economic flexibility one would expect that the estimation results should be quite similar. The estimation results reveal that this is not the case.

Furthermore, gender roles between partners in households have changed. Female partners are no longer automatically inclined to do housework and take care of the children. Therefore in order for individuals to choose an optimal time allocation scheme is more difficult, especially for married individuals. Therefore, if economic flexibility is lacking it is likely that this has the most impact on married couples and females.

The estimation results suggest that couples are relatively less satisfied with policy imposed in order to realize a 24-hour economy. Furthermore,



where males are relatively more satisfied with shop opening times, females are relatively more satisfied with policies concerning the 24-hour-economy.

The only similarity between the two policies is the significance of left-wing voters, who appear to be relatively less satisfied with both policies compared to other voters. right-wing voters appear to be relatively more satisfied with the the policy aiming to realize a 24-hour-economy.

### *Educational system*

Being married has a positive effect on the satisfaction levels with respect to primary education and other levels of education. This can be explained from two points of views. First, the probability of having children is larger for married or cohabiting individuals compared to single-person households. Consequently these individuals are more actively involved in the education system and are better judges of the quality of educational system.

Apparently respondents who live on the countryside are relatively less satisfied with the educational system. This might be due to a lack of supply of education in these regions. This can result in parents and children travelling long distances to their school.

### *Health care and social security policies*

This section will shortly discuss health care and social security policies. The satisfaction levels that can be regarded as indicators are the satisfaction levels with respect to pension funds, social security, the amount of social benefits and national benefits (in table 7 indicated as *PP8* up to *PP11*). A

significant result is consistent and robust if a certain personal characteristic is significant and has the same sign over most public policies.

Being married is positively significant with respect to all public policies. couples on average, have a higher household income and are less dependent on the level of social benefits. The same argument holds for higher educated respondents who are relatively more satisfied with the health care and social security policies. It is likely that the variable education and married capture the income effect.

Age is significant and has a parabolic-log form with a minimum at 42. This indicates that individuals become less satisfied as they get older until they are 42. After this age they will be marginally more satisfied as they get older. An explanation might be that individuals above 42 are at that age certain about the social securities that they will receive (although they are not satisfied with these securities). However, individuals below 42 pay more and more taxes in order to assure others with social benefits while their own social benefit becomes more uncertain over time.

#### *Immigration and naturalization policy*

Higher educated individuals tend to be more satisfied with immigration policy. Since higher educated individuals on average earn a higher income, they can avoid living in 'black or multi-cultural' areas. Consequently they are less confronted with social integration problems. They often 'employ' immigrants or asylum seekers as housekeepers, babysitters, etc.

Another reason is that lower educated native Dutch have to compete on the labor market with lower educated immigrants. This causes them to see

immigrants as competitors which leads to lower satisfaction levels with the immigration policy.

The integration problem is confirmed by research of the Dutch Social Cultural Planning Bureau (de Hart, Knol, Maas-de Waal and Roes (2002)). Ethnical minorities have different positions on the labor market than native inhabitants. There is also a social distance towards the Dutch society. Ethnical minorities participate less on the labor market, are in general less educated, are less able to communicate in Dutch and are often living in a neighbourhood where the percentage of ethnical minorities is high.

Right-wing voters are less satisfied with the immigration policy. During the elections in 2002 it turned out that individuals were enormously dissatisfied with the imposed immigration policy. This is also indicated by table 5 where the summary statistics show that immigration and naturalization policy has the lowest average satisfaction level combined with a relatively low standard deviation.

### *International issues*

Higher educated individuals (with higher wages) are more satisfied with policies on international issues. They more often work for large (international) firms or for the government. Therefore, these individuals are more involved in international issues. This is confirmed by the literature on social capital, trust and social participation (Groot and Maassen van den Brink, (2002)).

Furthermore, males, married individuals and left wing voters are more satisfied with policies on international issues.

## 6 Conclusion

Following the recent developments in happiness research we applied in this paper the two-layer model, introduced by Van Praag et al. ((2003*b*)). We found that this model, which proved useful for the explanation of individual satisfaction with aspects of personal life, may be used in the same way on satisfaction with public policy issues. It is found that satisfaction with respect to public policy may be seen as an aggregate of domain satisfactions, where the domains refer to specific aspects of public policy. We notice that the explanation of domain satisfactions by objective characteristics like age and income is meager when evaluated in terms of R-squares. The explanation is rather good in terms of the significance of effects. Moeller and Saris ((2001)) argue that the more recent top-down models (subjective well-being affects domain satisfactions) are more appropriate. In our study we do not find much evidence for this thesis. On the contrary, using the two-layer model makes it possible to indicate which political domain policy influences general satisfaction with the government but also which individuals are dissatisfied the most, according to their individual characteristics. The estimation results suggest that the specified public policies are all significant except the respondent's attitude with respect to policies regarding social security, the amount of social benefits and immigration policy. Within these political domains the main characteristics that are significant are age, highest education level/ wage and marital status, gender and being defined as a right-wing or left-wing voter.

Wage and education are mainly positively significant. This finding does not necessarily mean that income will directly produce higher political sat-

isfaction levels. It is also possible that education and income indirectly influence satisfaction levels, because it provides individuals with adaptation possibilities in a changing environment (Frey & Stutzer, (2002)). Frey and Stutzer ((2002)) find that older individuals are more satisfied with life compared to younger ones. This is also found with respect to the political satisfaction domains. Within the political context of 2001 right wing voters are less satisfied with policies towards national benefits and immigration. Left wing voters are most satisfied with social security policies.

## Appendix A

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<b>Mean of:</b>	<b>consists of public policy</b>
Education	<ol style="list-style-type: none"><li>1. Primary education</li><li>2. General vocational education</li><li>3. Lower/intermediate vocational education</li><li>4. Higher vocational education</li></ol>
International Issues	<ol style="list-style-type: none"><li>1. The Euro</li><li>2. Expansion of European Union</li><li>3. Policy of European Commission</li><li>4. Dispatching Dutch soldiers in U.N. peace missions</li><li>5. Dutch role in the U.N.</li></ol>
Immigration & Naturalization	<ol style="list-style-type: none"><li>1. Naturalization immigrants and asylum seekers</li><li>2. Effort to integrate immigrant/ asylum seeker in labor market</li><li>3. Immigration policy for asylum seekers</li><li>4. Immigration policy for immigrants</li></ol>
Privatization	<ol style="list-style-type: none"><li>1. Privatization of the educational system</li><li>2. Privatization of health care</li></ol>

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## Appendix B

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<b>PP number:</b>	<b>full name</b>
PP1	Privatization (mean)
PP2	Participation in important issues
PP3	Environmental policy
PP4	Employment policy
PP5	Shop closing time
PP6	Twenty-four-hour economy
PP7	Education (mean)
PP8	Pension fund
PP9	Social security
PP10	The amount of social benefits
PP11	National benefits
PP12	Immigration and naturalization (mean)
PP13	International issues (mean)

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Table 1: Satisfaction with the Government

	N	Relative percentage
<i>Very Unsatisfied</i>	813	5.67
<i>Unsatisfied</i>	2449	17.09
<i>Indifferent</i>	5291	36.93
<i>Satisfied</i>	5297	36.97
<i>Very Satisfied</i>	478	3.34
<i>Total</i>	14328	100

Table 2: Satisfaction with the Government conditioned  
on individual characteristics

	Age			Education			Working	
	16-36	36-56	>56	lower	middle	higher	no	yes
<i>Very Unsatisfied</i>	3.12	4.70	7.46	7.35	5.70	4.59	9.68	4.44
	52	313	448	269	238	293	15	382
<i>Unsatisfied</i>	14.59	15.06	20.04	19.13	18.11	15.17	32.26	15.30
	243	1002	1204	700	756	968	50	1316
<i>Indifferent</i>	36.13	36.17	37.99	38.62	37.53	35.60	28.39	35.96
	602	2407	2282	1413	1567	2271	44	3094
<i>Satisfied</i>	42.98	40.41	31.50	31.40	35.45	41.29	25.81	40.66
	716	2689	1892	1149	1480	2634	40	3498
<i>Very Satisfied</i>	3.18	3.67	3.01	3.50	3.21	3.34	3.87	3.64
	53	244	181	128	134	213	6	313
<i>Average</i>	3.29	3.23	3.03	3.05	3.12	3.24	2.82	3.24
	1666	6655	6007	3659	4175	6379	155	8603

Table 3: Transition matrix of the Political Preferences in 1998 and 2002

		Respondent will vote on May 2002 on							Total	Total(%)
		<i>PvdA</i>	<i>VVD</i>	<i>D66</i>	<i>CDA</i>	<i>LPF</i>				
<b>Respondent voted in 1998 on</b>										
<i>Labor Party (PvdA)</i>		2025	111	51	90	224		2501	26.1	
<i>Right-of-center Liberals (VVD)</i>		34	2420	19	111	807		3391	35.4	
<i>Democrats66 (D66)</i>		136	123	621	18	129		1027	10.7	
<i>Christian Democratic Appeal (CDA)</i>		34	113	18	1836	163		2164	22.6	
<i>Right-wing Lijst Pim Fortuin (LPF)</i>		-	-	-	-	-		-	-	
<i>Other Political Party</i>		82	47	35	59	275		498	5.2	
<i>Total</i>		2311	2814	744	2114	1598		9581		
<i>Total(%)</i>		24.1	29.4	7.8	22.1	16.7		100		

Table 4: Estimation results with respect to Governmental Satisfaction

<b>Satisfaction with respect to:</b>					
Mean privatization		0.08	***	The amount of social benefits	0.02
		<i>4.04</i>			<i>1.08</i>
Participation in important issues		0.10	***	National benefits	0.09
		<i>5.43</i>			<i>4.17</i>
Environmental policy		0.08	***	Mean education	0.04
		<i>4.68</i>			<i>2.42</i>
Employment policy		0.07	***	mean immigration	0.03
		<i>5.13</i>			<i>1.56</i>
Shop closing time		0.08	***	Mean international issues	0.11
		<i>5.44</i>			<i>7.66</i>
Twenty-four-hour economy		0.04	**	z	-0.09
		<i>2.34</i>			<i>-1.17</i>
Pension funds		0.05	***	constant	0.10
		<i>2.90</i>			<i>3.85</i>
Social security		0.02			
		<i>1.09</i>			
Number of observations		6782			
R-squared		0.1095			

*Note:* \* significant at 10 % level, \*\* significant at 5 % level, \*\*\* significant at 1% level.  
t-values are printed in italics.

Table 5: **Summary statistics of the defined public policies**

<b>Public policy:</b>	<b>N</b>	<b>Mean</b>	<b>S.e.</b>
Privatization (mean)	6782	2.259	0.861
Participation in important issues	6782	2.564	1.034
Environmental policy	6782	2.723	0.877
Employment policy	6782	3.172	0.767
Shop closing time	6782	3.013	0.962
Twenty-four-hour economy	6782	2.300	1.118
Pension funds	6782	2.915	0.904
Social security	6782	2.642	0.856
The amount of social benefits	6782	2.558	0.871
National benefits	6782	2.330	0.921
Education (mean)	6782	2.960	0.756
Immigration and naturalization (mean)	6782	2.140	0.755
International issues (mean)	6782	3.016	0.656

1 = very dissatisfied; 2 = dissatisfied; 3 = indifferent;  
4 = satisfied; 5= very satisfied

Table 6: Estimation results with respect to Public Policies -1-

	pp1	pp2	pp3	pp4	pp5	pp6
Gender	-0.01	-0.05**	-0.03*	-0.00	-0.03*	0.05**
married	-0.79	-2.34	-1.90	-0.30	-1.85	2.04
Log(# children+1)	0.03	0.05**	0.04**	0.03***	-0.02	-0.05*
Log(age)	1.30	2.11	2.37	2.84	-1.18	-1.82
Log(age)	0.01	0.03	-0.01	-0.00	0.02*	-0.05
Log(age)	0.54	1.63	-0.42	-0.15	1.83	-0.24
Log(age) <sup>2</sup>	-3.78***	-2.47***	-0.72	-1.92***	0.01	-2.69**
Log(education)	-4.71	-2.92	-1.12	-3.77	0.02	-2.53
Log(education) <sup>2</sup>	0.48***	0.32***	0.10	0.26***	-0.01	0.34**
Log(education)	4.47	2.80	1.15	3.79	-0.12	2.40
Log(education)	-0.20	-0.83***	-0.17	-0.11	0.04	-0.18
Log(education) <sup>2</sup>	-0.92	-3.88	-1.06	-0.86	0.24	-0.69
Log(monthly wage)	0.06	0.27***	0.06	0.04	0.00	0.12
Lives in city (dummy)	0.90	4.13	1.27	1.15	0.08	1.47
Lives on countryside (dummy)	0.01	0.02***	-0.00	-0.00	-0.00	0.02***
Not working (dummy)	1.45	3.22	-0.23	-0.56	-0.04	2.95
left wing voter (dummy)	-0.01	-0.01	-0.01	-0.01	-0.00	-0.02
right wing voter (dummy)	-0.50	-0.44	-0.98	-0.51	-0.19	-0.91
constant (dummy)	-0.04*	0.01	-0.03*	0.01	-0.00	-0.01
Number of observations	-1.67	0.58	-1.78	0.43	-0.05	-0.57
R-squared	0.03	0.07	-0.02	-0.05*	0.03	0.08
	0.67	1.54	-0.54	-1.71	0.76	1.48
	0.11***	0.02	0.03**	0.01	-0.03**	-0.07***
	5.66	0.88	2.26	0.98	-2.06	-2.90
	0.12***	-0.06***	-0.02	-0.01	-0.00	0.10***
	6.34	-2.88	-1.36	-0.92	-0.15	4.34
	7.07***	5.02***	1.28	3.58***	-0.05	4.63**
	4.73	3.18	1.08	3.78	-0.04	2.32
	6782	6782	6782	6782	6782	6782
	0.015	0.011	0.005	0.006	0.004	0.025

Note: \* significant at 10% level, \*\* significant at 5 % level, \*\*\* significant at 1 % level. t-values are printed in italics.



Table 7: (Table 6 continued) Estimation results with respect to Public Policies -2-

	pp7	pp8	pp9	pp10	pp11	pp12	pp13
Gender	0.01	-0.01	-0.01	-0.00	0.04**	-0.02	0.03***
Married	<i>1.38</i>	<i>-1.03</i>	<i>-0.58</i>	<i>-0.04</i>	<i>1.99</i>	<i>-1.34</i>	<i>2.77</i>
Log(# children+1)	<i>0.03**</i>	<i>0.05***</i>	<i>0.09***</i>	<i>0.08***</i>	<i>0.05**</i>	<i>0.00</i>	<i>0.03***</i>
	<i>2.47</i>	<i>3.16</i>	<i>5.00</i>	<i>4.47</i>	<i>2.63</i>	<i>0.19</i>	<i>2.80</i>
Log(age)	-0.01	-0.00	-0.02*	-0.01	0.00	0.00	0.02**
	<i>-1.19</i>	<i>-0.15</i>	<i>-1.71</i>	<i>-0.41</i>	<i>0.28</i>	<i>0.23</i>	<i>2.05</i>
Log(age) <sup>2</sup>	<i>-1.18**</i>	<i>-2.85***</i>	<i>-2.16***</i>	<i>-3.21***</i>	<i>-3.09***</i>	<i>-0.55</i>	<i>-2.28***</i>
	<i>-2.25</i>	<i>-4.89</i>	<i>-2.99</i>	<i>-4.23</i>	<i>-3.66</i>	<i>-0.68</i>	<i>-4.87</i>
Log(education)	0.15**	0.38***	0.29***	0.43***	0.38***	0.05	0.30***
	<i>2.16</i>	<i>4.84</i>	<i>3.00</i>	<i>4.19</i>	<i>3.41</i>	<i>0.50</i>	<i>4.80</i>
Log(education) <sup>2</sup>	0.03	-0.05	0.60***	0.37*	0.02	-0.34*	-0.16
	<i>0.21</i>	<i>-0.27</i>	<i>3.00</i>	<i>1.92</i>	<i>0.08</i>	<i>-1.77</i>	<i>-1.25</i>
Log(education) <sup>2</sup>	-0.02	0.04	-0.16**	-0.10*	0.02	0.14*	0.07*
	<i>-0.52</i>	<i>0.81</i>	<i>-2.72</i>	<i>-1.74</i>	<i>0.27</i>	<i>2.43</i>	<i>1.88</i>
Log(monthly wage)	0.00	-0.00	-0.00	0.00	-0.00	-0.01	0.00*
Lives in city (dummy)	<i>0.84</i>	<i>-0.42</i>	<i>-0.03</i>	<i>0.14</i>	<i>-0.64</i>	<i>-1.55</i>	<i>1.72</i>
	-0.02	-0.01	0.01	0.02	-0.01	0.01	0.01
Lives on countryside (dummy)	<i>-1.32</i>	<i>-0.55</i>	<i>0.54</i>	<i>1.00</i>	<i>-0.49</i>	<i>0.27</i>	<i>1.19</i>
	-0.03*	-0.01	0.00	0.02	0.02	0.02	-0.02
Not working (dummy)	<i>-1.92</i>	<i>-0.62</i>	<i>0.12</i>	<i>0.78</i>	<i>0.93</i>	<i>0.87</i>	<i>-1.50</i>
	0.01	-0.03	-0.03	-0.06	-0.08*	-0.04	-0.01
left wing voter (dummy)	<i>0.66</i>	<i>-0.91</i>	<i>-0.89</i>	<i>-1.52</i>	<i>-1.73</i>	<i>-0.97</i>	<i>-0.53</i>
	-0.00	0.03**	0.06***	0.09***	-0.01	-0.02	0.04***
Right wing voter (dummy)	<i>-0.03</i>	<i>2.25</i>	<i>4.00</i>	<i>5.50</i>	<i>-0.33</i>	<i>-0.87</i>	<i>4.26</i>
	-0.01	-0.01	-0.01	-0.03*	-0.06*	-0.33***	-0.01
constant (dummy)	<i>-0.90</i>	<i>-0.39</i>	<i>-0.94</i>	<i>-1.76</i>	<i>-3.03</i>	<i>-17.57</i>	<i>-0.75</i>
	<i>2.23**</i>	<i>5.20***</i>	<i>3.28**</i>	<i>5.46***</i>	<i>5.75***</i>	<i>1.15</i>	<i>4.17***</i>
Number of observations	<i>2.29</i>	<i>4.75</i>	<i>2.43</i>	<i>3.89</i>	<i>3.65</i>	<i>0.76</i>	<i>4.80</i>
R-squared	6782	6782	6782	6782	6782	6782	6782
	0.005	0.012	0.013	0.015	0.013	0.067	0.020

Note: \* significant at 10% level, \*\* significant at 5 % level, \*\*\* significant at 1 % level. t-values are printed in italics.