

Local Unemployment and Other Factors Influencing Individual Government Approval in Finland*

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Discussion Papers No. 608:2004

ISSN 1459-3696 ISBN 952-10-1538-1

October 8, 2004

Abstract

We document the influence of local unemployment, political orientation and socio-economic background on individual citizen's government support. From the point of view of the responsibility hypothesis, the influence of the local unemployment on the respondent's government approval likelihood is somewhat confusing. During the right government the high local unemployment does not decrease respondent's approval likelihood, but during the multi-party government it does. Obvious explanation comes from the Centre Party's dominant position in the rural, high unemployment regions. Otherwise, we get results supporting the class dealignment, the importance of political orientation on government support, the increased likelihood of non-support if facing the risk of being less-well-off, and the positive attitude towards the government of the youngs amidst all the turbulence in the society.

Keywords: government approval, local unemployment

JEL Classification: D72

*The author wishes to thank Professor Seppo Honkapohja, Professor Erkki Koskela and Professor Anne Mikkola for comments. Dr. Mika Haapanen and Lic.Soc.Sc Kristiina Huttunen are thanked for help in matters concerning econometrics.

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1 Introduction

The monthly publication of the government's and parties' popularity ratings receives more and more attention in the media. Speculation arises on the factors and events altering the ratings. Research on the factors changing the political actor's popularity has been part of economics and political science over three decades. A widely acknowledged fact is that the economy to a remarkable degree drives the government popularity. Unsurprisingly, unemployment is the most common economic variable to explain the government popularity, other influential variable being inflation and incomes. Also in the Finnish evidence so far, unemployment has been connected at the national level to the decline of the incumbent popularity as well as to the increase of the popularity of the left parties.

Generally, the media report the overall, or aggregate, approval ratings. Only lately, there has been a tendency towards a more detailed reporting. However, any survey bears in itself almost innumerable possibilities to aggregation since in order to fulfill the required representativeness, the pollster has to record various individual qualities regarding the respondent. These qualities allow the survey result to be presented either as an aggregate figure or as a group-wise result where the responses are aggregated according to the desired individual quality. Availability of the individual-level data for research purposes has increased over the years allowing new aspects of the political behavior to be explored.

Individual-level data caters for the possibility of appending the data with additional variables. For example, when the respondent's residential area can be traced, then it is possible to connect the respondent to any local economic indicators. This has been one of the latest trends in the popularity research. Behind the increased interest lies the diverging economic development within countries. In this matter Finland has not been an exception. In 1991-95, Finland experienced the deepest peace-time depression ever. It created differences in the economic conditions between individuals, socio-economic groups and provinces. Hence, we wish to find out whether these differences are visible in the group-wise evaluations of the government. Particularly, the diverging local unemployment rates lead us to assume diverging behavior among citizens from different provinces. Basically, we assume that living in a province with high unemploy-

ment lowers one's likelihood to approve of the government. As the first Finnish individual-level study, we wish to gain basic knowledge on whether different socio-economic and demographic qualities are linked to one's approval decision. According to several measures there seems to have happened diverging economic development not only between groups, but within groups, too. We explore whether there exists within these groups some subgroups which tend to approve differently.

In theory, the incumbents have been held accountable for the economic development in the incumbency period since the publication of *The Economic Theory of Democracy* by Downs (1957). The incumbent parties are punished (rewarded) for bad (good) economic outcomes by voting against (for) them. The Downsian responsibility theory assumes similar policy preferences for each party. The partisan approach (Hibbs, 1977) replaces this assumption with one that allows different economic policy preferences for the leftist and rightist parties. The left parties are assumed to be more concerned about the unemployment, the right parties about the inflation and growth. On the background lies the assumption of different preferences between the parties' core voters. Assumed direction of influence is derived either from the traditional class hypothesis or the connection goes via the voter's preferences on income redistribution, i.e. level of government's share in the economy. One's propensity to adverse economic shocks, like unemployment, leads one to favor redistributive politics. People likely to experience the adversaries are assumed to vote and approve similarly. In the circumstances of the left (right) incumbent and increasing unemployment (inflation), the voters and poll respondents have two response possibilities: 1) to support the leftist (rightist) parties, since they are believed to be the only able parties to tackle the unemployment (inflation) (Swank, 1993), 2) to punish the left (right) incumbent, since it has not been able to tackle the unemployment (inflation) considered to be its top priority in the economy (salient goal approach, Powell and Whitten, 1993).

Empirical testing of the incumbent's responsibility started in the beginning of the 1970's with the studies by Kramer (1971), Mueller (1970) and Goodhart and Bhansali (1970). The basic idea in the operationalization of the responsibility hypothesis is to explain the incumbent's popularity rating by various

economic indicators and political events. This relationship is called the popularity function. The majority of the empirical popularity function studies applies either the national aggregates or the individual indicators. In the latter, the economic explanatory variables are based on the poll respondent's own perceptions and reporting, whereas in the former, the objective economic indicators are employed. Naturally, the subjective evaluation of one's own and the nation's economy may be biased due to the favorite party's incumbency (see e.g. Zaller, 2001).

The choice of the explanatory variables into the popularity function has brought up interesting debates into the field. The following questions have received the most attention: What is the poll respondent's economic reference group when (s)he evaluates the incumbent, i.e. is the approval decision based on her/his own pocketbook (egotropic approval) or does (s)he take the success of the national economy into account (sociotropic approval)? Does (s)he judge the incumbent by its performance so far (retrospective evaluation) or by what (s)he expects of it (prospective evaluation)?¹ The egotropic and sociotropic aspects of approval were introduced by Kinder and Kiewiet (1979). To be able to detect the two basis of approval from each other, one needs survey data with questions on the respondent's own economy and her/his perceptions on the national economy. However, Kramer (1983) questioned the suitability of the survey data for distinguishing the changes in the economy in general and the changes caused by the government. In addition, he suggested an intermediate aggregation between the individual and the aggregate level. For along time there wasn't many to follow his suggestion. Nowadays, there is a slightly increasing amount of studies concentrating on the local economic conditions, regional political and social differences and their influence on the political outcomes. In several studies on the British elections, it is concluded either that the better the local economy is doing, the higher the government support (Pattie and Johnston, 1995b), or more exactly, the higher the regional unemployment, the lower the support for the government (Pattie and Johnston, 1995a, Johnston et al., 2000). There is also discussion whether controlling all the relevant individual qualities removes the inter-regional variation in party or government support (Johnston and Pattie,

¹For a quite recent review on the topics see Lewis-Beck and Stegmaier (2000).

1998). In Britain, it does not seem to be so.

Not only regional but also other groupwise unemployment rates have been linked to approval and vote choice. For example it is found that the group-specific unemployment rates do not perform better than the aggregate unemployment rate, when the popularity of the Swedish Social Democratic Party is studied (Jonung and Wadensjö, 1987). Another aspect to groupwise differences in approval and voting behavior is to test whether different groups react differently to changes in the economy. There is empirical support for the partisan divide in issues related to unemployment, real incomes and inflation in the US (Hibbs et al. 1982a), whereas in Britain the voters' sensitivity towards unemployment and real incomes in evaluating the government follows the occupational divide between blue-collars and white-collars (Hibbs et al. 1982b). On Irish data, it is concluded that voters in lower social classes are concerned about unemployment, whereas in higher social classes they are concerned about interest rates and changes in disposable incomes (Borooah and Borooah, 1990). The popularity of the Swedish Social Democratic Party is not affected by economic variables in the older age groups and in the lowest income group but unemployment has the biggest influence on party popularity in the middle-income group (Jonung and Wadesjö, 1987).

The previous Finnish studies concentrate on the aggregate level party and government popularities. A connection between the national unemployment and the aggregate approval rates of the Finnish government (Mattila, 1994, Nyberg 2000) and of the parties (Nyberg, 2000, Asikainen, 2002) is a common finding. In addition, both the responsibility and the partisan hypothesis are supported. The right incumbent parties are punished for increasing unemployment, whereas the left parties increase their support at the same time. Especially, the incumbents of 1991-95 (the Centre Party, the National Coalition) are severely punished for bad economic development when unemployment is used as an indicator. (Asikainen, 2002) Finland has been included in several Scandinavian multi-country studies, where the results are weak and inconsistent or that only the left parties whether incumbent or not are affected by the economy. (Mattila, 1996, Pacek and Radcliff, 1999)

The above mentioned results - the international evidence on the regional

and groupwise differences and the previous Finnish results - lead us to question whether the regional divide exists in Finland and whether groups differ from each other in evaluating the government. The data used in looking for the answers includes 15 surveys on the Finnish government popularity from 1992 to 2001. More specifically, our research questions are the following.

1. **Unemployment and approval.** We apply local unemployment, to test whether the local circumstances matter, when it comes to approving of the national government. Here we rely on the responsibility hypothesis; no matter which government coalition reigns, it is punished for the unemployment. In other words, the likelihood of approving of the government is lower in the provinces with a high unemployment rate. In addition, from 1995 to 2001, the surveys have included a question of one's own labour market status. Our interest is to see whether the behavior among the unemployed differs crucially from others.
2. **Groups and approval.** All the socio-economic groups do not benefit equally of the economic growth, just as not all the groups suffer similarly in the recession. In Finland, we have comprehensive evidence on the differences in the economic and social well-being between groups and regions in the 1990's. But there is not yet evidence on the differences in the government support between groups and regions. Our interest lies in exploring whether there is a group or groups that very strongly disapproved of the government and whether that is related to their experiences during the crisis. Overall, we expect that those in a less-well-off position would view the government more critically than others. To complete our hypotheses, we apply traditional class voting hypothesis and preferences for income redistribution. In addition, we test our hypotheses within groups divided by age, sex, education, income class, occupational class, residential province, labor market status and vote intention. Naturally, we do not expect all the groups to have significantly divergent behavior.

In the following, we first present different ways in which the regional divide can come up and then describe the economic differences between groups in the 1990's. Our data is described in the chapter 3. Chapter 4 begins with the

method and is followed by the results.

2 The Potential Role of the Economy

2.1 Regional Distinctiveness

In the following, we present features of the regional and groupwise economic development that gives us a cause to assume divergent government approval patterns both between and within regions and groups.

Generally, we agree with the well-known phrase "the changes in the economy are experienced locally rather than nationally". However, the relationship between the national and local economy in explaining the popularity ratings should not be seen as rival, but more as complementary to each other. The local economy may go to different direction as the national economy. The same applies of course to one's personal economy with respect to the national and local economies. Yet, they do not exclude each other in outlining the country's economic development. Overall, the regional economic divergence has gained attention in the economics research and, thus, the importance of connecting a person to her/his locality has been notified also in the popularity research (see e.g. Marsh, 2002). It is admitted that controlling on the decision-making context is essential as the contexts (be it regions or other kind of groups) differ from each other with respect to the dependent and independent variables. Marsh (2002) also reminds of the general, but in many cases misleading, assumption of the universal equivalence of phenomena, events and issues². In other words, we often hold comparable things that are it only on the surface.

Regions differ from each other due to the disparities in the production structure, which creates different kind of skill structures and skill-distributions to the regions. Differences in the production structure lead to differences in the economic development, not only in a crisis but in normal times, too. The share of industrial manufacturing and agriculture in the employment, unemployment rate and regional gross domestic product are structural factors that emphasize regional distinctiveness and are further reflected for example in the regional po-

²He refers to a situation of being a small farmers in the western Ireland and being it near the capital.

litical atmosphere. Furthermore, the possible restructuring of the production leads to concentration of different sectorial employment in different areas. This again causes changes in the local socio-economic composition, and selective migration from a region to another still strengthens this effect. (Curtice and Steed, 1982)

In the Finnish case, the usual statistical measures confirm the variation between regions. The length of the depression varied from region to region from 4 to 8-9 years (Kuntaliitto, 1999). As Table 1 shows, the highest unemployment rates in the crisis years were in Eastern and Northern Finland. Those rates also remained high as there was a regional mismatch in the job creation process: employment opportunities increased in the Western and Southern Finland, but unemployment increasingly concentrated on the Eastern and Northern Finland (Koskela and Uusitalo, 2002). Convergence in the regional employment rates began in 1997 (Kangasharju et al., 2002). Another general measure for differences is incomes. When the country is divided into four areas, it seems that from 1990 to 1998, the relative income differences between regions did not grow. Taxation and transfers had a role in smoothing the differences. Within the regions the picture is, though, different. Gini-coefficients calculated on the basis of disposable and gross incomes per capita for each area separately show that in the 1990's the income inequality within the regions started to increase. It began first in the capital area and then spread throughout the country. Nevertheless, this divergence did not occur in the factor incomes. (Kangasharju et al., 2002)

It is obvious that there are many objective economic indicators to outline the regional economic distinctiveness. We have chosen the local unemployment. There are several reasons that speak for the use of the local unemployment as the local economic indicator. First, there is a lot of variation in the local unemployment rates (see Table 1.). Nevertheless, the diverging unemployment development is not fully mediated to disposable income differences since the social transfers had high coverage percentage (Kangasharju et al., 2002). Second, the impact of unemployment is not restricted to the person unemployed but affects the whole family. Persons living in high unemployment regions have more likely either themselves or via a family member or a friend been touched by unemployment. Besides, the respondents living in low unemployment regions

are likely to have different perceptions of the aggregate economy than those living in high unemployment regions. Third, the local unemployment receives attention in the local media. Hence, it is a well-known economic indicator. Finnish studies show that, especially from 1991 to 1993, the media's interest in the economy increased. From 1988 to 1997, approximately 20% of all the news stories were about the economy. In other words, along the unemployment rose also the number of articles on the topic. Specifically, in the local newspapers the local economic aspect was emphasized in the crisis period. (Aslama et al., 2002) These findings give a reason to assume that citizens were aware of their region's economy as well as the whole country's economy.

Table 1. Average unemployment in different regions and in different periods calculated as weighted averages of municipal monthly rates.

Region	1992-95	1996-01
Uusimaa	14.8	10.9
Vars.-Suomi	16.8	13.1
Satakunta	19.9	17.4
Häme	19.6	16.3
Pirkanmaa	19.5	16.0
Kymi	18.8	17.1
Etelä-Savo	19.8	18.3
Pohj.-Savo	19.3	17.8
P-Karjala	20.9	21.2
K-Suomi	21.0	18.4
E-Pohjanmaa	17.1	13.9
Pohjanmaa	10.7	12.6
P-Pohjanmaa	20.1	16.8
Kainuu	23.0	22.5
Lappi	23.7	22.7

Besides the economic development, there are other factors that can promote the regional distinctiveness. A concept related to the non-economic regional influence is the so-called neighborhood effect (Miller, 1977), which includes the strengthening of the traditional party affiliations in the region. The voters whose class-based vote choice would be something else voted for the party, which

had the strongest position in that region. In addition, in the different local environments political events are understood and interpreted differently. The local media has a role in building the local atmosphere which affects attitudes and behavior (Johnston and Pattie, 1998). In Table 2, we list the government approval rates in the Finnish provinces. The first period covers the years of the right government, the second the years of a wider coalition government. The approval rates follow closely the results of the parliamentary elections. The Centre Party was the largest party in all the three parliamentary elections held in the 1990's in Pohjois-Savo, Vaasa (Pohjanmaa), Oulu (includes Kainuu), Lappi; in addition, in 1991 and 1999 in Etelä-Savo and Keski-Suomi. The Social Democratic Party was the biggest party in all three elections in Satakunta, Häme and Kymi. Helsinki and Uusimaa are the strongholds of the National Coalition Party. Concrete issues in which the regions diverge are for example preferences on industry specific subsidies and the attitudes towards the EU.

Table 2. Government approval rates by regions.

Region	Whole	1992-95	1995-01
National	40.1	19.1	51.9
Uusimaa	46.6	17.2	63.7
Vars.-Suomi	40.3	16.5	54.8
Satakunta	35.6	15.9	49.8
Häme	41	20.4	52.8
Pirkanmaa	40	16.1	53.3
Kymi	38.3	15.9	52.0
Etelä-Savo	37.7	18.9	48.5
Pohj.-Savo	39.9	19.7	49.9
P-Karjala	34.5	15.8	49.0
K-Suomi	39.9	32.2	43.4
E-Pohjanmaa	34.1	23.9	39.9
Pohjanmaa	45.6	31.5	51.0
P-Pohjanmaa	37.3	23.2	44.9
Kainuu	27.1	10.8	31.8
Lappi	33.6	20.6	40.7

2.2 Some Other Aspects of the Economic Development³

The recession of the 1990's does not fit into the frames of a usual economic downturn. Typical of the depression was the huge increase in the unemployment rate, from 3 % in 1990 to almost 20% in 1994. Annual average growth rate from 1991 to 1993 was -3.8%. Even if the depression left almost everyone worse off compared to the prior situation, or as Lehtinen (1998) puts it "everyone lost", not all the groups benefitted equally of the subsequent economic growth and the increase of the employment opportunities.

Unemployment

The nature of the unemployment changes in the observation period. In the beginning, it is cyclical unemployment due to the sudden and unforeseeable changes in the economy. Then it becomes structural unemployment as a more profound change in the society takes place. In the crisis, jobs were lost mostly in construction and manufacturing, in the recovery period the new jobs were created mainly in the service sector. The mismatch between the unemployed and the new jobs gave rise to the structural unemployment. (Koskela and Uusitalo, 2003) The relative position of the unemployed worsened as their average disposable incomes declined in the 1990's. In the latter half of the 1990's the unemployed were more often long-term unemployed who receive the means-tested minimum unemployment security benefit. Therefore since 1994 the unemployed have lived more often in poverty (less than 50% national average income) than in 1994. (Riihelä et al., 2002)

Groupwise investigation of the unemployment development tells the following. Women's unemployment never reached the level of men's unemployment (both peaked in 1994). But there was also a difference in the declining process: male unemployment declined faster than female unemployment and in 1997 male unemployment was lower than female. Unemployment rose in every educational group but in the crisis the gap widened between the highest and the lowest educational group. Those having polytechnic degrees experienced the fastest increase in employment opportunities after the crisis.

Decline of employment hurt most the youngest (18-25 years) age group.

³Based on Vartia and Kiander 2000, unless otherwise indicated.

When the unemployment is disaggregated by age, then the elderly (45-59 years) have overrepresentation. Elderly with low education have the weakest job market position but unemployment has remained high among the lowest educated young people, too. In the end of 1990's, the lowest educational group made up the largest group when unemployment is disaggregated by education.

Incomes

In the crisis, the highest educated experienced the smallest decline in income. In the first recovery years the wages of all educational groups grew similarly, only the lowest educational group had a little lower wage growth. Since 1996 the highest educated have had also the highest wage increases. Depression influenced most the wage incomes of the age group under 40 (in 2001). The average wage incomes in the group under 40 in the end of 1990's was lower than the same age group's in the beginning of 1990's. Only the highest educated under 40 have experienced average income increases. Pensioners' relative position in income distribution even improved (Lehtinen, 1998).

Income distribution

In the depression period from 1990 to 1993 increase in unemployment caused significant changes in the relative distribution of the factor incomes but these changes were not transmitted to the relative distribution of the disposable incomes. Contribution of the income transfers to the tranquility of the disposable incomes was larger than that of the progressive income taxation. (Lehtinen 1998)

Income inequality between individuals has increased in the 1990's. First, the reason was piling unemployment in the crisis years (1990-94), afterwards the capital incomes, as their share in earnings has increased. In addition, income redistribution has declined in the 1990's. Gini coefficients calculated separately for different socio-economic groups (farmers, entrepreneurs, white collars, blue collars, workers, unemployed, pensioners) show increased inequality within these groups. From 1994 to 1998 the biggest increases in inequality occurred in the households headed by pensioners, farmers, entrepreneurs and white collars. (Riihelä et al., 2002)

According to Ritakallio (2002) poverty is increasingly likely to be connected

to one's socio-economic position (labour market status, education, social position). In addition, social assistance and over-indebtedness is linked to low education and blue-collar workers. Further, from 1995 to 2000 the relative position of single-parent families worsened but feminization of the poverty did not occur in Finland.

Values

Divergence occurred also on the mental level. The decline of conformity of the Finnish values strengthened in the crisis, solidarity towards the less-well-off decreased among middle-aged, educated and Southerners. Furthermore, the rural-urban divide was born. (Aslama et al., 2002) On one hand, the well-off people were not solidaristic, on the other hand, the less-well-off did not themselves unite and bring up their cause and constitute a political force (Häkkinen and Peltola, 2002).

3 Data and Specification of the Popularity Function

3.1 Data

Our data is gathered by Gallup Finland for Kaleva-newspaper. The data consists of biannual random samples of the Finnish voting age (over 18 years) population. On average there are 950 respondents in each poll (ranging from 914 to 1428). There are on average 300 respondents per survey excluded from the data due to no answer to the government approval question, that leaves us with approximately 650 respondents in each survey. The exclusion may slightly affect the representativeness of the sample since those excluded may have different response patterns also otherwise. The average respondent is 46 years old and 48% of the respondents are women. Different respondents have been interviewed every time. Thus, the observations are independent, but not identically distributed. The first poll employed here is Spring 1992 and the last is Autumn 2001⁴, that is altogether 15 observations in time. These features make the data set a pooled cross-section.

⁴Unfortunately, not all the surveys of the period were available from Gallup Finland.

The questionnaire is designed by Gallup Finland, the survey questions differ from time to time as well as the answer classifications. In telephone interviews the respondents have been asked of their government, prime ministerial and presidential approval. Further, their vote intention and voting in the last election held (either parliamentary or local) is asked. Of the socio-economic and demographic variables the following are recorded: age, sex, education, income class, occupational class, residential region (municipal) and labor market status. The exact coding of the variables is reported in Appendix 1. Since the original survey data includes the residential municipal of each respondent, it provides an easy way to append the data set with local unemployment rates. We add the NUTS3-level unemployment rates. As geographical units, the NUTS3-regions are very close to the well-known provinces.

As the surveys cover several years and three electoral periods, it is meaningful to divide the data into two subperiods according to the government coalition (Table 3). The first period covers the years from 1992 to 1995, and the latter from 1996 to 2001. This division is practical also from the point of view of our hypotheses. From 1992 to 2001, Finland was governed by three multiparty coalitions. Party combination in the last two coalitions was essentially the same. The first coalition was a pure rightist government but after that the country was governed by a combination of parties from the left to the right. (See Table 4) The latter coalition is usually called the rainbow coalition.

Table 3. Periods and observations.

Period	Polls	Month/year	Average obs.	Total N
1992-95	5	4/92, 9/92, 4/93, 12/93, 5/94	690	3454
1996-01	10	4/96, 4/97, 11/97, 11/98, 5/99, 11/99, 4/00, 11/00, 3/01, 11/01	610	6100
Sum	15		637	9554

As Table 4 shows, there is a huge increase in the government average popularity from the first period to the latter. This difference can not be explained just by the increased number of parties in the coalition. The first period coincides quite exactly with the deepest phase of the depression and the first signs

of recovery. The government’s popularity level during the crisis signals a widely felt discontent with the government’s policies and actions.

Table 4. Government popularity (%) and incumbents in different periods.

	Mean	Std	Max	Min	Incumbent parties
1992-95	19.1	39.3	23.2	15.3	NC, CENT, SSPP, CD
1996-01	51.9	49.9	65.8	31.9	NC, SDP, LA, GL, SSPP

Abbreviations: NC (National Coalition), SSPP (Swedish Speaking People’s Party), SDP (Social Democratic Party), CENT (Finnish Centre Party), LA (Left Alliance), GL (Green League), CD (Christian Democratic Party).

In Table 5, the government popularities are listed by socio-economic groups (See Appendix 1 for the abbreviations and classifications). The whole period average popularities within groups depends on the size of each group in each period. The sizes may vary somewhat, due to the different number of surveys available in each period.

3.2 Specification of the Popularity Function

The nature and composition of the data determines the estimation method. In a panel data, the same individuals are observed over time, whereas in a cross-sectional data, there is only one observation on each individual. This difference is reflected in the modeling of the data (See Appendix 1 for details). In our data, the dependent variable is dichotomous; the respondent either approves the government (=1) or does it not (=0). The explanatory variables include both binary and continuous variables. There are several possibilities for estimating a binary response model. The cross-sectional nature of the data leads to a static model. All the static methods for pure cross-sectional data are applicable to our data, too.

Another issue in picking the estimation method is how to correctly take the time-specific effects into account. It is possible to separate the time-specific effects either by using fixed-effects model or to highlight the time-specific effects by dummies in a random effects model.

Table 5. Government popularity by groups and time periods.

		Whole	1992-95	1996-01
	Total	40.1	19.1	51.9
Gender	Male	40.6	18.5	52.7
	Female	39.6	19.8	51.2
Age	18-25	40.4	20.0	63.1
	25-34	34.9	14.9	51.4
	35-49	35.7	16.2	47.3
	50-64	44.0	19.5	53.4
	64+	47.7	32.4	53.6
Education	No-training	26.5	15.6	33.3
	Vocational	41.9	20.9	53.7
	Polytechnic	37.8	17.5	52.3
	Academic	39.8	17.7	48.7
Income	Below mid	43.4	20.1	53.4
	Mid	36.9	19.4	48.8
	Above mid	39.9	15.9	49.1
Socio	Farmer	35.1	46.8	29.9
	Entrepreneur	41.6	19.6	51.2
	White collar	43.4	19.6	56.3
	Blue collar	33.1	10.4	49.6
Labour market	Employed			51.6
	Unemployed			44.4
Voted for	SDP	46.8	8.1	80.3
	CENT	38.1	64	28.9
	NC	62.1	36.3	71.7
	LA	23.1	5.3	42.7

The fixed effects method assumes that there is a group-specific constant term, defining the group is up to the theory or the researcher. The dummy approach can be applied to any random effects logit or probit model. According to several textbook sources the logit and probit estimations would yield similar results (Hsiao, 2003, Wooldridge, 2002). Considering our data and the aim of the study, it is easy to make a decision between the methods.

Our data consists of repeated random samples of voting age population, and every data combination applied in our study includes a few thousand observations. While using a survey data, the basic idea is to make inferences with respect to the underlying population characteristics, not only with respect to the effects in the sample. This line of thought excludes the use of fixed-effects model which is generally considered to yield inferences conditional on the effects in the sample (Hsiao, 2003). Therefore, our starting point is the maximum likelihood random effects probit with the time-specific dummies. The estimated model is as follows,

$$(1) \quad G_{i,t} = \beta_0 + \lambda_t + \beta_1 W_{i,t} + \beta_2 I_{j,t} + \varepsilon_{i,t},$$

where $G_{i,t}$ denotes government approval by individual i at time t , λ_t includes the time specific dummies (assumed random and estimated along with the other explanatory variables), $W_{i,t}$ includes the individual-level characteristics (like education, sex, etc.) and $I_{j,t}$ is the group-level economic indicator, in this case either the local unemployment or the provincial dummy indicating respondent's home province. There are two practices to explore whether the poll respondents with different socio-economic characteristics approve of the government differently. Firstly, to use these characteristics as explanators. Secondly, to group the whole data according to the feature and estimate the popularity function in the subset of the data. We apply both approaches. The latter approach means running about some one hundred separate regressions. Not all the groupwise estimations are expected to yield meaningful results, since each socio-economic and demographic group consists of people with varied life-styles and values and are not likely to share common interests in policy issues. Thus, it might be difficult to find systematic approval patterns within groups.

4 Estimation Results

In the following, we report the results variable by variable by first citing the respective hypothesis. In interpreting and discussing the results we apply the evidence of the 1990's depression, the general knowledge of the Finnish political behavior and evidence from international studies in our field.

We begin by estimating the government popularity function for each sub-periods separately. Our strategy is to hold as many factors fixed as possible. In other words, to include as many background variables in the regression as available. In adding the variables to the equation, attention should be paid on the possible multicollinearity that weakens the estimated influence.

An important issue in the probit models is the interpretation of both discrete and continuous explanatory variables. Following the common practise, we report in the text the marginal effects with respective significance levels, while the actual parameter estimates and their standard errors are printed in Appendix 2. For a categorical variable, the marginal effect is the change from zero to one, holding all other variables fixed. For a continuous variable, it is the infinitesimal change evaluated at its mean level. Although the coefficient signs and significances are more relevant in judging the fit of the model, we also report the values of the likelihood function, pseudo- R^2 and the percentage correctly predicted. The statistical package used in the estimation is Stata 8.0. In the following, we first comment the periodwise results, then we make some remarks on the subgroup results. In interpreting and discussing the results we proceed variable by variable. First, we shortly review the hypothesis concerning the variable, and then proceed to the results. Tables 5 and 6 give the complete results of the popularity function estimations for the two government types. Table 5 provides the results with the local unemployment, table 6 with the home province dummies. The most interesting results of the within group estimations are commented and the details of them are printed in Appendix 2, the rest of the results are available from the author on request.

Overall, it seems that in the first period the local unemployment, political orientation, demographic variables, own economic situation and the region of residence are not very helpful in predicting the government approval. Whereas exactly the same variables yield quite high a percentage of correctly predicted

responses in the latter period. Reasons for this finding may lie in the very low government popularity in the first period (on average 19%, almost rare events data), extraordinary economic development and the ongoing fast and thorough transformation of the society, where the usual explanators do not have a place.

Unemployment

The responsibility hypothesis leads us to assume wider discontent with the government among the respondents in the regions of high unemployment. As the relationship between the respondent's likelihood of support and the local unemployment is nonlinear, it is meaningful to calculate the response probabilities for low and high unemployment rates separately and then subtract the low unemployment response probability from the high unemployment response probability. Doing so gives us some very interesting results. In the first period, the respondents living in Lappi (the highest local unemployment, 25.6%) are approximately 11 percentage points more likely to support the government than the respondents in Uusimaa (the lowest local unemployment, 9.9%). In the latter period, the respondents in Lappi (the local unemployment still 25.6%) are approximately 23 percentage points less likely to support the government than are the respondents in Uusimaa (the local unemployment 7.3%). In other words, in case of the rightist government the respondents' likelihood to support the government is positively affected by the high local unemployment: the higher the local unemployment, the higher the likelihood of supporting the government. This finding is in stark contrast with the responsibility hypothesis, the results in the international studies (Pattie and Johnston, 1995a, 1995b, Johnston et al., 2000) and the Finnish studies involving the aggregate-level variables, where it was found that especially in its government period the Centre Party and the National Coalition are punished for the unemployment (Asikainen, 2002). It seems that entering the regional level completely changes the picture. However, an apparent explanation for these opposite results lies to a great extent in the regional distinctiveness in the party support concentrating around the Centre Party. The Centre Party has a historically dominant position in the sparsely populated rural areas in Northern and Eastern Finland, where nowadays the unemployment rates are high. In those areas the Centre Party has long been a catch-all party (Arter, 1999) and it seems that the poor local economic devel-

opment won't change that.

On average the unemployment rate in the Centre Party's core areas does not essentially change from the first period to the latter. Nonetheless, the attitude towards the local unemployment changes as the government coalition changes. In the first period - interpretation according to the responsibility hypothesis - it is not the government's fault, but in the latter period the government is punished for the high local unemployment. Besides, in its opposition period the Centre Party has strongly forwarded the message of government's inaction in smoothing the regional disparities. Obviously, the message has hit home at the target audiences, namely, Northern and Eastern provinces.

Another unexpected feature is that being unemployed oneself does not have a significant influence on the approval likelihood. Let us bear in mind the fact the respondent's labour market status is recorded only in the surveys of the two last electoral periods. After the mid-1990's the nature of the unemployment began to transform into structural unemployment, which includes persons with dated skills and education. Here it is impossible to separate the long-term unemployment from seasonal and cyclical unemployment. It is very likely that the reason for unemployment as well as age, education etc. affects one's expectations of the future and thus makes this group quite heterogenous. To get a more educated opinion on the topic whether unemployed approve the government differently, we estimate the model within the group of unemployed. There are altogether 396 unemployed respondents in the surveys. The results show two dissimilarities compared to the results in Table 5: the unemployed entrepreneurs' increased likelihood to disapprove of the government. The other difference is that the unemployed National Coalition's voters are more likely to approve of the government than for example the Social Democratic Party's unemployed voters. The unemployed National Coalition voters do not blame the government for their unemployment, as they are even more likely to approve of the government than the other National Coalition's voters.

Table 6. Estimation results on the government popularity function for different periods with local unemployment.

		1992-95	1995-01
Polls	Au92/Sp97	-0.09**	0.06*
	Au93/Au97	-0.1*	0.02
	Sp93/Au98	-0.1**	0.04
	Sp94/Au99	-0.04	0.04
	Sp00		0.05
	Au00		-0.04
	Sp01		-0.01
	Au01		0.05
	Govt2		0.24**
Gender	Female	0.006	0.01
Age	18-24	-0.07	0.17**
	25-34	-0.12**	0.02
	35-49	-0.13**	-0.03
	50-64	-0.11**	0.02
Education	Notraining	-0.07	-0.15*
	Vocational	-0.07	-0.03
	Polytechnic	-0.06	-0.04
	Academic	-0.09*	-0.06*
Socio	Farmer	0.09	-0.15**
	Entrepreneur	-0.07	-0.003
	White-collar	-0.03	0.02
	Blue-collar	-0.12**	-0.02
	Pensioner	0.00	0.01
Income	Below-mid	0.004	-0.06*
	Mid	0.01	-0.06*
	Above-mid	-0.000	-0.07**

*(**) = statistically significant at 5% (1%) risk level.

Table 6 continues. Results for different periods with local unemployment.

		1992-95	1995-01
Voted for	SDP	-0.09**	0.37**
	NC	0.3**	0.25**
	CENT	0.5**	-0.15**
	LEFT	-0.14**	0.02
	GREEN	-0.11**	0.03
Local	LU	0.007	-0.01**
	N	3453	6100
	pseudo R ²	0.22	0.16
	log likelihood	-1312.3	-3541.4
	% corr. pred	12.4	53.6

() = statistically significant at 5% (1%) risk level.

Table 7. Estimation results on the government popularity function for different periods with regional dummies.

		1992-95	1995-01
Poll	Au92/Sp97	-0.06	0.08*
	Au93/Au97	-0.04	0.07*
	Sp93/Au98	-0.05	0.1**
	Sp94/Sp99	0.02	0.01
	Au99		0.06*
	Sp00		0.07*
	Sp01		0.01
	Au01		0.09**
	Govt2		0.29**
Residence	Vars.Suomi	-0.05	-0.06*
	Satakunta	-0.03	-0.08*
	Häme	0.07	-0.08**
	Pirkanmaa	-0.007	-0.08**
	Kymi	-0.001	-0.11**
	Etelä-Savo	0.07	-0.09*
	Pohj.-Savo	0.05	-0.07*
	P-Karjala	-0.03	-0.13**
	K-Suomi	0.19**	-0.14**
	E-Pohjanmaa	-0.07	-0.14**
	Pohjanmaa	0.15*	-0.09**
	P-Pohjanmaa	-0.01	-0.1**
	Kainuu	-0.1	-0.24**
	Lappi	0.06	-0.14**
Gender	Female	0.003	0.01
Age	18-24	-0.06	0.17**
	25-34	-0.12**	0.02
	35-49	-0.12**	-0.02
	50-64	-0.1**	0.02

*(**) = statistically significant at 5% (1%) risk level.

Table 7 continues. Results for different periods with regional dummies.

		1992-95	1995-01
Education	Notraining	-0.07	-0.18*
	Vocational	-0.07	-0.04
	Polytechnic	-0.06	-0.06*
	Academic	-0.09*	-0.06*
Socio	Farmer	0.11	-0.15**
	Entrepreneur	-0.06	0.001
	White-collar	-0.04	0.02
	Blue-collar	-0.12**	-0.02
	Pensioner	0.01	0.01
Income	Below-mid	0.002	-0.06**
	Mid	0.01	-0.06**
	Above-mid	-0.007	-0.07**
Voted for	SDP	-0.1**	0.36**
	NC	0.3**	0.25**
	CENT	0.5**	-0.15**
	LEFT	-0.15**	-0.02
	GREEN	-0.11**	0.03
N		3453	6100
pseudo R ²		0.23	0.16
log likelihood		-1296.9	-3530.1
% corr. pred		12.4	53.6

** = statistically significant at 5% (1%) risk level.

Region

We included the home province dummy for each respondent as we wished to capture the non-economic effects that living in a certain province may have. The results are displayed in Table 7. Since it is not possible to include all the regions in one regression at the same time, we dropped Uusimaa. It seems to be a natural comparison group because Uusimaa features as the forerunner in the economic development within the provinces. Multicollinearity makes it impossible to add local unemployment or any kinds of interactions with it to the same regression with the province dummies. Thus, it is difficult to exclude the possible influence of the economy.

In the first subperiod, we find expectably the dominant position of the Centre Party in certain regions. The respondents living Keski-Suomi and Pohjanmaa were 19% and 15% more likely to approve of the government than the respondents in the other regions. For the other regions the coefficients were not significant. In the latter period, the differences between regions are more pronounced. It is difficult to say whether it is caused by the change of the government coalition, or by the change of times generally. The highest likelihood of not approving of the government is in Kainuu, second comes Lappi, third Etelä-Pohjanmaa and fourth Keski-Suomi. The result is not surprising as the first two are Northern regions of low incomes, high unemployment and high vote share of the Centre Party. In addition, the latter two regions belong to the Centre Party's core areas and, thus, it is natural to see the low government approval there.

Political orientation

We assumed that the party the respondent voted for in the last elections reflects one's political orientation. Therefore, we expect that the incumbency of one's latest electoral choice increases one's likelihood to approve of the government. That is also the case. The coalition change is visible as those who voted for the Social Democratic Party become more likely to approve of the government in the latter period and, respectively, the voters of the Centre Party become less likely to approve of it. These results indicate that the Centre Party voters are more inclined than the other parties' voters to approve or disapprove of the government according to their favorite party's parliamentary position.

The voters of the Left Alliance are less likely to approve of the right government, but in the second period the party's incumbency leaves them indifferent towards the government.

The National Coalition's incumbency stretches over the entire research period, and its voters are from 25 to 30% more likely to approve of the both government types than others. Maybe due to its long incumbency, the voters of the National Coalition's main coalition partner are more likely to approve of the government. When the Centre Party is the partner, its voters are 50% more likely approve of the government. In the latter period, the voters of the Social Democratic Party are 36% more likely to approve of the government. The stronger adherence may be due to the prime minister's position held by the Centre Party and later by the Social Democratic Party. Often the government is personified in good and in bad to the prime minister.

In the first period, an interesting observation is that the blue collar Centre Party voters were 22 % less likely to approve of the government, this finding is naturally explained by the group's aversion for the National Coalition. In addition, the Centre Party voters with less than 49 years of age or with high incomes were from 22 to 28 % less likely to approve of the right government. Maybe these groups include the so-called swing voters who just happened to vote for the Centre Party in the latest election but do not belong to its core supporters.

In addition, here we document clear evidence that not all the incumbent party voters approve of the government. Thus, the summing up of the party popularities to get the government coalition popularity leads to biased numbers.

Socio-occupational group

Finland has a history of strongly class-based party support. Growing class dealignment on the voters' side and the parties' transformation from class-based parties to catch-all parties have obviously weakened the ties. In addition, new parties have emerged to catch the voters. Yet, it still is common knowledge that the Social Democratic Party basis its support on blue-collar workers, the Centre Party on farmers and rural residents, and the National Coalition on white-collar workers.

Our results indicate that the farmers and the blue-collar workers have class-

based approval behavior. The blue-collar workers are more likely than any other groups to disapprove of the right government, whereas the farmers are several times more likely to disapprove of the rainbow coalition which excludes the Centre Party. These results suggest that the class-based support comes actually up as 'non-support'. This inverse influence may reflect the dealignment process as these voter groups - the farmers and the blue-collars - know what they oppose (the SDP led government, the rightist government) but are no longer strongly for their traditional party.

Besides, among the farmers the discontent felt with the government in the latter period may be mixed with their disapproval of the European Union. In the period of 1995-99 issues related to EU received a lot of attention in the media (Aslama et al., 2002) and it is a topic heavily promoted by the government.

Gender

There is international evidence showing emerging of a gender gap in voting and party support. Hence, we expect to discover some gender differences also here. We find that gender does not make one more likely to approve or disapprove of the government and this holds for both government types. Nevertheless, differences arise when we estimate the same model for both genders separately (results in Appendix 2, tables 3-4). It is the education that makes the difference. One difference comes from the effect of having no training. In the latter period, it decreases 21% men's likelihood to approve of the government whereas it does not significantly change women's approval likelihood. Here we probably have the phenomena which the being unemployed oneself -variable did not catch. The men without training have a weak job market position, thus, facing higher risks of economic adversaries. In addition, this group of men faces social risks of becoming estranged from the society. Social assistance and overindebtedness is linked to low education in 1995-2000 (Ritakallio, 2002) Thus, this is a less-well-off group, or at the risk of becoming one, that might oppose the government's policies directed at welfare services and transfers.

At least as fascinating a finding concerns the highly educated women. In the first government period, we find that the academic women are 14% less likely to approve of the government, in the latter period, the percentage drops to 10%. In the latter period, the discontent has spread as the women having

polytechnic education are 8% more likely to disapprove of the government. All in all, the academic women are more unsatisfied with the outcomes delivered by any government type.

Obviously, critical thinking increases along with education and the target of the criticism can justifiably be the government as well as any other instance. Strikingly, the same increase in criticism towards the government does not happen to men. In the following, we try to reason an explanation. Firstly, international evidence shows that women increasingly tend to favour the left parties. This is assumed to be connected to the increasing number of divorces which lead to the increasing number of single-parent households, where the parent most likely is the mother. The left parties favour redistributive policies, part of which are targeted to children and low-income households. (Edlund and Pande, 2002, Edlund et al., 2003) Secondly, Finnish studies show that in the 1990's the redistributive efforts by the government have declined (Riihelä et al., 2001), in the recovery from the depression the government put heavier weight on cut-backs in the public expenditures than on the increases of taxes (Kautto, 2001), not only the level of the social benefits has lowered but also eligibility to the transfers has become more difficult in the 1990's (Lehtonen et al., 2002) and the single-parent households' relative position has worsened (Ritakallio, 2002). Connecting the first and the second point, we suggest that the academic (and polytechnic) women might oppose the government's policies that lead to decline in the welfare services. These women may see the transfers and services as insurances against being less-well-off themselves if they end up as single-parents. Our reasoning needs clarification on the part that why it is just the highly educated women who are more likely to disapprove of the government since also the less educated women must concretely face the problems of the single parenthood. The highly educated women are likely to be married to the highly educated and high earning men. The gender wage gap is the wider the higher is the educational level. Thus, the in case of a divorce the highly educated women lose more in relative terms than their less educated sisters who are likely to be married to men with lower incomes. The public transfers replace a lower percentage of the lost incomes in high income families and further declines in the transfers may increase the highly educated women's discontent with the policymaking.

Another explanation for the finding might come from somewhat different direction⁵. The discontent felt by the highly educated women might be directed at the societywide attitudes and often invisible structures that end up limiting their possibilities to make use of their skills and capacities at full. As young (18-25 years), they do not realize this but rather have an optimistic view on policymaking supporting the government. With age and the education the disillusionment is associated with increasing criticism towards the decisionmaking bodies.

Age

The oldest age group (over 65 years) had to be excluded due to multicollinearity, but the respondents in that group are well represented in the socio-occupational group 'pensioners'. Each age group consists of people with varied lifestyles and values. Actually, it would be surprising to find coherent opinions towards the government within age groups. But there are those, as we will learn. In the first period's results we notice that young people (18-25 years) have more positive views of the government compared to other age groups. In the latter period, the young are several times more likely to approve of the government than others are. More precisely, the results show that belonging to the youngest age group increases one's likelihood of approving of the government by 17 %. An interesting finding is also that in the latter period the women in the youngest age group are more likely to approve of the government than the men in the respective age group. This result might reflect the overall optimism of the young. This view is supported by the survey results reported by Aslama et al. (2002). They conclude that young people regarded the crisis as some sort of "survival training", ie. did not see as an end of era or not in very negative terms. Estimation within the age groups tells that socialization to one's socio-occupational group begins early since already in the youngest age group the blue-collar workers are 16 % less likely to approve of the rightist government than others.

⁵The following reasoning has arisen in discussions with Professor Mikkola.

Education

We expect educational divide to be seen in the opinions of those having no-training. As is reported above, the overall position of no-trained has weakened in the 1990's. Our results show that in the first period, the only educational group significantly more likely than others to disapprove of the government is the academic. In the latter period, the no-training group is 17 % more likely to disapprove of the government. In addition, having either academic or polytechnic education increases one's likelihood to disapprove but not as largely. The differences in the sizes of the influence between educational groups are large, and they may reflect worsening labour market position and income development of those having no training.

Income

In the first period there is 22 % and in the latter period 24.7 % of respondents who do not tell their incomes. In the first period, belonging to any of the income groups does not influence one's opinion on the government. In the latter period, the effects are significant but about the same size in each of the income groups.

5 Conclusion

In this study we analysed the influence of local unemployment, political orientation and socio-economic background on individual citizens' government approval in the 1990's. Diverging economic development between and within regions and groups lead us assume divergent behavior also with respect to the government. The period under study covers years of the rightist coalition from 1991 to 1995 and the years of almost-all-inclusive rainbow coalition from 1995 to 2001. Thus, the models are estimated for each of the different government types separately.

Several aspects of our findings complement the existing evidence on both the depression and the Finnish voting and approval behavior. We find that during the incumbency of the right government (1991-95), a high local unemployment did not increase one's likelihood of approving of the government. For the latter part of the 1990's, the era of the multi-party coalition, the result is just the opposite. In addition, we document the inter-regional approval differences without the direct connection to the level of the local unemployment. The government

approval in different provinces reflects the long-standing regional divide in the party support. These results are clearly affected by the dominant position of the Centre Party in the Northern and Eastern provinces.

The incumbency of the respondent's last voted for party expectedly increases the likelihood of government support. Class dealignment is obvious in our results, since only the farmers' and the blue-collar workers' approval pattern slightly resembles the class-based support. Remarkable though is that the class-based behavior occurs as 'non-support', ie. as disapproval of the right government (blue-collars) or of the SDP lead government (farmers). From 1996 to 2001, among the male respondent's the likelihood of approval is significantly lower for those having no-training, whereas, among the female respondents the lower approval likelihood in the whole period occurs in the group of academic women, and for the period from 1996 to 2001 also among the polytechnic women. These male and female groups are definitely not similar, although they have the higher likelihood of disapproval in common. We suggests that these groups either concretely face or are conscious of their risks of being less-well-off. For the male group the risks consist of weak job market position, unemployment, poverty and becoming estranged from the society. The female group is probably aware of the challenges related to single-parenthood and the relatively weakened position of single-parent families in the 1990's. Our suggestion is in line with the international evidence of women's increased likelihood of disapproving the social transfer cutbacks.

Appendix 1: Description of Data

Data Type

Panel data and cross sectional data differ in modeling from each other to some extent. A general model for both data types is

$$(1) \quad y_{i,t}^* = \beta^0 x_{i,t} + v_{i,t}$$

where $y_{i,t}^*$ is individual i 's response at time t , $x_{i,t}$ includes explanatory variables connected to the individual i at time t and $v_{i,t}$ is the error term. The crucial difference comes from the way the error term can be decomposed. In the panel data, it is possible to decompose the error term into three parts:

$$(2) \quad v_{i,t} = \lambda_t + \alpha_i + u_{i,t},$$

where α_i stands for the individual effects and λ_t represents the time-specific effects. In the repeated cross-sectional data the individual-specific effects can not be accounted for due to the lack of repeated observations on the same individual. Thus, the error term can be decomposed as

$$(3) \quad v_{i,t} = \lambda_t + u_{i,t},$$

including only the time-specific effects and the error term.

Survey Variables

These opinion polls by Gallup Finland are originally not designed for academic purposes. Although they are conducted biannually starting in 1985, I was not able get all the material collected so far. Thus, this study includes 15 surveys from Spring 1992 to Autumn 2001, excluding polls of Spring 1995 and Autumns 1994, 1995, 1996 and 1998. Not all the surveys include all the questions which limits the setting of the research questions. Nevertheless, this is a valuable source when we are interested in the factors affecting the government support on the individual-level. The recorded background variables offer much information on the respondent's living circumstances. The interviews were done

over the phone and each poll includes 900-1500 respondents. Below is the listing and definitions of the variables used in this study. Usually, Gallup Finland's original answer scaling has several options. For purpose of this study the scaling is in many cases simplified. Details on the variables drawn from the Gallup Finland surveys are as follows.

1. GENDER male=0, female=1.
2. AGE The respondents are asked their age in years. Then the answer is classified to a 7-point scale. This is changed into an increasing scale of 5 points: under 25, 25-34, 35-49, 50-64, over 65. Age is included also without scales.
3. EDUCATION Due to the changes in the education system over the years Gallup has used different coding conventions. Original coding has been slightly changed. The basic idea in re-coding is to 1 = no professional training (elementary school), 2 = vocational school apprenticeship training, 3 = matriculation exam or polytechnic degrees, 4 = academic degrees, 0= other.
5. INCOME Both in the polls and in the official statistics information on gross incomes is collected by households. Gallup asks the respondent his/her household's gross income class. The original scales that Gallup uses differ a lot from poll to poll. For that reason it is impossible to construct any other than the following division: less than middle income, middle income, more than middle income. First, the reported income classes are converted into 2001 prices. Second, the middle income for each year is checked in the yearly income statistics by Statistics Finland. The category including the middle income is entitled to middle income (2), all observations below it to below average (1) and the rest to above average (3) or no answer (0).
6. SOCIO-OCCUPATIONAL GROUP This variable is a result of combining several questions. The aim is to categorize the occupational status of the household in which the respondent is living. We apply the following Gallup's questions: 1. what is your occupation? 2. are you yourself the

primary breadwinner in your household? 3. what is the occupation of the primary breadwinner in your household? We apply the general procedure to classify the occupational status of the household according to its main breadwinner. The alternatives for occupational status are: farmer, entrepreneur, leading position or white collar, blue collar, pensioner, student, other (includes stay-at-home moms and dads).

7. LSTATUS (EMPLOYED/UNEMPLOYED) This variable tells the respondent's labor market status. Original codes employed, unemployed, for other reasons outside the labor force, no answer.
8. LCYCLE What is the phase of the life cycle you are living at the moment? live with your parents, live alone/single, with a spouse, with spouse and kids, single parent, other, no answer.
9. REGION Gallup asks in which municipal the respondent is living? Gallup codes municipals using the Finnish municipal coding practice. When those codes are known it is easy to construct different regional units. Here we have applied NUTS3 division, which is close to the Finnish provinces (Åland excluded): Uusimaa, Varsinais-Suomi, Satakunta, Häme, Pirkanmaa, Kaakkois-Suomi, Etelä-Savo, Pohjois-Savo, Pohjois-Karjala, Keski-Suomi, Etelä-Pohjanmaa, Pohjanmaa, Pohjois-Pohjanmaa, Kainuu, Lappi.
10. GOVERNMENT APPROVAL (GOVT) How content you are with the government lead by Prime Minister N.N.? Very, quite, both and, not quite, not at all, no answer. These answer options are combined to result a digital scale for positive and negative answers. Don't know and no answer -answers are deleted.
11. PRIME MINISTER'S APPROVAL RATE (PM) Do you approve the way N.N. is handling his job as the Prime Minister? Very much, quite much, both and, not quite, not at all, no answer. These answer options are combined to result a digital scale for positive and negative answers.
12. PRESIDENT'S APPROVAL RATE (PRES) Do you approve the way N.N. is handling his/her job as the President? Very much, quite much, both

and, not quite, not at all, no answer. These answer options are combined to result a digital scale for positive and negative answers.

13. VOTE INTENTION (PARTY) If parliamentary elections were held tomorrow, which party's or other group's candidate would you voter for? Socialdemocratic party (SDP), Centre Party (CENT), National Coalition Party (NC), Left Alliance (LA), Green League (GL), Swedish Speaking People's Party (SSPP), Christdemocratic Party (CD), Other, No answer or don't know.

Other Variables

In addition to the variable above, the following variable were added to the data set.

1. TIME To be able to identify separately each poll, the time variable is included. It is a dummy variable. Its abbreviation is a combination of the polling time (2 letters) and polling year (2 digits), for example a poll conducted in the Spring 1992 is coded as Sp92 where Sp= Spring and 92=1992. For Autumn 2000 the code is Au00.
2. GOVT2 is a dummy variable applied in the latter period's regressions to separate the second government period (starting in 1999) from the first.
3. LOCAL UNEMPLOYMENT (LU) Monthly municipal unemployment rates are collected by Ministry of Labour. Provincial unemployment rates are calculated as the weighted average of municipal rates. Applied weight is the number of labor force in municipal. There are two lags used for the variable, one month and two months.

Appendix 2

Table 1. Parameter coefficients behind the marginal effects in Table 5 in text.

		1992-95	[std]	1995-01	[std]
Poll	Au92/Sp96	-0.25**	[0.09]		
	Au93/Sp97	-0.28**	[0.12]	0.16*	[0.08]
	Sp93/Au97	-0.31**	[0.11]	0.06	[0.08]
	Sp94/Au98	-0.12	[0.12]	0.09	[0.08]
	Sp99			0.11	[0.08]
	Au99			-0.11	[0.08]
	Sp00			0.12	[0.08]
	Au00			-0.1	[0.08]
	Sp01			-0.03	[0.08]
	Au01			0.12	[0.08]
Gender	Female	0.02	[0.06]	0.03	[0.04]
Age	18-24	-0.19	[0.11]	0.43**	[0.1]
	25-34	-0.35**	[0.1]	0.04	[0.08]
	35-49	-0.37**	[0.09]	-0.07	[0.07]
	50-64	-0.3**	[0.09]	0.04	[0.06]
Education	Notraining	-0.21	[0.29]	-0.44*	[0.21]
	Vocational	-0.2	[0.11]	-0.08	[0.07]
	Polytechnic	-0.16	[0.1]	-0.12	[0.06]
	Academic	-0.27*	[0.11]	-0.16**	[0.06]
Socio	Farmer	0.24	[0.16]	-0.44**	[0.11]
	Entrepreneur	-0.19	[0.14]	-0.007	[0.09]
	White-collar	-0.09	[0.11]	0.05	[0.08]
	Blue-collar	-0.36**	[0.1]	-0.05	[0.07]
	Pensioner	0.002	[0.12]	0.02	[0.09]
Income	Below-mid	0.01	[0.11]	-0.17*	[0.06]
	Mid	0.03	[0.07]	-0.17**	[0.05]
	Above-mid	-0.002	[0.11]	-0.19**	[0.06]

*(**)= statistically significant at 5% (1%) risk level

Table 1. continues. Parameter coefficients behind the marginal effects in Table 5 in text.

		1992-95	[std]	1995-01	[std]
Voted for	SDP	-0.27**	[0.08]	0.97**	[0.05]
	NC	0.77**	[0.09]	0.64**	[0.05]
	CENT	1.43**	[0.08]	-0.43**	[0.05]
	LA	-0.43**	[0.15]	-0.05	[0.09]
	GREEN	-0.32**	[0.12]	0.09	[0.08]
	LU	0.019	[0.01]	-0.03**	[0.002]

NC (National Coalition), SDP (Social Democratic Party), CENT (Finnish Centre Party),

LA (Left Alliance), GREEN (Green League)

**= statistically significant at 5% (1%) risk level

Table 2. Parameter coefficients behind the marginal effects in Table 6 in text.

		1992-95	[std]	1995-01	[std]
Poll	Au92/Sp97	-0.17*	[0.09]	0.2*	[0.08]
	Au93/Au97	-0.1	[0.09]	0.17*	[0.08]
	Sp93/Au98	-0.16	[0.09]	0.25**	[0.08]
	Sp94/Sp99	-0.06	[0.09]	0.03	[0.08]
	Au99			0.16*	[0.08]
	Sp00			0.17*	[0.08]
	Sp01			0.04	[0.08]
	Au01			0.23**	[0.08]
	Govt2			0.75**	[0.08]
Residence	Vars.Suomi	-0.13	[0.11]	-0.15*	[0.07]
	Satakunta	-0.09	[0.13]	-0.22*	[0.09]
	Häme	0.17	[0.12]	-0.22**	[0.07]
	Pirkanmaa	-0.02	[0.12]	-0.22**	[0.07]
	Kymi	-0.004	[0.13]	-0.28**	[0.08]
	E-Savo	0.18	[0.15]	-0.25**	[0.1]
	P-Savo	0.13	[0.14]	-0.18*	[0.08]
	P-Karjala	-0.09	[0.15]	-0.34**	[0.1]
	K-Suomi	0.48**	[0.13]	-0.39**	[0.08]
	E-Pohjanmaa	-0.19	[0.13]	-0.39**	[0.09]
	Pohjanmaa	0.39**	[0.16]	-0.25**	[0.1]
	Oulu	-0.03	[0.12]	-0.27**	[0.08]
	Kainuu	-0.29	[0.34]	-0.74**	[0.14]
Lappi	0.15	[0.14]	-0.40**	[0.09]	
Gender	Female	0.01	[0.05]	0.03	[0.04]
Age	18-24	-0.17	[0.12]	0.43**	[0.1]
	25-34	-0.33**	[0.11]	0.05	[0.08]
	35-49	-0.36**	[0.09]	-0.06	[0.07]
	50-64	-0.29**	[0.09]	0.05	[0.06]

*(**)= statistically significant at 5% (1%) risk level

Table 2 continues. Parameter coefficients behind the marginal effects in Table 6 in text..

		1992-95	[std]	1995-01	[std]
Education	Notraining	-0.19	[0.3]	-0.49*	[0.2]
	Vocational	-0.19	[0.11]	-0.11	[0.07]
	Polytechnic	-0.16	[0.1]	-0.15*	[0.07]
	Academic	-0.26**	[0.12]	-0.17*	[0.07]
Socio	Farmer	0.29	[0.16]	-0.43**	[0.11]
	Entrepreneur	-0.18	[0.14]	0.003	[0.09]
	White-collar	-0.1	[0.11]	0.05	[0.08]
	Blue-collar	-0.36**	[0.11]	-0.04	[0.07]
	Pensioner	0.03	[0.12]	0.03	[0.09]
Income	Below-mid	0.007	[0.11]	-0.16*	[0.06]
	Mid	0.03	[0.07]	-0.16**	[0.05]
	Above-mid	-0.02	[0.11]	-0.19**	[0.06]
Voted for	SDP	-0.28**	[0.08]	0.97**	[0.05]
	NC	0.77**	[0.09]	0.63**	[0.05]
	CENT	1.46**	[0.08]	-0.42**	[0.05]
	LEFT	-0.46**	[0.15]	-0.05	[0.09]
	GREEN	-0.32**	[0.12]	0.07	[0.08]

NC (National Coalition), SDP (Social Democratic Party), CENT (Finnish Centre Party),

LA (Left Alliance), GREEN (Green League)

**= statistically significant at 5% (1%) risk level

Table 3. Marginal effects within gender groups.

		1992-95	1992-95
		Male	Female
Poll	Au92/Sp96	-0.06	-0.11*
	Au93/Sp97	-0.07	-0.15*
	Sp93/Au97	-0.1*	-0.11*
	Sp94/Au98	-0.06	-0.03
Age	18-24	-0.05	-0.09
	25-34	-0.14**	-0.1*
	35-49	-0.12**	-0.13**
	50-64	-0.1*	-0.11*
Education	Notraining	-0.2	0.04
	Vocational	-0.04	-0.1
	Polytechnic	-0.03	-0.08
	Academic	-0.03	-0.14**
Socio	Farmer	0.06	0.13
	Entrepreneur	-0.08	-0.05
	White-collar	-0.05	-0.02
	Blue-collar	-0.11*	-0.12*
	Pensioner	0.04	0.07
Income	Below-mid	-0.00	0.01
	Mid	0.01	0.03
	Above-mid	0.02	-0.03
Voted for	SDP	-0.04	-0.13**
	NC	0.3**	0.34**
	CENT	0.55**	0.50**
	LA	-0.09	-0.19*
	LU	0.007	0.009

NC (National Coalition), SDP (Social Democratic Party), CENT (Finnish Centre Party),

LA (Left Alliance), GREEN (Green League)

*(**)= statistically significant at 5% (1%) risk level

Table 4. Marginal effects within gender groups.

		1995-01	1995-01
		Male	Female
Polls	Sp97	0.05	0.08
	Au97	-0.04	0.1*
	Au98	0.01	0.05
	Sp99	-0.04	0.02
	Au99	-0.02	0.1*
	Sp00		0.08
	Au00	-0.09*	
	Sp01	-0.04	-0.00
	Au01	-0.06	0.14**
	Govt2	0.27**	0.23**
Age	18-24	0.13*	0.22**
	25-34	0.007	0.04
	35-49	-0.03	-0.01
	50-64	0.04	0.00
Education	Notraining	-0.21*	-0.13
	Vocational	-0.02	-0.04
	Polytechnic	-0.02	-0.08*
	Academic	-0.03	-0.10**
Socio	Farmer	-0.18**	-0.14**
	Entrepreneur	-0.006	-0.03
	White-collar	0.003	0.03
	Blue-collar	-0.04	-0.003
	Pensioner	-0.02	0.03
Income	Below-mid	-0.03	-0.11**
	Mid	-0.04	-0.09**
	Above-mid	-0.02	-0.13**

*(**)= statistically significant at 5% (1%) risk level

Table 4 continues. Marginal effects within gender groups.

		1995-01	1995-01
Voted for	SDP	0.37**	0.36**
	NC	0.24**	0.26**
	CENT	-0.17**	-0.15**
	LEFT	0.01	0.06
Local	LU	-0.02**	-0.01**
	N	3201	2899
	pseudo R ²	0.17	0.16
	log likelihood	-1841.72	-1684.22

NC (National Coalition), SDP (Social Democratic Party), CENT (Finnish Centre Party),

LA (Left Alliance), GREEN (Green League)

**= statistically significant at 5% (1%) risk level

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