# Happiness Before and After an Election: An Analysis Based on a Daily Survey

# around Japan's 2009 Election

Yusuke Kinari<sup>\*</sup> (Kyushu University) Fumio Ohtake<sup>†</sup> (Osaka University) Miles Kimball<sup>§</sup> (University of Michigan) Shoko Morimoto<sup>‡</sup> (Osaka University) Yoshiro Tsutsui<sup>¶</sup> (Konan University) abstract

This paper investigates whether the Japanese voters became happy and unhappy due to the results of the General Election in 2009. We conducted a daily web survey for seven days before and after the election to obtain 1068 responses. Estimating a fixed effect model, we found that Democratic Party of Japan (DPJ) supporters, the winner, significantly became happier and Liberal Democratic Party of Japan (LDP) and New Komeito supporters, the loser, became significantly unhappier on the next day of the election. However, happiness returned to the previous level in one or two days, implying people adapted to the news very quickly. Dividing those who support the policies of DPJ into two groups, those who get material benefits from the victory of DPJ and those who do not, we demonstrated that the reason why the supporters of the winner (DPJ) felt happy was not because they obtained material benefits from the change of government. We also found that happiness level of those whose expectation of the election results realized did not change, while that of those whose expectation differed from the reality changed substantially. In a word, unexpected results only matter.

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<sup>\*</sup>Faculty of Economics, Kyushu University, 6-19-1 Hakozaki, Higashi-ku, Fukuoka, 812-8581, e-mail: kinari@econ.kyushu-u.ac.jp, Phone: +81-92-642-2493

<sup>&</sup>lt;sup>†</sup>Institute of Social and Economic Research, Osaka University, 6-1 Mihogaoka, Ibaraki, 567-0047 Japan, e-mail: ohtake@iser.osaka-u.ac.jp, Phone: +81-6-6879-8572

<sup>&</sup>lt;sup>§</sup>Department of Economics and Survey Research Center, University of Michigan, Ann Arbor, MI, 48109, USA, e-mail: mkimball@umich.edu, Phone: 1 (734) 764-2375

<sup>&</sup>lt;sup>‡</sup>Graduate School of Economics, Osaka University; 1-7, Machikaneyama, Toyonaka 560-0043 Japan, e-mail: shoko.morimoto.12@gmail.com

<sup>&</sup>lt;sup>¶</sup> Faculty of Economics, Konan University, 1-8-9 Okamoto, Higashinada-ku, Kobe, 658-8501, e-mail: tsutsui@center.konan-u.ac.jp, Phone & Fax: +81-78-435-2920

#### 1. Introduction

This paper investigates whether news of election results affect happiness of voters. There have been few studies that investigates whether election affects happiness, Gilbert et al. (1998), Wilson et al. (2003), Tsutsui et al. (2010), and Kimball et al. (2014) are, to our knowledge, rare exceptions. This study tries to fill this scarcity. In addition, this paper has merits to analyze following two problems that previous studies didn't tackle with. The first is the adaptation. People have a baseline level of happiness from which happiness temporally jump up (down) when good (bad) news come in, but it return to the baseline level rather quickly (Kimball and Willis, 2006). According to the tentative result based on the survey conducted by Osaka University, personal news have on average five-times large influence of macro news delivered by television and newspapers, and the influence lasts for a few days. In contrast, the influence of macro news continues only until the next day (Kimball et al. 2007). Therefore, although election results might affect voters' happiness just after the election, the happiness level returned to the previous level immediately. Of course, the extent of the influence, the size and effective time, depends on what is the macro news. For example, Hurricane Katrina lowered American's happiness for three weeks (Kimball et al. 2006).

The second merit of this paper is to consider why election results affect happiness. This topic has not been examined up until now. Traditional economics thinks that peoples' happiness, or utility, is determined with material benefits that they gain. To examine whether this hypothesis is really the case, we compare happiness of two groups; the one is those who are benefitted by a victory of DPJ and the other is those who are not. If supposition of traditional economics is really the case, the former group becomes happine than the latter group.

#### 2. The election and our survey

## 2.1 The 45<sup>th</sup> general election on August 30, 2009

We analyze the 45<sup>th</sup> general election of the House of Representatives conducted on August 30, 2009. By this election, Liberal Democratic Party (LDP) lost the power and Democratic Party (DPJ) won a majority and took the power. Since the founding of LDP in 1955, it was the first event that LDP could not take the position of the leading party, and it was the second time that non-LDP took the power. Thus, this election was the one that produced the most dramatic outcome. While just before the election, Mr. Aso was the prime minister and LDP shared 303 seats and New Komeito, a ruling coalition, shared 31, their seats shrank to 119 and 21, respectively. On the other hand, DPJ won 308 seats, though it had only 112 at the time of dissolution. The total number of seats of the House of Representatives is 480.

#### 2.2 Our survey

We conducted a web-survey from August 27 to September 2 (seven days including the voting day). Respondents are 1068 (male=486, female=582) eligible voters from all over Japan. While some questions including "how happy are you?" and "did you sleep well the last night?" were asked every day, different questions were asked on different days. Specifically, on August 27, the first day of the survey, we asked the attributes of respondents such as school career and income, and on 28<sup>th</sup> we asked their supporting party and, expectation and wish of the seats. On August 31, the next day of the voting day, we asked whether they voted or not, which party they voted, and whether the results were as expected or not.

#### 3. Did the Japanese become happy and unhappy according to their political allegiance?

Main aim of this paper is to see whether supporters of the ruling parties, LDP and New Komeito, became unhappier just after knowing the results of the election, and supporters of DPJ that won the landslide victory became happier. To do so, we need to be careful to two elements. The one is that responses on 30<sup>th</sup> include those who know the election results and confirmed report was only released on 31<sup>st</sup>. Given these facts, we determined to compare the happiness on 31<sup>st</sup> with that on 29<sup>th</sup> to measure the effect of the election.

The second point is that happiness level varies every day due to various events other than election. Thus, it is not appropriate to compare the average happiness levels of supporters of a party directly between days. Rather we need to normalize the happiness of supporters of a party on a day by subtracting average of all the respondents on that day.

Comparing normalized happiness, happiness of DPJ supporters rose only on 31<sup>st</sup> and returned to the original level on September 1<sup>st</sup>. Happiness of LDP supporters dipped on 31<sup>st</sup>, but substantially recovered on September 1<sup>st</sup>. Supporters of New Komeito dipped largely on 30<sup>th</sup> and dipped further on 31<sup>st</sup>. Although it recovered on September 1<sup>st</sup>, it did not return to the original level. These results are consistent with the hypothesis that supporters of winning party become happier and those of losing party become unhappier.

The results reveal how adaptation worked quickly. Happiness of DPJ and LDP supporters seems to return to their original levels very quickly. Even happiness of New Komeito, which dipped larger than LDP, recovered on September 1<sup>st</sup>. At the same time, however, we find the adaptation was imperfect for New Komeito supporters at least during our survey period.

Let us check the significance of changes in the happiness level by a regression analysis. We take 29<sup>th</sup> as the benchmark, since some respondents might have known the results on 30<sup>th</sup>. Explanatory variables are day-dummies from August 27<sup>th</sup> to September 2<sup>nd</sup> (August 29<sup>th</sup> is excluded as the benchmark) and interaction terms of these day-dummies and supporting parties. In order to control the characteristics of a person that are constant over the observation period, we estimate the equation by the fixed effect model.

The estimates for DPJ supporters show that the coefficient of the interaction term of 31<sup>st</sup> is positive and significant at the 1% level, implying that they became significantly happier than 29<sup>th</sup>. The results for LDP supporters reveal that the interaction term with 31<sup>st</sup> is significantly negative at the 5% level. The interaction term with 27<sup>th</sup> is also significantly negative.

Let us heck the other parties than DPJ and LDP that is, New Komeito, old (before the election) ruling party supporters, new (after the election) ruling party supporters, pro-Aso-cabinet, and anti-Aso-cabinet. Supporters for New Komeito became unhappier not only on 31<sup>st</sup> but also on 30<sup>th</sup> already. Yet, the coefficient of 31<sup>st</sup> is larger. Supporters of old ruling party show the same tendency. Supporters for new ruling party became happier only on 31<sup>st</sup>. Pro-Aso-cabinet became unhappier both on 30<sup>th</sup> and 31<sup>st</sup>. On the other hand, anti-Aso-cabinet became happier on both days. All of these results are in general consistent with our hypothesis.

### 4. Only unexpected results affect the happiness

Victory of one's supporting party would not affect their happiness, if they expected it. Only an unexpected result will have an impact. In this section, this hypothesis is examined. In our survey, we asked respondents on 31<sup>st</sup>, the next day of the election "Did you expect the election results correctly?", and requested them to choose from "as expected," "a little bit different from expectation," "substantially different from expectation," and "completely out of expectation." Then, we divided the whole sample into two: the one is those answered "as expected" and the other is otherwise. Calculating the normalized happiness for the two groups of DPJ supporters and comparing the happiness level on 29<sup>th</sup> and 31<sup>st</sup>, while happiness is almost the same level for those who answered "as expected," it largely increased on 31<sup>st</sup> for those who chose the other options.

We do the same analysis for LDP supporters. Comparing happiness on 29<sup>th</sup> and 31<sup>st</sup>, while happiness of "as expected" did not change between the days, happiness of the others lowered substantially on 31<sup>st</sup>. These results reveal that happiness is only moved by unexpected results.

#### 5. Why did happiness change due to the result of the election?

Why did people feel happiness and unhappiness from the result of the election? Traditional economists who assume that individuals are selfish might argue that people become happy only when they gain material benefits. In this section, we examine this hypothesis.

In our survey on August 28<sup>th</sup>, we showed seven main policies and asked respondents which party's policy is preferable to them. Among the policies, we picked up "child allowance policy" and "expressway toll policy." If DPJ gets the power, those households which have children under 15 years old and those who have cars are better off. If the reason why people support DPJ is to get material benefits by the victory of DPJ, such a household becomes happier than other

households by the victory of DPJ. Thus, we divide DPJ supporters into two samples depending on whether they have children and cars, and calculate the normalized happiness every day. We find no evidence that car owners became happier on  $31^{st}$  than non-car owners (t=-0.212)<sub>o</sub>

Results of the child allowance indicates that the difference between groups is not significant (t=-0.644). These results suggest that supporters of DPJ became happier not because they themselves get monetary benefits by the realization of DPJ's policies. These results indicate that people do not select their supporting party due to material benefits they obtain.

#### 6. Conclusions

Conducting a daily survey for seven days before and after the 45<sup>th</sup> general election, this paper examined whether the Japanese voters became happy and unhappy due to the results of the election that produced a historical government changeover. The former 44<sup>th</sup> general election was also a very heated one. Tsutsui et al. (2010) analyzed it and found that while the supporters of the winners became happy and those of the losers unhappy, they were not significant. Although they interpreted the result that Japanese are indifferent to election, they have a problem that their monthly survey started four day after the election on this month. Thus, their results do not deny that Japanese became very happy and unhappy just after the election.

To examine this possibility, we need to investigate how quickly the happiness and unhappiness brought about by the election results returned to the previous level, so that we conducted a daily survey covering the voting day. Using these survey data we found that DPJ supporters, the winner, became significantly happier only on 31<sup>st</sup>, and the LDP and New Komeito supporters, the loser, became significantly unhappier on 31<sup>st</sup>.<sup>1</sup> Japanese people become happy and unhappy just after the election, but they return to the previous level of happiness quickly. Quick adaptation is the reason why Tsutsui et al. (2010) did not find the significant results.

If the results are expected ones, even favorable results would not raise the happiness. We asked respondents just after the election whether the election results were expected. Using these data, we found that happiness level of those whose expectation realized did not change, and that of those whose expectation differed from reality changed substantially.

One more merit of this paper is to investigate the reason why people become happy and unhappy. Traditional economists may think that people become happy because they get material benefits by a new policy which realized by a change of power by the election. However, our empirical analysis did not find evidences for this hypothesis, suggesting that supporting party is

<sup>&</sup>lt;sup>1</sup> Supporters for New Komeito became unhappier already on 30<sup>th</sup> (the voting day). It is widely known that supporters of New Komeito, which is backed by a large religious body named Soka-Gakkai, are passionate. Therefore, it is supposed that many of them watched the election results at the beginning of counting the votes on 30<sup>th</sup>.

not determined by material benefits. It might be the case that sympathy to the policies and the candidates of that party is important factors to select the party.

A problem of this paper is that we could not separate the responses on  $30^{\text{th}}$  into those before or after the election, since we did not retrieve the time of response. As the news on election results started at 20:00 on TV, the responses on  $30^{\text{th}}$  include both of those who know the election results and those who don't. Thus, we make do with comparing the happiness on  $31^{\text{st}}$  with that on  $29^{\text{th}}$ .

Although our survey is not perfect, collecting daily data before and after voting day is innovating and contributes to elucidate whether happiness varies due to election results in Japan.

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