Taste for Revolution and Unemployment as Economic Exclusion:
Evidence on Philippine Data using Ordered Probit Models

Leonina Mendoza Morillo¹
University of the Philippines School of Economics

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¹ Leonina Mendoza Morillo is a Masters of Arts in Economics student at the University of the Philippines School of Economics in Diliman campus.
² This is a working paper subject to further revision by the author. Relevant portions of this work may be quoted and used for research and other scholarly purposes, provided these are duly approved by the author.
I. INTRODUCTION

Among the main impediments to goals set by a market-driven economy is the threat to national security marked by sustained movements of revolt against the existing ruling body. In a span of several decades since the collapse of the Marcos regime, the Fifth Republic of the Philippines instigated during the Corazon Aquino administration in 1986 and extending to the current Benigno Aquino III administration remain beset with threats of conflict from various groups ranging in manifestation from the legally permissible acts of protests and demonstrations to the globally detested and politically-charged criminal offenses [Milligan, 2003]. The response of the Philippine government to manage these conflict situations in the country remains a debatable issue since monetary resource is highly rival among other government priorities including education, health and other basic public good provision, making a purely military approach in conflict-resolution not entirely feasible [Schiavo-campo and Judd, 2005: 4]. One of these methods proposed by the Philippine government under the Aquino administration is to focus on ensuring the economic well-being of its citizens, and in particular decreasing unemployment in the country. This response by the government leads to a very basic but relevant empirical question that this paper attempts to answer: does unemployment as a form of economic exclusion bring about greater revolutionary tastes? Using exploratory methods that have not been previously done on Philippine data, the results of this paper provide modest but insightful implications which can shed light on public policy geared toward effective conflict-resolution efforts in the country.

To answer this paper’s main thesis, the framework of a pre-conflict negotiations model initially set-up by Hirshleifer, Boldrin and Levine in their game-theoretic study of conflict versus concession is set on the backdrop of the Philippine setting. An applied pre-conflict negotiations model used in this paper posits that low levels of individual utility from the present socio-economic condition become inferior to the expected utility levels that the individual stands to gain from possible conflict situations despite the marked losses associated with revolutionary support or participation. These low levels of individual utility from the current socio-economic condition may be brought about by varied forms of curtailment of social, economic and political liberties, which may bring about greater revolutionary tastes [Macculloch and Pezzini, 2010]. The paper conducts exploratory econometric methods of utilizing microdata in the Philippines from 1996 and 2006 year rounds of International Social Survey Programme (ISSP) Role of Government survey by applying ordered probit models from a range of responses by 2,400 Filipino citizens, which tests economic exclusion in the form of unemployment as a contributory factor to low levels of utility from the current socio-economic condition consequently leading to greater revolutionary tastes of individuals in the country.
II. REVIEW OF RELATED LITERATURE

The existing literature on conflict spans a wide range of study including various manifestations of conflict situations in the form of protest demonstrations, labor strikes and other more extreme manifestation of revolutionary behavior. Existing studies that explain the cause of civil conflict have been forked into two strands. One strand focuses on the role of deprivation and grievances brought about by the political and economic conditions, while the other concentrates on the individual’s choice of participation in conflict where the individual weighs the utility and costs of conflict [Macculloch, 2005: 94]. These conflict situations may further be analyzed both in the static and dynamic time frame by using models of pre-conflict and post-conflict situations [Hirshleifer, et. al., 2010: 198]. From these models of conflict, more recent case-specific studies provide arguments that forward not only the role of institutions but also the role of deliberate individual action in bringing about and sustaining conflict. Because of the interaction between the historical and institutional determinants, and the actual human agency, resource mobility gives rise to different social and economic groups that have varying quantity and quality of resources, which each group can supply to an imminent social movement upon the individual decision to support or participate in a conflict situation [Cuzon, 1990: 403].

Earlier models of conflict include individual decision-making involving political participation as set-up in Ireland’s The Rationale of Revolt. Ireland [1967] argues that although revolt may take on many political forms, i.e. violent or peaceful, short-term or long-term engagement, there remain “political universals” from which the decision of the individual to support, oppose or not to participate in revolution hinges on. These two political universals are as follows: (1) individuals undertake political action with individual ends in mind, and (2) the expected individual gains from one’s action must exceed the costs that the individual anticipates paying. Among the costs of revolt are both the direct costs that include opportunity costs in terms of labor-hours lost to an individual because of participation in revolt, and other external costs imposed on the individual throughout the course of the revolution, such as loss of property and human lives. Ireland concludes that if these two political universals are not met, the alternative situation is that the individual will not participate in revolutionary behavior [Ireland, 1967: 62].

An expanded breadth of the categories of conflict is laid down by various studies on the economics of conflict by Hirshleifer [1995] where he identifies the basic ingredients of conflict as consisting not only of the actual manifestation of conflict but also the preferences and perceptions associated with conflict. This broader definition of conflict situations leads to a more extensive range of study including actual war or armed revolution as well as varied forms of possible conflict situations involving crimes, litigation, strikes and lock-outs and other manifestations of redistributive politics.
Hirshleifer expounds on the two existing theories behind the economics of conflict, and subsequently proposes varied models that depict conflict not only through perceptible fighting but also in the form of armed peace. One of these two theories on conflict is the exchange theory, which illustrates a form of contract concerning possible mutual gains to be gained by opposing sides to a conflict. The conflict theory, on the other hand, is likened to a competition for asymmetric advantage of one side over another. Two important models of conflict that had been widely used in case-specific research on conflict are: (1) the Rubinstein [1982] and Stahl [1972] Model of Post-conflict, and (2) the War of Attrition model. Both models are notably designed along the framework of an already existing conflict situation. The former model consists of negotiations to end the existing conflict, while the latter model depicts a scenario where conflict ends only in concession, where one party gives all possible gains to the winning party [Hirshleifer, et. al., 2010: 199]. The Model of Post-conflict and the War of Attrition have been used to illustrate how an already existing conflict situation is ended, but among the most recent models forwarded is the Model of Pre-conflict Negotiations which is designed to prevent a conflict situation at the onset where negotiations are still possible. This pre-conflict negotiations model highlights a dynamic approach to the decisions of individuals whether to engage in conflict or concede to settlement arrangements in the future [Hirshleifer, et al., 2010: 199]. The model works around the question of why conflict situations arise if conflict is a costly venture to engage in. This question highlights different situations where conflict situations result in the presence of “concession indivisibilities”, which arise because of natural, physical or social differences between the expected winning party and expected losing party. Invoking the Coase theorem, Hirshleifer, Boldrin and Levine [2010] conclude that only when small concessions are possible between the expected winning party and losing party will conflict be avoidable. The individual decision models of Ireland [1967] and that of Hirshleifer, Boldrin and Levine [2008] are further elucidated in Chapter 3 of this paper.

Given these models of conflict, the question of whether conflict situations are caused and implemented by structural forces or by deliberate human action and initiative remains a contestable issue [Kamrava, 1999: 317]. Kamrava [1999] proposes that both institutional determinants and the human agency are important in consolidating and carrying out conflict, particularly a revolution. Furthermore, he classifies a revolution under three categories, namely, (1) spontaneous revolution, (2) planned revolution, and (3) negotiated revolution, which are all founded on assumptions concerning (a) varying time element for revolutions, (b) violence as not a necessary manifestation of revolutions and (c) the notion that transfer of power may be achieved through negotiations. Kamrava concludes that, despite the categorical differences in all the three types of revolution, “the consolidation of the post revolutionary state entails considerable deliberative actions on the part of the revolutionary victors, and yet exactly what the revolutionaries can do is largely shaped and limited by such structural factors as in resources and predicaments,
the alignment and composition of social classes and international dynamics” [Kamrava, 1999: 344].

The interacting roles of institutional determinants and the human agency’s decision to participate in conflict may be illustrated in case-specific studies of actual revolutions. One such study is Cuzon’s [1990] Mobility and Political Opportunity in the Nicaraguan Revolution, which uses a resource mobilization-political opportunity paradigm of revolution in the Third World, stating that “sufficient poverty, corruption and social, economic and political inequalities, grievances and discontent are assumed to exist in most Third World autocracies to legitimate violent revolutions” [Cuzon, 1990: 401]. He adds that grievances and discontent are not the driving factors that bring about a revolution but are relevant only inasmuch as revolutionaries act on them [Cuzon, 1990: 403]. Cuzon further underscores the importance of the resources for revolution, and how different groups based on social and economic characteristics contribute differing quantities as well as qualities of resources they can supply to a social movement, showcasing the economic links of sustaining a revolution.

This link between engagement in political conflicts and other extreme forms of revolutionary behavior and the economic condition of society is further highlighted in studies which confirm the critical role of economic conditions in bringing about collective social and political unrest, including research by Parvin [1973], Khawaja [1995], Nafziger and Auvinen [2000], Ben Meir [2001], Berger and Spoorer [2001], Davis [2002] and Saleh [2009]. Evidence from a cross-country study by Nafziger and Auvinen [2000] show that economic factors including real Gross Domestic Product (GDP) growth, Gross National Product (GNP) per capita, food output growth, and IMF funding significantly predict emergence of conflicts. This underscores Parvin’s [1973] claim that economic variables are “(the) main explanatory variables of political violence” [Saleh, 2009: 18].

Empirical studies that test underlying economic factors leading to individual taste for revolution include Macculloch’s Income Inequality and Taste for Revolution in 2005, and Macculloch and Pezzini’s The Role of Freedom, Growth and Religion in the Taste for Revolution in 2010. The former study shows that more people are found to support the positive relationship between taste for revolution and income inequality in their nation [Macculloch, 2005: 93]. Further expanding this initial study on taste for revolution and using an international survey of more than 100,000 people across different countries, Macculloch and Pezzini [2010] test whether greater freedom in the form of political and civil rights brings about greater support for rebellion. The variable, taste for revolution, is taken from the World Values Survey question where the respondents are in agreement with the statement: “The entire way our society is organized must be radically changed by revolutionary action”. Other data sources utilized by the said study include Freedom House survey for the variables that capture freedom indicators, and Polity IV Project
variables for political regime characteristics and transitions. Probit regressions were applied, and control variables for macro variables such as aggregated country-level trade openness and level of inequality, and micro variables of the respondents’ personal characteristics including employment, marital status, age and education level, were added. Results show that greater freedom and indicators of being religious reduce the taste for revolution. Also, greater growth in the country’s domestic product buys off the increase in support for revolution upon curtailment of certain individual liberties. The curtailment of certain political and civil freedom is shown to have strong and robust negative effects on expression of revolutionary support [Macculloch and Pezzini, 2010: 329].

This paper draws along the lines of the existing literature and closely follows the work of Macculloch and Pezzini [2010]. To test whether the paper’s proposition, i.e. that unemployment as a form of economic exclusion brings about greater revolutionary tastes, applies in the context of the Philippine socio-economic setting, the paper uses data from two-year rounds of the International Social Survey Programme (ISSP) Role of Government survey with 2,400 Filipino respondents that have been weighted to accurately estimate that of the Philippine population in 1996 and 2006. Ordered probit models are applied on the Philippine microdata gathered and set on possible conflict situations ranging from protest demonstrations to more extreme revolutionary behavior. The variable, *Taste for Revolution*, includes a range of four responses in order of strongly allowing to strong disallowing possible conflict situations to arise in society. This categorical dependent variable is set against binary variable of whether the respondent is employed or unemployed. Control variables indicating age, gender, cultural and other demographic variables are also included. The categorical dependent variable, taste for revolution, used in this paper is labeled as such to be consistent with the existing literature. The coefficients and thresholds of each of the responses on each possible conflict situations are reported and analyzed on the backdrop of the Philippine socio-economic and political setting. Policy implications of the findings conclusively follow.
III. DATA AND METHODS

This paper uses the ordered probit model as modeling methodology to analyze the degrees of revolutionary tastes of individuals in five possible conflict situations: (1) organization of public meetings to protest against the government; (2) organization of protest marches and demonstrations; (3) organization of nationwide strike of all workers against government; (4) public meetings to express views on overthrowing the government by revolution; and (5) publication of books to express views on overthrowing the government by revolution. The individual is faced with a decision of allowing these conflict situations to transpire in society based on greater expected individual gains from the conflict situation over the individual utility from the status quo.

Using an applied pre-conflict negotiations model, this situation is given by

$$u^i(x_t)^i < V^i(x_t)^i,$$

for individual $i = 1, 2$. The individual’s utility from the status quo is $u(x_t) = [u^1(x_t)^1, u^2(x_t)^2]$, and the expected utility in the possible conflict situation is $V(x_t) = [V^1(x_t)^1, V^2(x_t)^2]$.

The individual utility from the status quo can come from existing privileges that the individual enjoys at the present situation, while the expected individual utility in the conflict situation can come from possible gains in privileges or opportunities acquired from the conflict. This paper focuses on individual utility as a function of individual gains in terms of privileges and opportunities enjoyed arise from membership in socio-economic groups that increase the individual’s well-being. The paper posits that absence of these privileges and opportunities due to possible social exclusion may bring about low levels of present utility which are less than the expected utility from the possible conflict situation. Thus, social exclusion in forms of non-membership in socio-economic groups leads to greater revolutionary support from the individual.

Ordered probit is used for each of the five possible conflict situations because this method appropriately identifies relationships which are statistically significant between the explanatory variables and the categorical dependent variable. This holds true for ordinary least squares regression. However, one important dissimilarity with ordinary least squares regression is that the ordered probit effectively determines unequal differences between ordinal classifications in the dependent variable [Greene, 1997]. Because of this, ordered probit is able to capture qualitative differences between different degrees of revolutionary tastes in individuals.

Although probit models have been used in existing literature on taste for revolution [Macculloch and Pezzini, 2010], ordered probit models have hitherto not been used.

The ordered probit models estimate statistical significance as well as direction of the relationship of every explanatory variable to each degree of revolutionary taste, in
each of the five possible conflict situations. The categorical dependent variable is revolutionary taste in four ordered classes of responses from the individual: (1) strongly allow, (2) probably allow, (3) probably disallow and (4) definitely disallow. The factors that explain individual taste for revolution are personal characteristics that precede the decision to allow or disallow possible conflict situations. These factors include the individual attributes of the respondent (i.e. age, gender, education, employment, income, region and community type, affiliation, religious attendance, ethnicity), where dummy variables are set to demarcate membership and non-membership of individuals in certain socio-economic groups of interest.

1. Data Description

This paper applies ordered probit models on a sample of 2,400 Filipinos interviewed during the 1996 and 2006 year rounds of the International Social Survey Programme (ISSP) Role of Government survey. The ISSP was established in 1984 by five nations and currently involves 45 member countries that administer identical survey to a random sample of their respective national populations [Guerrero, 2009]. The Philippines had joined the ISSP survey consortium in 1990 and implemented the Role of Government survey in 1996 along with 22 member countries for the third wave. The first wave of the Role of Government survey was conducted in 1985 by 6 countries; the second wave in 1990 with 9 countries. Two thirds of the 1996 Role of Government III survey had been replicated in 2006 Role of Government IV by 21 member countries. These two year rounds of survey had been conducted by the Social Weather Stations (SWS) in the Philippines.

The Role of Government survey obtains microdata on attitudes of citizens toward socio-political and economic issues including government rule and responsibility, civil liberties, political interest and public trust. It includes other individual background information such as age, gender and income levels. Weights are designated in the survey descriptions to ensure that data from the random sample of individuals inferred to the population of the nation as a whole.

For the Philippine 1996 and 2006 Role of Government survey, a random sample of 1,200 Filipino citizens aged 18 and above for each of the two years were interviewed. The Role of Government surveys were conducted from September 5 to October 5, 1996 and March 8-14, 2006, respectively, using a multi-stage probability sampling in selecting the adult respondents. To obtain the national estimates, SWS applied area weights that reflect the official population projections of the National Statistics Office (NSO) from the succeeding year. The Philippines was divided into four major study areas, namely, the National Capital Region (NCR), balance Luzon, Visayas and Mindanao.
This paper focuses on two questions in this survey that reveal revolutionary tastes. These are as follows:

“(1) There are many ways people or organizations can protest against a government action they strongly oppose. Please show which you think should be allowed and which should not be allowed.
   a. Organising public meetings to protest against the government
   b. Organising protest marches and demonstrations
   c. Organising a nationwide strike of all workers against government

(2) There are some people whose views are considered extreme by the majority. Consider people who want to overthrow the government by revolution. Do you think people should be allowed to:
   a. Hold public meetings to express their views
   b. Publish books expressing their views”

ISSP Role of Government Survey III, IV
(September - October 1996 and March 2006)

The individual answer is categorized into four ordered responses for each of the five possible conflict situations. The responses are (1) strongly allow, (2) probably allow, (3) probably not allow and (4) definitely not allow. These categorical responses are used in this paper to reflect the degree of revolutionary tastes in the dependent variables of the ordered probit regressions. These dependent variables are: (a) Protest Meetings, (b) Protest Demo, (c) Anti-government Strike, (d) Revolt Meetings, and (e) Revolt Publications.

A set of personal characteristics from the respondent’s background information sheet comprise the explanatory variables including age, gender, education, employment, income, region and community type, political affiliation, religious attendance and ethnicity; where dummy variables are set to show membership and non-membership of individuals in particular socio-economic groups of interest.

2. Modeling Methodology

The ordered probit model is given by the following form:

$$ y^* = \beta' x + \epsilon, $$

where $y^*$ is categorical dependent variable (degree of taste for revolution), which can take on the values 1 (definitely allow), 2 (probably allow), 3 (probably disallow), 4 (definitely disallow). The vector of estimated parameters is given by $\beta'$ and the vector of explanatory variables is given by $x$. The error term, $\epsilon$, is assumed to have a normal distribution of mean equal to zero and variance equal to one, with cumulative distribution denoted by $\Phi(\cdot)$ and density function denoted by $\phi(\cdot)$. 


For each of the five possible conflict situations, an individual falls in degree of revolutionary taste, \( n \), where \( n = 1,2,3 \), if \( \mu_{n-1} < y' < \mu_n \). The data on the individual’s response on consent for conflict, \( y \), are related to the underlying latent variable, \( y' \), through the thresholds \( \mu_n \). From this, the probabilities take the following form:

\[
Prob (y = n) = \Phi(\mu_n - \beta'x) - \Phi(\mu_{n-1} - \beta'x), \quad n = 1,2,3,
\]

where \( \mu_0 = 0 \) and \( \mu_3 = +\infty \) and \( \mu_1 < \mu_2 \). These are the thresholds from which the categorical responses of degree of revolutionary taste are estimated.

From the ordered probit regression, the following are reported: (1) the estimation of thresholds, \( \mu_n \), and (2) the estimated parameters, \( \beta \). The thresholds show the range of the normal distribution which is associated with the actual values of the categorical dependent variable, degree of revolutionary tastes. The effect of the changes in explanatory variables on the underlying scale is represented by parameters \( \beta \). The marginal effects of \( x \) on the underlying degree of revolutionary taste is evaluated as follows:

\[
\frac{\delta \text{Prob} (y = n)}{\delta x} = -[\Phi(\mu_n - \beta'x) - \Phi(\mu_{n-1} - \beta'x)]\beta, \quad n = 1,2,3,4.
\]

The direction of the estimated parameters, \( \beta \), as well as the magnitudes of the same parameters indicate how an explanatory variable affects the degree of revolutionary taste in each of the five possible conflict situations. A positive direction denotes that the explanatory variable increases the propensity of revolutionary taste with an increase in the magnitude of the said explanatory variable. \( \backslash \).

The categorical dependent variable is \( \text{Taste for Revolt}_{ni} \), where \( n = 1,2,3,4,5 \), denotes the five possible conflict situations faced by individual \( i \) namely: (1) organization of protest meetings, (2) organization of protest demonstrations, (3) organization of anti-government strikes, (4) organization of revolutionary meetings, and (5) publication of revolutionary books. This variable takes on an ordered category of responses based on the degree of individual revolutionary tastes, given by the following:

\[
\text{Taste for Revolt}_{ni} = \begin{cases} 
1, & \text{definitely allow possible conflict situation } n \\
2, & \text{probably allow possible conflict situation } n \\
3, & \text{probably not allow possible conflict situation } n \\
4, & \text{definitely not allow possible conflict situation } n 
\end{cases}
\]

The explanatory variable indicating unemployment is a dummy variable equal to one if the individual is unemployed, and zero otherwise. This variable denotes the current employment status of the individual.
So as not to confound the results showcasing the relationship between unemployment and degree of revolutionary taste, a set of individual characteristics of the respondent comprise the control variables in the ordered probit model. These control variables include indicators for age, gender, education, marital status, income, region and community type, religious attendance, ethnicity, political affiliation and year dummy variable when the survey was conducted.
IV. RESULTS AND ANALYSES

1. Ordered Probit Regressions

The results of the ordered probit regressions are reported in Table 1 of the appendix for each of the five possible conflict situations, namely:

1. organization of protest meetings,
2. organization of protest demonstrations,
3. organization of anti-government strikes,
4. organization of revolutionary meetings, and
5. publication of revolutionary books;

where the coefficients with their respective signs are indicated above the standard errors in parentheses. Statistical significance of each of the explanatory variables is also denoted at 5% and 10% levels. The five possible conflict situations allow for expansive policy implications of revolutionary tastes in various conflict behaviors in the succeeding subsections.

As established in the earlier section, the ordered probit models account for the categorical and ordinal nature of the dependent variable taken from the ISSP Role of Government survey for year rounds 1996 and 2006. These models identify the significant variables associated with each of the five possible conflict situations. A positive value of the coefficient of each explanatory variable indicates that the said explanatory variable increases the tendency for revolutionary taste with an increase in the coefficient’s magnitude. The opposite is true for a negative value of the coefficient.

However, considering the results in Table 1 can be misleading in that the ordering of responses are arranged from greater degree of revolutionary taste, i.e. definitely allow a possible conflict situation, to lower degree of revolutionary taste, i.e. definitely disallow a possible conflict situation. Thus, to be consistent with the analysis of the coefficient sign and magnitude reported in Table 2, a negative value of the coefficient would indicate that the explanatory variable decreases the nominal value of the response, which correspondingly increases the degree of revolutionary taste.

Significant in all five possible conflict situations is the explanatory variable that indicates unemployment. Analyses of the results show that members of the unemployed sector of society have a higher revolutionary preference in each of the five conflict situations.
2. Unemployment, protest and revolution

From the empirical findings, there is strong evidence that unemployment significantly increases the degree of revolutionary taste among individuals. Unemployment is a significant factor that heightens revolutionary preference in the form of protest demonstrations, strikes and other more extreme revolutionary behavior as discussed in the results presented in this chapter. These findings shed light on the behavior of the unemployed as a sector excluded from enjoying economic opportunities.

In 2007, the European Union Structural Fund had categorized the unemployed as a socially-excluded group, which is defined as a sector in society in need of special government assistance. The concept of anomie introduced by Durkheim [1893] can conceptually link together why the unemployed are more prone to participate in protests and revolutions, even if the motivation behind this participation is not necessarily emanating from a political ideology but rather initially due to a form of economic exclusion experienced by the unemployed. Because unemployment is a form of exclusion from economic opportunities such as suitable livelihood and wages to compensate daily living standards, the unemployed find more to gain from a change in the economic order compared to the status quo. The unemployed as a sector of society excluded from certain economic opportunities can easily be susceptible to recruitment by groups who forward ideological stands such as anti-government movements based on long-standing principles and beliefs, since it had been observed that “those who can find no place in the social order are obviously ripe for recruitment to groups which tend to disrupt that order” [Arora 1971: 343]. This observation strengthens all the more the argument that economic factors are the main explanatory variables to forms of political conflicts and public unrest [Saleh 2009: 18].

In the World Views interview conducted on November 2011, President Benigno Aquino stated that addressing economic grievances is one of the primary plans of the present administration towards conflict-management efforts in the country. He indicated that there is a need for a “guns-and-butter approach” to combat rebellion, secessionist movements and even criminal activity, where “the more opportunities for everybody; more inclusive growth; we’ll see a natural lessening of the issues with regards to peace and order” [World Views Interview with President Benigno S. Aquino, 4 November 2011]. Among the pressing social issues underlying the national security concerns of the country is unemployment, which is a form of curtailment of economic opportunities available to individuals. Currently, based on the results of the October 2011 Labor Force Survey (LFS) conducted by the National Statistics Office (NSO), the labor condition of the country includes a growing labor force of 41.189 million, marked by a 4.8% increase from the previous year. The labor force participation rate closed in at 66.3%, and employment levels expanded to 38.545 million from 36.488 million in 2010, accompanied by a decrease in national unemployment by 0.7 percentage points in 2011.
Employment increased the most in the services sector with 6.5% approximately equal to 1.233 million employed in the services in 2011. Wage increased by 7% since the previous year, and the average daily basic pay stood at Php 320.59 as of July 2011 [Statistics from the Department of Labor and Employment, 2012]. The present labor condition appears consistent with the administration’s course of action.

However, it is important to note that unemployment as a form of economic exclusion cannot be isolated as a single determinant of heightened revolutionary preferences; rather, it is observed that, “unemployment, considered together with educational level, may prove to significantly affect predispositions toward participation in protests” where evidence from a study of 84 nations show that countries with high proportion of the population with education combined with low rate of percentage change of per capita gross domestic product is “most conducive to political unrest” [Arora 1971: 345-346]. Further study on the interaction between unemployment and education can provide more insightful analysis on this relationship.
V. CONCLUSION AND RECOMMENDATIONS

This paper began with an empirical proposition that unemployment brings about greater revolutionary tastes. This is tested on the backdrop of the Philippine socio-economic setting by applying ordered probit models on microdata from two year-rounds of the ISSP Role of Government survey conducted in the country in 1996 and 2006 revealing individual responses toward five possible conflict situations in varying degrees of revolutionary tastes. The five possible conflict situations are: (1) organization of protest meetings, (2) organization of protest demonstrations, (3) organization of anti-government strikes, (4) organization of revolutionary meetings, and (5) publication of revolutionary books and literature. The degrees of taste for revolution are given by the categorical dependent variable with responses ranging from strongly allowing to strongly disallowing these possible conflict situations.

After conducting ordered-probit regressions on the given data, the main finding of this paper is that unemployment is a significant determinant that increases the degree of revolutionary taste of individuals. This finding provides key insight into policies involving the issue of conflict-management in the country. That unemployment as a form of economic exclusion brings about heightened revolutionary tastes in individuals can be considered an ex ante argument to address the lack of economic opportunities that an individual is faced with at the current socio-economic and political set-up, subsequently driving the individual to find other means of raising these demands or grievances.

As a final note on further research on this topic, because this paper uses exploratory methods of applying ordered probit regression analysis that have not yet been utilized in Philippine data, limitations in available data as well as the tools applied in this paper make the results and analyses constrained. Increased number of responses representative of longer periods spanning more administrations with changing policies and government priorities is ideal to provide stronger evidence of changing revolutionary tastes among Filipino citizens. More focused survey data can be conducted given considerable financial resources to enable well-captured variable indicators and allow for comprehensive inferences. Particularly, unemployment as a dependent variable can also be interacted with other variables such as age and education as well as capture not just present unemployment but also long-term unemployment of individuals. Taking these recommendations into account, this exploratory paper can further incite future study on data that reveal preferences of individuals to provide more robust results to support or refute the paper’s findings on unemployment and revolutionary preferences, and related policy implications on conflict-management.
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### APPENDICES

**TABLE 1. Ordered Probit Regressions**

Categorical Dependent Variable: Taste for Revolution in Possible Conflict Situations

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<thead>
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** 5% Significance level
* 10% Significance level