opción

Revista de Antropología, Ciencias de la Comunicación y de la Información, Filosofía, Lingüística y Semiótica, Problemas del Desarrollo, la Ciencia y la Tecnología

Año 35, 2019, Especial N° 20
Revista de Ciencias Humanas y Sociales
ISSN 1012-1587/ ISSNe: 2477-9385
Depósito Legal pp 198402ZU45

Universidad del Zulia
Facultad Experimental de Ciencias
Departamento de Ciencias Humanas
Maracaibo - Venezuela

Opcion, Año 35, Especial Nº 20 (2019):*2899-2921*
ISSN 1012-1587/ISSNe: 2477-9385

Revealed Preference in President Election 2019 in Padang City West Sumatra Province

Eka Dewi Anggraini
Bengkulu University, Indonesia.

Syafruddin Karimi, Indrawari, Endrizal Ridwan
Andalas University, Indonesia.

Abstract
Preference is the attitude that underlies the choice of consumers in choosing commodities. This attitude is not a genetic character that is carried at birth, but rather formed because of framing, habits, and situations that make consumers need to choose a choice. Because the influence of these three factors the resulting options may not reflect consumer preference. Moreover, in making political decisions that are full of interest, stated preference is a difficult matter to do. However, the revealed preference theory can overcome the issue by observing the community options in the 2019 presidential election in Padang City West Sumatera province. The goal is to reveal voter preferences and associated relationships with it. Data were collected through research poll deployments to explore expected leader characters. There are four characters namely populist, smart, assertive, and humble. The result of research showed the sequence of characters the preferred voters of the candidate 01 was populist, humble, smart, and assertive. While the sequence of characters that are preferred voters candidate 02 was smart, populist, assertive, and humble. Thus the populist character is the candidate 01 voters' preference and smart character is the candidate 02 voters' preference.

Keywords; revealed preferred, election, preference, rational

Preferencia revelada en la elección de presidente 2019 en la ciudad de Padang, provincia de Sumatra Occidental

Resumen

La preferencia es la actitud que subyace en la elección de los consumidores al elegir productos. Esta actitud no es un carácter genético que se transmite al nacer, sino que se forma debido al encuadre, los hábitos y las situaciones que hacen que los consumidores necesiten elegir una opción. Debido a la influencia de estos tres factores, las opciones resultantes pueden no reflejar la preferencia del consumidor. Además, al tomar decisiones políticas llenas de interés, la preferencia declarada es un asunto difícil de hacer. Sin embargo, la teoría de preferencia revelada puede superar el problema al observar las opciones de la comunidad en las elecciones presidenciales de 2019 en la provincia de Padang City West Sumatera. El objetivo es revelar las preferencias de los votantes y las relaciones asociadas con él. Los datos se recopilaron a través de implementaciones de encuestas de investigación para explorar los personajes líderes esperados. Hay cuatro personajes: populista, inteligente, asertivo y humilde. El resultado de la investigación mostró que la secuencia de personajes que los votantes preferidos del candidato 01 era populista, humilde, inteligente y asertivo. Si bien la secuencia de personajes que son los votantes preferidos del candidato 02 fue inteligente, populista, asertiva y humilde. Por lo tanto, el carácter populista es la preferencia de los votantes candidatos 01 y el carácter inteligente es la preferencia de los candidatos candidatos 02.

Palabras clave revelado preferido, elección, preferencia, racional

Introduction

Revealed Preference is a study in economics that learn the rationalization of consumer behavior in determining the choice of two types of goods/services on the provided budget. Each individual has a different flavor and taste called preference. Preferences that can be stated called stated preference, but sometimes they cannot be stated or individuals are not willing to state. Unstated preference can be stated with a revealed preference theory to make rational decisions. This theory is used to analyses whether the resulting options are consistent with the preference. This theory is used to rationalize the individual actions observed.

By knowing selector preference against candidates can be suspected voters' traits and characters. This information is necessary to determine the decision for either economic, political, or governmental purposes. Unstated preferences can be disclosed by observing the request.

Beshears et al (2008) identifies the existence of gaps between the revealed preference and the normative preferences so that they develop a model to solve the gaps. They identify five factors that increase the disparity between the revealed preference and the normative preference. These five factors are passive choice, complexity, limited personal experience, third-party marketing, and time choice. They use six approaches that contribute to identifying normative preferences, i.e. structural estimation, active decision, asymptotic choice, stated aggregate preference, reported preferences, and informed preferences. The results show that structural estimation determines a positive model with economic and psychological motives. Active decisions remove the bias made by the previous regime where the individual must state his preferences without being influenced by the previous factor.

Consumer demand that does not reflect preferentially suggests differences in consumer choices resulting in inconsistencies. The cause is the time difference (Adams et al, 2014; Hoch and Loewenstein, 1991), Tastes (Gul and Pesendorfer; 2005, Landsburg; 1981), Self-control (Gul and Pesendorfer; 2004), Price (Deb, et al 2018), and real income (Jerison and Jerison, 2001). This situation was discussed by Hoch and Loewenstein (1991) who found the inability of the consumer to control themselves and control the sudden desires of a product. Meanwhile, Schlapfer and Fischhoff (2010) Observe the stated preference and revealed preference and indicate that both of these preferences are consistent and can measure the basis of individual preference if a necessary condition is met, namely the introduction of goods and information relevant to options such as market prices.

Crawford and Rock (2014) conduct testing to distinguish the empirical-revealed preference by structural econometric where the empirical revealed preference is focused on observation, while the introduction of unobservable errors term is an aspect of structural econometric essence. This theory has even been developed by Adams et al (2014) who developed a method that allows us to explore whether time inconsistencies in the household choices are non-stationarities individual preference products or the results of heterogeneity and renegotiation of individuals in households. Meanwhile, Pervan, Visic, and Parvic (2014) concluded that

potential differences in individual choices were determined by their characteristics, namely gender and household income. Deb, Kitamura, Quah, and Stoye (2018) build a model of analysis revealed preference for consumption whereby consumers maximize utilities on observable purchases to determine the welfare implications of price changes.

Meanwhile Gross (2014) tested the data to measure the consistency of the similarity of taste and preference stability. They structure the size according to estimated spending to maximize utilities. If all consumers share the same utility function, this size increases with the increasing proportion of observations. Chambers (2017) develops a standard revealed preference in the economy and proves the need for economic theories that have universal implications and can be expressed recursively. He applied this theorem to two behavioral groups of group preference theory and Nash theory equilibrium. The result states that every time the economy model has a certain axiom, the revealed preference can be translated into universal tests and effective for theory. He advised to consider the theory and observe components that cannot be observed because the axiom can do that. Whenever the theory applies universally and the axiom used effectively, there is a projection of axioms in which the components can be observed. This condition can be widely applied in economics.

Anojan and Subaskaran (2015) also observe consumer preference through the behavior of soft drinks purchases in the northern province of Sri Lanka. While Oke, Kamolshotiros, Popoola, Ajagbe, and Olujob (2016) also used this theory to observe public demand for healthy drinks in Thailand. Cosaert (2016) uses a revealed preference to consider the rationality of the demand for diamonds when consumers are not only concerned about the quantity but also the value of the product. They found that although diamond prices are more expensive but consumer consideration can be rational. The results show that this diamond size is related to product visibility to the community, indicating a certain level of consumption

In addition to analyzing economic behavior, a preference is also used in healthcare to measure the conditions of hunger and nutritional deficiencies in developing countries caused by demand for calorie sources that cost Cheap (Jensen and Miller, 2010). Meanwhile, Svirsky (2018) who observed the individual consistency in sharing personal data on social media found that individual preference to information is sensitive to the elicitation method. This means that individual consistency depends on the method of communication with individuals. Based on behavioral psychology and economic experiments conducted by MacDonald et al (2019)

found that in engineering design, differences in preference selection methods used in design decision making can also lead to Preference inconsistencies.

In addition, the earthquake experience that occurred in the province of West Sumatra in 2009 is also one of the evidence that theory revealed preference for developers worked. Increased consumer demand for properties built away from the coast reveals consumer preferences that want a sense of security and comfort without any worries on the devastating tsunami. To respond to these preferences, the manufacturer's policy decision is to build a housing that is located far from the seashore. Until the area that had been inferior and considered far from the city center now has a high selling value and many interested people who need a dwelling away from the beach.

In addition to economics, health, and housing, this theory can also be used in politics to reveal community preference in presidential and vice president election in 2019. Data collected from 200 respondents located in Padang City. Observations were made through the distribution of polls and interviews with selected samples Non-probability sampling accidentally. The data collected are populist (x1), smart (x2), assertive (x3), and humble (x4). Consumer preferences are analyzed using descriptive statistics, then apply the relevant assumptions to get the desired results.

Theoretical Framework

An analysis of the revealed preference is performed by observing demand or selections on various constraint. The information obtained is used to examine the behavioral hypothesis that the chosen one is the preferred candidate who participated in the elections. The information is also used to locate voters' preference relationships with other behaviors or characteristics. The assumption used is that the preference does not undergo a change in short time and is strictly convex and monotonic. When convex and monotonic preferences there will be a unique requested bundle at each budget. Graphically shown in the following image;

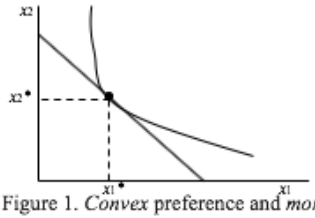

Figure 1. *Convex* preference and *monotonic* made unique decision

Assume package x* selected when y can be reached, so x* expressed preferred directly (directly revealed preferred) to y, if there is no x so y will be selected which wrote as x > y. Assumed selected bundle is character commodity consists of four characters namely populist (x1), smart (x2), assertive (x3), and humble (x4). If character x1 selected when character x2, x3, and x4 can be reached (affordable), so can be expressed that x1 directly revealed preferred from x2, x3, and x4 as in the Figure 1.

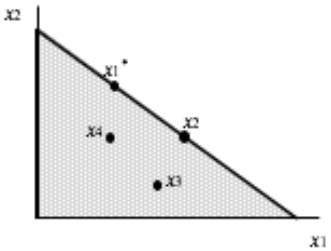

Figure 2. x_1 *directly revealed preferred* from x_2

If x1 more preferred from x2, means x1 directly revealed preferred from x2. If x1 directly revealed preferred from x2, x2 directly revealed preferred from x3, x3 directly revealed preferred from x4, so with assumption transitivity x1 indirectly revealed preferred from x4. To obtain rational analyze, choice must fulfill these criteria weak axiom revealed preference (WARP) namely if x directly revealed preferred to y so it will never happen that y directly revealed preferred to x ,that is x > y can't become y > x. Data that violates this assumption becomes inconsistent with economic rationality because WARP is a necessary condition for applying economic rationality to explain the observed choices.

If the condition x is selected when y is available, x > y, while y is selected when x is available, y > x, this statement is inconsistent and violates the WARP axiom. There is no indifference curve that can be drawn from the curve as shown below.

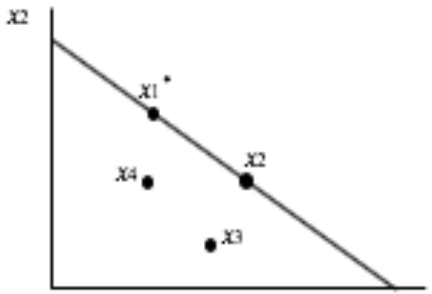

Figure 3. Violation WARP axiom

Checking data to test WARP violations is done individually by observing four characters and two selected candidates. It is assumed that each voter decides on one of the preferred characters when other characters are available and affordable, and selects one candidate who is preferred.

i) (x1, x2, x3, x4) is character commodity quantity x1, x2, x3, and x4 which requested on price (p1, p2, p3, p4). Commodity x1 ¬is populist character, commodity x2 is smart character, commodity x3 is assertive character, and commodity x4 is humble character.

ii) Quantity x1 which greater than quantity x2 reflects price p1 which cheaper than price p2 so character x1 more preferred than character x2. Otherwise quantity x2 which greater than quantity x1 reflects price p2 which cheaper than price p1 so more voters preferred character x2 than character x1, so on.

iii) Due to axiom WARP, so if character x1 directly revealed preferred than x2, so when x1 selected, x2not selected, because it is unlikely if x1 > x2 so x2 > x1. Consequently if all voters select x1 then its ensured x2 = 0, x1 maximal, and otherwise if all select x2 then its ensured x1 = 0, x2 maximal.

iv) If x1 > x2, x2 > x3, x3 > x4 so x1 indirectly revealed preferred from x4, so when x1 selected unlikely that x4 selected too.

Testing a WARP violation

Based on observations conducted to 200 voters acquired 85 people who voted 01 and 115 who voted 02. Then the four candidate characters were combined so that six character combinations were obtained. The combination of these characters is shown in the following image, and this combination of characters is observed to get the dominant character that is more liked.

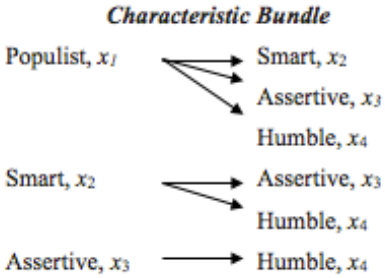

Figure 4. Character Bundle that being observed

The figure shows the four characters observable candidates to find the voters preference behind the choice. The four characters were combined with each other so that six character combinations were obtained. Considering the WARP axiom set that if the x1 > x2, it is unlikely x2> x1 because it would violate the WARP. Thus means if the x1 is preferred (x1 = 1) Then it means that x2 is not selected (x2= 0). Similarly, if x2 is preferred from x3, then it means x2 is selected and x3is not selected. Using the descriptive statistics obtained the quantity option of each character according to the candidate as shown in table 1.

Table 1. Nominees for a candidate 01 and 02 before applying the WARP axiom

Y Character Bundle			Choose		Total
			01	02	
Populist, x_1					
0	Smart, x_2	0	8	26	43
		1	2	16	18
1	Smart, x_2	0	32	15	47
		1	43	58	101
			85	115	200
Smart, x_2					
0	Assertive, x_3	0	34	18	52
		1	6	23	29
1	Assertive, x_3	0	27	35	62
		1	18	39	57
			85	115	200
Assertive, x_3					
0	Humble, x_4	0	28	44	72
		1	33	9	42
1	Humble, x_4	0	7	38	45
		1	17	24	41
			85	115	200
Humble, x_4					
0	Populist, x_1	0	7	33	40
		1	28	49	77
1	Populist, x_1	0	3	9	12
		1	47	24	71
			85	115	200
Humble, x_4					
0	Smart, x_2	0	26	34	60
		1	9	48	57
1	Smart, x_2	0	14	7	21
		1	36	26	62
			85	115	200

Source: Primary Data, 2019

Table 1 is the result of all observations including those that have not yet implemented the WARP axiom, i.e. voters who dislike both characters (y = 0 and z = 0), voters who like both characters (y = 1 and z2 = 1), and the result of a selector observation that only likes one Characters (y revealed preferred from z so that y = 1 and z = 0 or z revealed preferred from y so that y = 0 and z = 1) as set in the WARP axiom. Because the table contains all the observation results then unneeded observation or that violates the WARP axiom is removed from the table so that the remaining is only an observation that meets the WARP axiom of characters that are not liked y1= 0 and Characters that are more like y2= 1 as in table 2.

Table 2. The choice of candidates when the y_2 is revealed to be a preferred character y_1.

Character (y_1) = 0	Character (y_2) = 1	Choose 01	Choose 02
Populist	Smart	2	16
Smart	Populist	32	15
Assertive	Populist	53	32
Populist	Assertive	2	21
Smart	Humble	14	7
Humble	Smart	9	48
Assertive	Humble	33	9
Humble	Assertive	7	38
Populist	Humble	3	9
Humble	Populist	28	49
Assertive	Smart	27	35
Smart	Assertive	6	23

Source ; descriptive statistic 2019

In the table, y1 = 0 is an unlikely character, y2 = 1 is the preferred character (y2 revealed preferred from y1) according to candidates 01 and 02. To get the quantity of each candidate's character, observations of the candidate 02 candidates are excluded from table 2 so that the results are obtained as in the following table.

Table 3. The quantity of voters who like the character 01

Character Bundle	Quantity	Comparison Character	Quantity	Consistecy
Populist, x_1	32	Smart, x_2	2	**Consistecy**
	53	Assertive, x_3	2	
	28	Humble, x_4	3	
Smart, x_2	**27**	**Assertive, x_3**	**6**	**Inconsistecy**
	9	Humble, x_4	14	
	2	Populist, x_1	32	
Assertive, x_3	7	Humble, x_4	33	
	2	Populist, x_1	53	**Consistecy**
	6	Smart, x_2	27	
Humble, x_4	14	Smart, x_2	9	
	33	Assertive, x_3	7	
	3	**Populist, x_1**	**28**	**Inconsistecy**

	Populist (1)	Smart (2)	Assertive (3)	Humble (4)
Populist, x_1		>	>	>
Smart, x_2	<		>	<
Assertive, x_3	<	<		<
Humble, x_4	<	>	>	
Summary	$x_1 > x_2, x_3, x_4$	$x_2, x_4 > x_3$	$x_1, x_2, x_4 > x_3$	$x_1 > x_4$

Next on the third character is assertive, when compared to humble, populist, and smart characters, the quantity is smaller for all comparative characters. Voters prefer these three characters to assertive characters. It means that voters refused assertive as a candidate 01 character or in other words assertive not a 01 candidate character. While the fourth character was humble and it was more liked than the first two characters, namely smart and assertive, but not much more liked from the third character is populist. Next on table 6 is shown the result of the quantity voter who liked the character 02 candidate.

Table 5. Quantity voter who liked the candidate character 02

Character Bundle	Quantity	ComparisonCharacter	Quantity	Consistency
Populist, x_1	**15**	**Smart, x_2**	**16**	**Inconsistency**
	32	Assertive, x_3	21	
	49	Humble, x_4	9	
Smart, x_2	35	Assertive, x_3	23	
	48	Humble, x_4	9	
	16	Populist, x_1	15	**Consistency**
Assertive, x_3	**38**	**Humble, x_4**	**9**	**Inconsistency**
	21	Populist, x_1	32	
	23	Smart, x_2	35	
Humble, x_4	9	Populist, x_1	49	
	7	Smart, x_2	48	**Consistency**
	9	Assertive, x_3	38	

Based on the results of the quantity of 02 candidate characters that are more liked, all characters show small voter quantity difference and unobtrusive difference. Character populist directly revealed from a humble and assertive character, but not preferred from smart characters because there is a difference in a number of smart characters. While the smart character directly revealed from the character of the populist, humble, and assertive. It means that smart is the preferred character of voters than any other character. While the humble character was not directly revealed to all other characters are smart, assertive, and populist. This means that a humble character is not a character that is favored by the candidate 02 candidates who prefer assertive, smart, and populist characters. While the character was assertive directly revealed from a humble character, but against the character of the populist and smart was not preferred. To make it clearer this character comparison is shown in the following table.

Table 4. Summary of the more liked characters from the candidate voter 02

	Populist (1)	Smart (2)	Assertive (3)	Humble (4)
Populist, x_1		<	>	>
Smart, x_2	>		>	>
Assertive, x_3	<	<		>
Humble, x_4	<	<	<	
Summary	$x_2 > x_1$	$x_2 > x_3, x_4, x_1$	$x_1, x_2 > x_3$	$x_1, x_2, x_3 > x_4$

In the column (1) is more liked than the other two characters are assertive and humble, in the Smart column (2) is more liked from the whole character, in the column (3) assertive only liked from one character only, is in the field (4) Simple is not much liked from Other characters or all three characters are populist, smart, and assertive more than humble characters.

Results Analysis

With the result of the comparison of the four character quantity made the sequence of characters that are more liked voters 01 candidate in Padang City. The order of characters from the most liked is x1 x¬4, x4 x2, and x2 x3 or characters populist directly revealed preferred from humble, humble characters directly revealed preferred from the smart, and smart characters directly revealed preferred from assertive. Thus, the populist character indirectly revealed to be a preferred character for the assertive candidate 01. These results proved the completeness assumption applies in the consumer behavior theory. This means that voters can sort or rank the preferred options and do not happen to breach an axiom of WARP. Then the choice of character data voter 01 candidate was consistent to the economic rationality so that the candidate 01 preference in Padang City is the same.

While on candidate 02, the preferred character sequence is x2 x1, x1 x3, and x3 x4 or characters populist directly revealed preferred from Smart, smart directly revealed preferred from the populist, populist directly revealed preferred from the assertive, and assertive directly revealed preferred from the humble. So the smart character indirectly revealed a preferred character for the candidate 02. These results also meet completeness assumptions which means voters can sort the preferred character choices consistently. Observation Data did not violate WARP axiom so that the candidate's preference is obtained 01 in Padang City was smart.

Conclusion

Expressing preference in general elections is not an easy issue because preference is not the nature of birth, but is formed due to framing, situation and habit. Moreover, the general elections are filled with conflicts of interest so often the conflict obscures the actu-

al desired preference. This study observed the individual preferences in the 2019 presidential election in Padang City, West Sumatera province. Because the preference is not stated, the most effective way is to observe the commodity of the preferred characteristic voters. There are four characteristics observed that are populist, smart, assertive, and humble. The result showed character that is preferred by the candidate 01 consecutive voters was a populist, humble, smart, and assertive. While the characters preferred by the candidate 02 was smart, populist, assertive, and humble. Thus known preference voter candidate 01 was a populist and candidate 02 was smart.

References

Adams, A., Cherchye, L., Rock, B.D. and Verriest, E., 2014, Consume Now or Later? Time Inconsistency, Collective Choice, and Revealed Preference, American Economic Review, 104(12): 4147–4183

Anojan V. And Subaskaran, T., 2015, Consumers preference and consumer's buying behavior on soft drinks ; a case study in Nothern Province of Sri Lanka, GlobalJournal of Management and Business Research ; E-Marketing, Volume 15 Issue 2 Version 1.0

Chambers, C.P., Echenique, F., Shmaya, E., 2017, General revealed preference theory, Theoritical economics, 12, 493-511

Cosaert, S., 2018, Revealed Preferences for Diamond Goods, American Economic Journal, Vol. 10 No. 2, p. 83-117

Crawford, I. and Rock, B., 2014, Empirical revealed preference, Annual Review of Economics; 6,503-524

Deb, R., Kitamura, Y., Quah, J., and Stoye, J., 2018. Revealed price preference: theory and empirical analysis, CeMMAP working papers CWP57/18, Centre for Microdata Methods and Practice, Institute for Fiscal Studies.

Gul, F., and Pesendorfer, W., 2005, The Revealed Preference Theory of Changing Tastes, Review of Economic Studies, 72, 429–448

Hoch,S.J. and Loewenstein, G.F., 1991, Time inconsistent preference and self control, Journal of Consumer Research, Vol. 17, March

, 2004, Self-control, revealed preference and consumption choice, Review of Economic Dynamics, 7, 243–264

Jerison, D. and Jerison, M., 2001, Real Income growth and revealed

preference inconsistency, Working Paper 01-29, Economics Series 02, Departamento de Economía, Universidad Carlos III de Madrid
Oke, A.O., Kamolshotiros, P., Popoola, O.Y., Ajagbe, M.A., dan Olujobi, O.J., 2016, Consumer Behavior towards Decision Making and Loyalty to Particular Brands, International Review of Management and Marketing, 6(S4) 43-52.
Pervan, M., Visic, J., and Pavic, I., 2015, Inconsistency in Consumer Preferences: Some Interesting Insights, Procedia Economics and Finance, 23, 726 – 732
Svirsky, D., 2018, Why are privacy preferences inconsistent, Discussion paper, 81, Harvard Law School, no.

UNIVERSIDAD
DEL ZULIA

opción
Revista de Ciencias Humanas y Sociales

Año 35, N° 20, (2019)

Esta revista fue editada en formato digital por el personal de la Oficina de Publicaciones Científicas de la Facultad Experimental de Ciencias, Universidad del Zulia.
Maracaibo - Venezuela

www.luz.edu.ve

www.serbi.luz.edu.ve

produccioncientifica.luz.edu.ve