Journal of Research in Economics • İktisat Araştırmaları Dergisi • Cilt: 4 / Issue • Sayı: 1 March • Mart 2020 • ss/pp. 1-28
ISSN: 2636-8307 • DOI: 10.35333/JORE.2020.147

ARAŞTIRMA MAKALESİ / RESEARCH ARTICLE

CRITIQUE ON IDENTITY ECONOMICS*

KİMLİK İKTİSADI ÜZERİNE ELEŞTİRİ

Sinem BAĞÇE**
Ensar YILMAZ***

Abstract

Identity economics has acquired its literature in the last twenty years. However, the theoretical and methodological consistency of the concept is still quite weak, or the claims are no longer as sharp as it was at the beginning. Therefore, most of the followers of Akerlof and Kranton (2000) have considered identity as a variable rather than a vital part of the mechanism in explaining the behaviors. Except for John B. Davis, there is no attempt to clarify the arguments in the literature. Davis developed critiques to achieve the theoretical simplicity of identity economics. Although identity is a very complex concept, Davis insists on explaining it in an economic mechanism. Even if experimental research seems to be the applicable methodology for identity economics, in Kranton's research, the results of experiments present us systematic heterogeneity in social preferences for differentiated social identities which means there is no smooth behavioral path in her research yet to support the same claims in theory. In this article, we propose ethnographic and sociological field researches that can support the methodology that provide the purpose and result consistency. Although modeling identity might be evaluated as full of incoherence due to the problematics of identity economics, it brings us a broader parameter to understand differentiated social characteristics and preferences. This article seeks to simplify the modeling of identity and clarify progressive steps in the literature considering critical recommendations.

Keywords: Individuals, Personal identity, Social identity

JEL Classification: D01, D63, Z13

Öz

Kimlik İktisadı son yirmi yılda iktisat literatüründe yerini almış teorik bir yaklaşımdır. Kimlik kavramının iktisadi modellemedeki teorik ve metodolojik tutarlılığı oldukça zayıftır ve son yıllarda

* This research was supported by the Finnish Government Scholarship. For this research, Sinem BAĞÇE has been at University of Helsinki, Centre of Excellence in the Philosophy of the Social Sciences (TINT) as Visiting Researcher in 2018.

** Istanbul Bilgi University. PhD Candidate at Yildiz Technical University, Department of Economics. E-mail: sinem.bagce@bilgi.edu.tr

*** Yildiz Technical University, Department of Economics. E-mail: enyilmaz@yildiz.edu.tr

Makale Gönderim Tarihi: 06.01.2020
Yayına Kabul Tarihi: 02.03.2020

bu alandaki argümanlar başlangıçta olduğu kadar iddialı değildir. Bu sebeple, Akerlof ve Kranton'nın (2000) teorisini ampirik olarak uygulayan araştırmalar kimliği, iktisadi davranışları açıklamada belirleyici bir olgu olmaktan ziyade, bir değişken olarak ele almıştır. John B. Davis dışında, teoriyi oluşturan temel argümanları netleştirme çabası yok denecek kadar azdır. Kimlik iktisadının teorik sadeliğini elde etmek için eleştiriler geliştiren Davis, kimliğin karmaşık yapısına rağmen, iktisadi davranış motivasyonunu belirleyen mekanizmadaki açıklayıcılığında ısrar eder. Deneysel araştırmalar Kimlik İktisadının geçerli metodolojisi olarak görünse de Kranton'nın yaptığı deneyler, farklılaşmış sosyal kimliklerin sosyal tercihlerinde sistematik heterojeniteyi ortaya koymaktadır. Bu da deneylerin teorinin iddialarını doğrular nitelikte olmadğını ve düzgün bir davranış patikasını desteklemediği anlamına gelmektedir. Bu makalede, deneysel methodun yanı sıra, amaç ve sonuç tutarlılığını sağlayan, etnografik ve sosyolojik alan araştırmalarının yeniden hatırlanması gereği ortaya konmaktadır. Kimliği modellemek tutarsızlıklarla dolu görünse de, farklılaşmış sosyal özellikleri ve tercihleri anlamak için kapsamlı bir parametreyi analizimize dahil etmemizi sağlamıştır. Araştırma eleştirel önerileri dikkate alarak, kimliğin modellenmesini sadeleştirmeyi ve literatürdeki aşamalı adımları netleştirmeyi amaçlamaktadır.

Anahtar Kelimeler: Birey, Kişisel kimlik, Sosyal kimlik

JEL Sınıflandırması: D01, D63, Z13

1. Introduction

As a well-known fact, neoclassical economics excludes *what is humanized* out of the literature for a long time. The definition of rationality is in a very narrow context in mainstream economics. Identity economics is one of the challenges raised against this tradition that has developed in recent years. Rather than the application on differentiated economic outcomes of categorical variables, in a theoretical level, *identity* as an explicit concept was introduced to economics by Akerlof and Kranton (2000). In the literature, the identity-based analysis mainly searches the links between economic welfare and the decision of the actors in question-related to ethnic, racial, gender, and immigrant issues. It is more about discrimination and its repercussions on economic decisions of the relevant actors in a social sphere — utility function of the agent incorporated with identity as a motivation of behavior to understand differentiated economic behaviors, such as labor force participation, saving, consumption, the decision on welfare distribution.

Firstly, the authors examine the evolutionary process of the identity concept in social science literature by considering the substantive strategies in the explanation of human behaviors. Afterward, the critics of arguments are structured around the comparison of explanations in modeling identity and methodologies — the main discussion of the literature focus on whether social forces define preferences. The normative assumption of a self-seeking characteristic of the agent is exogenous determination, or socially embedded individual is determined with external factors that called endogenous determination explains the agent in interaction.

The second part argues that identity economics might be an extension of neoclassical economics, even if it seeks to go beyond neoclassical economics. Because the redefinition of the individual with identity was not entirely different. The ontological transformation of the agent from atomistic to "socially embedded" is fundamentally incompatible with assumptions on an individual and his/her interaction with society. Therefore, the consequences of the models might not be comprehensive enough to undermine the atomistic individual notion in economics.

Identity might be an inclusive conciliation to understand the differentiated motivation of human behavior. However, there are many compelling reasons for the inconsistent understanding of the literature that cannot express the interrelating cohesion. Our criticism in the last part covers all the models of part the neoclassical understanding. Besides, the distinctive assumption of identity economics is on the agent and the boundaries of the modeling in identity economics briefly examined.

1.1. Incorporation of Individual and Social Identity

As in the other models of behavioral economics, Akerlof and Kranton (2000) transferred the theoretical background from the other social sciences, such as psychology, sociology, social psychology, to improve the power of explanation of human behavior. In sociology and social psychology, group effect has a higher impact on individual behaviors. Group acceptance and rejection addresses beyond the homoeconomicus. In sociology, inequalities in the society are explained with systemic discrimination. It argues the unfair treatments related to domination and subordination. However, social psychology focuses on the categorization tendency of social groups, stereotypes, prejudices, implicit bias, dominance, and group hostility in society.

The roots of identity go to self in psychology. According to Baumeister (1987), discussion on self has continued since the sixteenth century with social and ideological developments, secularization, industrialization, enlightenment, and psychoanalysis that brought maturity to the idea of being individual. The most valuable contribution to the progress of self came from Freud (1921) that analyzed self in its unique circumstances under the social norm's pressure and the conflict between unsocialized impulse and superego. Although self is a personal, private, profoundly unique, and complex thing, the norm was the first external parameter of self in psychology (Hogg, 2001). On account of norm expresses unwritten rules most of the people agree with and a socially accepted standard way of behaviors.

Norms reflect social commitments that determine the social space of self. Social physiology analyses self as an embedded concept into social frames. The early attempt to defining an external parameter of self was by Wundt in 1916, the founder of psychology as an experimental science. According to Wundt, psychology examined social phenomena through isolated individual psychology. Thus, he extended social psychology interests to collective human communities, such as language, religion, and mythology. He addressed the method of inquiry, which asks the individual how an individual feels about herself and makes an explanation of her subjective situations. In contrast, another approach asserted that the self finds itself in a social group. The understanding revealed the concept of group mind generated with social interaction. The group mind has distinctive characteristics rather than its members (retrieved from Hogg and Vaughan, 2014).

During the 1940s, the first severe group discussions on identity started with Sherif's social experiments. In the path-breaking experiment, eleven years old schoolboys were randomly divided into two groups. They are isolated from each other for a week. After that time, they were asked to play games where groups would compete. While in gaming, the divided groups' behaviors to each other were antagonistic. They had structured distinct group identities during the time. This experiment of Sherif (1954) claimed the sufficient condition in-group competition is the creation of ethnocentrism. Following Sherif, Social Identity Theory of Tajfel and Turner presented intergroup differentiation.

Since Tajfel (1978) and Turner (1982), the theory of social identity has been considered as the primary perspective in social psychology. It focused on conceptualizing the relationship between self and group membership/social categories regarding its perceptional and cognitive dimensions (Hogg and Vaughan, 2014). Their perspective consists of two major theories, social identity theory by Tajfel and self-categorization theory by Turner. While social identity theory interprets behaviors in inter-group, the self-categorization theory focuses on behaviors in intragroup (Valtonen et al., 2014). The first systematic studies on the aspect began with Tajfel (1970, 1972, 1974, 1978) on social categorization. He focused on the comparison between the groups, prejudice, and stereotyping. He claimed social groups basing on the feeling of belonging.

In social experiments, subjects were tending to define themselves as a member of a group even they are randomly assigned and to award more points to people who is their in-group member. Tajfel called the tendency ”minimum group paradigm” that social categorization is a sufficient premise for in-group favoring discrimination (Tajfel, 1970). He defined social identity as follows, ”*The individual's knowledge that he belongs to certain social groups together with some emotional and value significance to him of his group membership*” (Tajfel, 1972: 292).

Preliminary extension work in this field is the self-categorization theory developed by John Turner in 1982. He examined the self-identification process of individuals with specific social group categories. Self-categorization is a cognitive process and depends upon individuals' beliefs and values on themselves and their social group. This cognitive process works with a defense mechanism to reduce uncertainty. Hogg and Vaughan expressed the process as follows, ”*The processes of self-categorization and prototype-based depersonalization reduce uncertainty because perceptions, attitudes, feelings, and behavior are now prescribed by an in-group prototype that usually has consensual validation from other group members*” (Hogg and Vaughan, 2014: 188).

By the way, social psychologists propounded two types of use; (1) self with social group membership and (2) personnel selfness pertain to her characteristics and interactions. In the most general sense, people have social identities they feel they belong to, and they have personal identities based on social interactions and the ascription set we believe we are in. Besides, the latter article by Turner and his colleagues (Turner et al., 1987) supported the same claims on group behaviors and the impact of group categorization on self.

According to Social Identity Theory, to enhance belonging and identity, people need to the value-laden dimension of in-group and concurrently devalue outgroup. There are two concepts to serve the purpose of feeling confident as a part of society. Firstly, the need for "self – esteem" that concerns positive self-image/self-evaluation of the individual for both self and social group.

Secondly, "*belief of superiority*" that a salient in-group characteristic compares with outgroups. The out-group also encourages self-esteem and strengthen group identification (Brown and Capozza, 2016). In this sense, the minimum group paradigm explains the need for belonging and acceptance with the satisfaction of self-esteem and social group enhancement. In the self-assessment process to reach self-esteem, people need to evaluate circumstances around positively though considering their group superior to others. Hence, they can structure a close identity to the social group. According to Abrams and Hogg (1990), social groups are defined in competition to have resources, power, authority, and prestige. Accordingly, to understand discrimination between the groups, their salient characterization takes importance. If a nine social group identity delineates arbitrarily in any competition, the identity becomes more salient and face discrimination. When social identity is salient, representing group characteristics by an individual becomes more liable rather than by interpersonal level. Due time self-conception in-group membership gains uniformity of group and high group coordination. Then, social pressure and normative behavior come into prominence. Under the specific circumstances, different people can behave in The hierarchy senses as a group member who has shared psychological reflexes and thinking (Abrams and Hogg, 1990).

Social physiology analyzes groups as individuals within social interactions. In contrast, sociology and political science analysis of groups are mainly on groups as collective structures (Hogg and Vaughan, 2014). Thus, the primary root of social psychology is in individuals and their interactions as it is in the literature on identity economics, too. In the following part, we review the literature on identity economics outlined; firstly, neoclassical understanding including the earlier research which modeled identity exogenously and complex models, modified neoclassical perspective by endogenizing identity, afterward, more recent criticism on identity economics.

1.2 Neoclassical Understanding in Economics

1.2.1 Canonical Models

Except for some essential critical approaches, what we know about identity in the economics literature is based on the neoclassical understanding that explains differentiated economic outcomes/behaviors concerning differentiated social categories/identities. The transition of focus in economic literature from differentiated economic outcomes to behaviors and from social categories to identity took four decades; since Becker (1957) until Akerlof and Kranton (2000). In the comprehensive study of Akerlof and Kranton's on identity economics in 2010 that covers all the arguments of their research on identity economics, they described their theory as a step forward by Becker. They said, "Becker's approach, like ours, was to expand the utility function. This book thus follows a long tradition of progress in economics" (Akerlof and Kranton, 2010).

Becker (1957) which is called taste-based discrimination accounted for discrimination against disadvantaged groups with the same reference of differentiated preference/taste of good in utility maximization. The model revealed that the market could eliminate discriminatory firms that are less profitable than non-discriminatory ones. If there is enough non-discriminatory employer who can compensate for the employer's taste of discrimination with lower wages for the non-preferred group, then discrimination can be eliminated.

During the decision-making process, the employer refers to observable features of employees to predict unobserved characteristics. Due to the low cost of searching employees, discrimination according to skin color and average group behavior correlates with the group member. Phelps and Arrow proposed two different sources of inequality. (1) The assumption of imperfect information in Phelps' model explains imperfect information about workers' productivity that is compensated with the proxies of being group members. In Arrow, asymmetry in belief is driven in equilibrium notion rather than using differentiated beliefs as proxies. (2) The difference between Arrow and Phelps is on the sources of inequality. Phelps (1972) assumes ax-ante exogenous differences between groups of workers. However, in Arrow, K., et al. (1973), group differences are driven endogenously in equilibrium. Their theoretical explanation is called statistical discrimination (K. J. Arrow (1971); K. Arrow et al. (1973), Phelps (1972); retrieved from Benhabib, 2010).

All the following neoclassical models contain identity notion are designed regarding canonical paradigm that explains social interactions with the decision-making process in a feasible set of options under rationality assumptions. When there is perfect information about the outcomes of decisions, the agent can maximize her utility. If there is uncertainty, the agent assumes objective and subjective probabilities to maximize an expected utility function. The probabilities are defined by the agent's belief about the outcomes of her actions.

Akerlof (1997) introduces two types of behavioral models. Firstly, the status-seeking behavior that people try to increase social distance with others. Secondly, conformist behavior that people keep themselves closer to other people in society. (Cost-font and Cowell, 2015). Following the Social Identity Theory of Tajfel and Turner [1] that focused on intergroup differentiation, Akerlof and Kranton (2000) assert that the motivation of human behavior considers social categorization. The economic choices of individuals primarily not only depend on monetary incentives but also on their identities. When the monetary incentives are constant, individuals keep away from the actions and economic activities that conflict with their identities. Thus, identity is a motivation for behavioral changes and differentiates economic outcomes. Identity is based on social categories

1 Since Tajfel (1978) and Turner (1982) conceptualizing the relationship between self and group membership/social categories regarding its perceptional and cognitive dimensions (Hogg, 2014). Their perspective consists of two major theories, social identity theory by Tajfel and self-categorization theory by Turner. While social identity theory interprets behaviors in inter-group, self-categorization theory focuses on behaviors in intragroup.

and their behavioral prescriptions. Prescriptions address social norms for the particular social category.

The Utility Function

$U_i = U_j\,[(a_j\,, a -_j\,, I_j\,]$ (1)

The Model of Identity

$I_j = I_j\,[(a_j\,, a -\,_j, c_{j,}\, E_{j,}\, P]$ (2)

The model decomposes identity into five explanatory parameters; (i) Usual vectors of the labor's actions, a_j, (ii) The others' actions, a_{-j}, (iii) Social category the labor assigned; c_j. Each social category has ideal characteristics and norms, (iv) The extended form of given social category (already socially in) matched with the ideal one (the labor would like to be in), E_j, (v) Prescribed behaviors, P.

To imply the theory, Akerlof and Kranton (2002) focused on students' reasoning to identify in social engagements in school. They modeled Coleman's survey (1961) on the social arrangements of Illinois High School students by following students' primary motivation in their different categories and their relationship with behavioral orientation into school settings.

In the article, the student formation of academic identity reflects their belonging to a school. Same as in the basic modeling, they define three social categories; the leading crowd, L, nerd, N, and burnout, B, that have determinants of own ideal or stereotyping behavior prescriptions. These prescriptions determine student social status as having a high or low profile. Their utility differentiates regarding how they accommodate their self-image to this category. The school setting has its expected ideal. By referring to the ethnographic research on high school students, they claim that such social divisions have an impact on school achievements. The utility function of students structured on effort and financial returns, social category (jock or nerd), and prescriptions. They defined a parameter that measures the difficulties of having ascriptive characterization in social difference, and degree of social difference, — prescriptions designated by physical appearances and ability. In equilibrium, the skill acquisition is not responsive to the wage but is responsive to the degree of social difference, *t*. When *t* is higher, then it is harder for students to be with the burnouts and the nerds to be in the leading crowd. When skill abilities response is high in the group, academic achievements become less even in nerds.

When students' backgrounds are unlikely to accomplish the sets of schooling, resources are inefficient. According to Akerlof and Kranton (2002), the missing point in the article is the motivations of teachers and school administration. Moreover, in economic modeling, economists consider economic returns of schooling; However, families majorly care about decent behaviors and universal moral principles of the society. The most convenient case might be the article by Akerlof and Kranton (2002) that applied the model to show the linkage between identity and schooling. There are three types of groups, and prescriptions are adequately defined and referred to ethnographic results — furthermore, the empirical analysis suited with the model.

Akerlof and Kranton (2005) aimed to amend the basic principle-agent model with identity differentiation between feeling belonging to an organization or not, simplified as being insider or outsider [2]. Insiders (outsider) are paired with high (low) effort action. As an assumption, insiders do not need a reward to work harder. They set a simple utility function of employer and majorly focus on case studies of military and civilian workplaces. In military work, soldiers do not have monetary incentives, but they had been trained a lofty aim. The article is also based on the same arguments with efficiency.

In Identity, Supervision, and Work Groups (Akerlof and Kranton, 2008), by following Akerlof and Kranton (2005), they structured more complex modeling to reveal management policies and organizational behaviors mainly diversified work-groups, concerning being insider/outsider. The model follows ethnographic research of firms and social psychology, such as Blader, and Tyler (2007), to reveal the tie between the workers' belonging motivation and their efficiency. The model is based on a similar logic with the model of contract theory. They give explicit descriptions of motivations in work-group behavior and write on the self-thinking of employees under the monitoring of the firm. In the equilibrium, most employees reflect intragroup effects on cooperative behavior.

Behavioral prescriptions are defined according to oppositional identities in Battu et.al (2007) and Battu and Zenou (2010), for instance, wearing a veil or not wearing a veil. Utility function oppositional identity modeling depends on sets of binary events, as well as identity categories are weighed with the intensity of belonging represents with coefficient parameters. Under the restriction of the psychological cost of social interaction with the other group, for both categories and direct cost of belonging to a category, the individual agent tries to maximize her utility. The objective of the model in Battu et.al, 2007) is to demonstrate social network performance on job occupation in non-white individuals. Individuals are determined with their closest networks and their attachment to the cultural origin such as religion or language. To show the peer pressure and family effect on cultural adaptation. They revealed that although there are adverse effects on labor market outcomes, depending on peer pressure level, non-whites might choose to adopt the oppositional identity.

In Shayo (2009) and Klor and Shayo (2010), identity is taken into consideration with the status that extended the model of Akerlof and Kranton (2000) by adding the preference for conformity into the utility function. They seek to affirm the correlation between social identity and voting

2 In the efficiency wage models, being insider/outsider as an organizational identity is defined as motivational capital of the firm. Regarding modeling explanation, the primary reference might be Akerlof and Yellen (1990) specialized in wage and effort hypothesis, rather than Akerlof and Kranton (2000), because, theoretically, in 2005, Akerlof and Kranton is far from the arguments of their first article. It might be expected to more profound analysis and clarification on the problematic arguments in the first article. In contrast, they majorly converged into labor market wage modeling and organizational theory.

behavior. The group identities are endogenously assigned, depending on individual monetary payoffs. However, as a drawback of the model, they underlined the endogeneity problem of the models include economic and social variables. People with a characterization might be more likely to earn a higher income and at the same time associated with a specific group (Costa-Font & Cowell, 2015).

1.3 Endogenizing Identity into the Decision-Making Process

There are fewer general models in the literature that can entirely explain the *identification* and *interaction* process. Fang and Loury's (2005) extension with the parameter of identity codes structured a model as a stock of identity. They firstly determine identity categories in social networks that the agent embedded into society. Secondly, analyze individual risk-sharing behaviors regarding identity code that is of income. The model by Benabou and Tirole (2007) might be the most notable research that presented how identity and taboos shape the beliefs and trigger the motivations of particular behaviors. It examined the reasoning relation between beliefs and values. They endogenized identity pay off function and behavioral prescription into the model. The individual can predict her pay off function in possible social frames and considers the cognitive cost of interaction. Therefore, she can invest in her identity called stock of identity capital that includes returns of investment. The agent is aware of her self-identity that defines identity utility with the stock of identity capital.

For a valid unit of explanation, Horst et al. (2006) and Darity Jr et al. (2006) present an integrative approach seeking to optimize the dominance of social identity regarding differentiated identities with their differentiated prescriptions. Horst et al. (2006) criticized the dominance of the social identity concept over personal identity. If an agent's decision-making process primarily relates to her social identity, the assumption of utility maximization of rational agents creates a continuous contradiction between personal and social preferences. Along similar lines, through imposing a more active role in personal identity, the inconsistency of the individual assumption and modeling are also tried to be resolved. However, they emphasized that the social equilibrium point is possible with less personal identity effect on the motivation of actions. The agent has the capability power to choose between social norms and personal desires. Even there is a conflict between social and personal identity, she can put personal limits and rules between social environment relations. The different situations disturb social utility and are seen as a cost for the agent to improve self-fulfillment.

Darity et al. (2006) argued the racist legislation in the history of the USA. They tried to structure a holistic approach considering the critics on identity models. Since the article, the models define identity as passive, given, cyclical, and in the short run. Under the restriction of the dynamic assumptions of agents' categorization, the model structures on an evolutionary game format that includes racist, individualist, or mixed identity equilibrium. The agent with racial identity can change her strategy into being racist or individualist overtime. Regarding racial identities, the model reveals the relationship between wealth and accumulation.

2. Deepening in Theory of Identity in Economics

Although the concept of identity has sophisticated research literature in social science, due to the aim of simplification and modeling in economics, identity cannot find an explicit examination in the economics literature — primary critics on identity economics made by Davis (2006a, 2009, 2010, 2014b), who considers atomistic agent as an epistemic problem of identity models. He empowered the philosophical side of economic literature. He revealed the problem of multiple selves and the incorporated relation between social identity and personal identity together. Multiple self-problem that comes up when reflexivity of the representative agent during the decision-making process meets interactive relationships with social groups. With the following words of Kirman and Teschl (2004), we can understand the significant focus of Davis,

> *"Neoclassical understanding fails to represent any identity according to synchronic identity, being able to distinguish between different individuals at a given point in time, and re-identification or diachronic identity, being able to follow the same individual through time and change."* (Kirman and Teschl, 2004:64).

In this part, principally, critics of Davis (2006b) on Akerlof and Kranton (2000), Amartya Sen (1985, 1999, 2002, 2005, 2007), and Kirman (1992) provide us to trace the current critical thinking on identity economics. Subsequently, by following his major articles, Davis (2014a, 2014b), we attempt to simplify his recommendations in modeling identity and clarify his progressive steps to have an accurate explanation in identity economics. Amartya Sen has an essential place in the development of Davis's thoughts in individual rationality perspective. For this reason, we would like to remind briefly about the contributions of Sen to the rationality concept of neoclassical economics. As we accentuated before, the core conflict of identity economic literature based on an intricate relation between personal and social identity. It points out the transition in understanding economic agents from atomistic to socially embedded. In this sense, in the literature, the first initiative came from Amartya Sen (1977). In the article on Edgeworth's rationality, he introduced a path-breaking approach to economic rationality (Costa-Font and Cowell, 2015).

The new psychological concepts related to consumer decision process and production activities, sympathy, and commitment, the limited rationality of economic agents, tried to be clarified. Regarding social norms, people are attached to certain groups. Adhering to particular social groups with a degree of proximity determines the context of a commitment to society. The concept of commitment defines identity with the others, which are different from the neoclassical atomistic understanding. It brought the idea of interdependent preferences that point out the emphasis on the interactive identification process. The concept of sympathy is also used as an equalization of intuitions between the agents. In the words of Davis;

> ”*Sympathy involves a concern for others that affects one's welfare directly, in making commitments one's welfare is only incidentally related to one's choice and not the reason for it*” (Davis, 2006a: 375).

Sen (1985) recommended using ordered individual preferences seeking for (i) self-centered welfare, (ii) self-goal achievement, and (iii) self-goal choice. He indicated a fundamental problem in the prisoner dilemma game, the conflict between private behavior and public achievement. The game restricts the value system of the individual. For the corporation, the most critical premises in the game are uncertainty and lack of knowledge rather than individuals' morality. In contrast, according to Sen, the individual has her goal priority in the decision-making process. If we can set the goal priority of the agent, then it would be easier to examine the motivational contradiction between individual and collective identity. Therefore, commitment is a kind of self-imposed restriction and deregulated parameter that weakens the linkage between individual welfare and choice of action. Besides, sympathy violates the self-welfare objective mechanism (Davis, 2006a). When the individual gives up her self-goal achievement, it means there is a commitment that points out social norms.

We put importance on the article of Darity Jr et al. (2006) because it covered the prominent objections and agreed to points in three dominant approaches in identity economics. He analyzed the approaches of Akerlof and Kranton, Amartya Sen and Kirman regarding the following questions; (1) ”how a single person can have different selves understood as a person's different social identities”; we can call it multiple self-problem (2) representation problem; ”how different persons can make up a single social group understood as their shared social identity”. Through following his argumentation, the authors briefly explain her major criticism. The critics on the model of Akerlof and Kranton (2000) point out the omitted interrelation between the social identities of the agent (Davis 2006a). Almost all work of Davis indicated the suppressed weight of the reflexivity of an individual in the objective function because the agent is incapable of managing more than one assigned social identity.

To eliminate multiple selves' problems and develop the models that reveal differentiated preferences, he suggested structuring identity function as a form of the production function. Additionally, sub-objective functions are supposed to be the components of the agent's objective function. Multiple sub-objective functions can be ordered to maintain a personal identity because people tend to have a personal identity form to feel more comfortable rather than being indifferent social context. According to Davis (2006a), Akerlof and Kranton could not answer the critical questions we referred to above. (1) In neoclassical understanding, although there is a matching measurement between the current and idealized form of social identity, ε, in Akerlof and Kranton (2000), multiple self-problem is omitted. Idealized social identity has an average characteristic that perfectly matches with the behavioral prescription. Besides, social norms are ad-hoc assigned social categories ' norms. Nevertheless, the identification process of the agent inferred internalized social norms.

Personal identity, self, defined with a set of self-image stock that each of them has a particular collection; implication indicates uniqueness. At the same time, the individual has a single specified social identity, as well. (2) Akerlof and Kranton (2000) avoided explaining the salient social identity. In Sen (2002), we see the endogenous social identity of the agent can define her choices and actions. Through the concepts of Sen (2002), reasoning, and self-scrutiny, the individual becomes rationally self-seeking. At the same time, the individual has a reasoning mechanism that can observe her behavior and get involved to change herself. The concept of self-scrutinizing makes the agent a reflexive actor for both self-decision and social categories. This mechanism provides the individual on how to choose the social identity and to decide how much commitment she should give to the social group. Although the basic capabilities of human beings are structures in self-scrutiny in Sen, he also underlines the obstacles to reach the basic capabilities that prevent have equal rights in the decision-making process.

The capability approach takes the variability of means into account because people cannot be capable of reaching human rights to be free in the decision-making process (Sen, 2005). Therefore, there may not be purely sovereignty of the self in Sen. The last critic of Davis (2006a) is on the complexity approach of Kirman (2002) based on the theory of social network. Kirman and Teschl (2004) present the first detailed psychological/philosophical analysis of identity in economics in which identity is defined with three questions; what, where, and who. The article considered the agent in differentiated social concepts.

According to Kirman (2002), the mainstream understanding of the agent under given preference orders and constraints did not realize where she lives in, how her social environment is, and importantly who is the agent, what are the personal characteristics of her and how she reflex her social conditions. He alleged that since Kirman and Teschl (2004), the differentiated economic output and segregation have been on the focus of economics without knowledge about the subject. In contrast, the agent can create, change, and learn; therefore, she is self-reflexive and can evaluate her actions. Not only the conditions of her but also her self-perception defines her. In summary, her history, experience, self-image and her potential to realize her desires shape the agent. Social interactions with many different subjects make the exchange relationship profitable 49 for the agent.

Under the knowledge about the agent, Kirman and Teschl (2004) called attention to the importance of welfare consideration to understand the full account of identity. Kirman and Teschl (2004) indicated a contradictory explanation of the motivation of human behavior in the identity model of Akerlof and Kranton (2000). They said that the social characteristics of the agent also have effects on her preferences. However, there is no mechanism to reflect the social characteristics. Therefore, it is not apparent to explain the motivation of her behavior; due to her preferences or due to her constraints by referring to the argument by Akerlof and Kranton (2000) that the motivations of the behavior would be unconscious.

On the other hand, they reminded Sen's capability approach that brought unconscious which homoeconomicus does not have (Kirman and Teschl, 2004). The article conducted a distinction between neoclassical utility maximization and identity maximization in Akerlof and Kranton (2000). For instance, in the gender discrimination model of Akerlof and Kranton (2000), if a woman does not choose a stereotyped job, she might lose her identity benefit. In contrast, according to Kirman and Teschl (2004), she can increase her utility maximization with her rational choices. Therefore, in the model of the identity of Akerlof and Kranton (2000), it is inevitable that giving up the benefits of identity brings the individual less utility. Social norms, rules, and traditions might be opposed to personal desires. When there is a kind of mismatching, there is no explanation in the utility maximization mechanism to present the change in behavior without modifying the constraint structures. Therefore, the utility maximization mechanism cannot reflex personal self-reaction. She might start to act as opposed to social prescriptions, even if the consequences are harmful to her, the mechanism cannot define the logical reasoning behind the behavior.

Kirman (1992, 1997) formerly used the Metzinger's Phenomenal Self Model (2003) summarized by Davis as follows; "the model reflexes a combination of neuroscience and psychology and means the sense we have ourselves as appears in consciousness which is ongoing and changing process" (Davis, 2006a). The reason for the dynamism of the process is the feedback relation between self-image and social context. Moreover, in A. Kirman and Teschl (2004), we see the ongoing changing in personal identity through interaction with social groups. All the dynamic process contradicts with an unchanged utility notion. According to this perspective, multiple selves' problem with its transparent nature reflects in all choices. Therefore, the phenomenal self contains deals in the all-multiple selves. Due to its invariant components, self generates the inter-temporal multiple self-problem, as well.

In Davis (2006a), the suggested objective function is a personal identity production function that embedded Akerlof and Kranton (2000)

$PI_j = PI_j\,[U_j(a_j\,,a- j,I_j\,]$ (3)

Davis (2006a) claimed that by the objective function called the embedded utility function, the multiple social identity problems could be solved because the individual can sustain the personal unity under the restrictions of the fragmented identity. We can make an extraction that the previous attempts majorly focused on the transform of the agent ontology from individualist to social. In contrast, Davis (2006a) revealed an objection to the dominance of socially determined agents and redefined the agent. The redefining agent referred to a sociological approach that Davis' point of view structured around. He explained the theoretical background of sociological analysis as follows.

> "*Through the sociological approach has antecedents in the idea of the 'looking glass self' of Charles Cooley (1902) and the symbolic interactionist thinking of George Mead*

> *(1934), current work on identity generally follows the structural approach of Sheldon Stryker(1980), which assumes, in contrast to Mead, social structures— and thus the self and identity—are relatively stable"* (Davis, 2006a: 355).

In the same sense, Davis (2006b) put importance on the approaches' assumption that social classifications in social science, artificial or by definitional attempts, individuals are interacted not only with social groups but also with many other social structures. In the book of Christoforou and Davis (2014), Davis's article "Social Capital and Social Identity: Trust and Conflict attempted to combine the terms R. D. Putnam (2000) bridging (between heterogeneous groups) and bonding (homogeneous groups) social capital by and relational and categorical social identity concepts of Brewer and Gardner (1996). At the same time, he introduces the concept of instrumental and non-instrumental rationality as a motivational reference in the decision-making process of combined mapping of social capital and social identity.

Through the distinction, he tried to explain the reasoning of differentiated relations of the individual with social groups. Instrumental rationality implies the means-ends rationality. It associates with attention to the consequences of an action. Non-instrumental rationality is generally explained regarding rules and values (both ethical and practical) which are taken to be intrinsically meaningful — the book "Social capital and economics: Social values, power, and social identity" mentioned about non – instrumental rationality in identity motivation which is particularly important in the history of ethics and the philosophy of Immanuel Kant.

A recent review of the literature on this topic during the last decade, the perspective of Kantian ethics in the decision-making process has been studied more in behavioral economics. We emphasize that even if the instrumental rational way of motivation improves utility and satisfaction of group members, people also motivate with non-instrumental rationality as being in a group, responsibilities, and the values of a group (Christoforou and Davis, 2014). Moreover, thus stand on their own apart from the issue of what consequences they may have Davis (2014a).

To have a composite relation between social identity and social capital, Davis (2014a) simplified his expressions. While categorical social identity with instrumental rationality motivation, the individual seeks for collective actions and considers values as. In relational social identity refers to social roles, instrumental rationality motivation defined as the same as in neoclassical understanding seeking efficiency and non-instrumentally considers rules. Taking into consideration slightly different approaches in social psychology and Putnam's approach (2000) in relational social identity, he structured his perspective on relational categories, which are more close to social psychology, because, in Putnam (2000), the difference between relational and categorical social identity referred within small social groups are intensively communicated. In contrast, the focus of Davis (2014a) is more on the larger group of people considered concerning interactions rather than likeness and similarities within the group.

Davis (2014a), takes the social identity theory is as a way to understand the conflict and incorporation of personal identity and social identity. Therefore, it is essential to examine the role of conflict in social capital theory. According to Putnam (2000), social conflicts the social space of the with corporations. Inserting conflict into social capital theory pointed out the explanatory impact of the concept; habitus by Bourdieu in the account of the evolutionary nature of social interaction concept. According to Davis (2014a), low of motion in social networks is well explained in Bourdieu (2000) that habitus presents ”the incorporated relation between the objective structures of society and the subjective role of agent” (ibid.: 9)

To make the complete argument that begins from bridging social capital and social identity theory referred though critics of instrumental rationality under the light of conflict solving mechanism of the individual in a contradiction between self-interest and social group belonging. According to Stigma Identity Threat Model by Steele (1997), social group conflict causes personal conflict, but the responsiveness of individuals depends on the composition of social group belonging, how much these social groups are stigmatized and how individuals handle the conflict. Davis (2014a) emphasized the dominance reference of categorical identity on relational social personal and its motivation. In his research on stratification, he traces the advances in the concept of stigmatized identity threat in social psychology.

Davis (2014b) considered the tendency of the social restratification process in a conflict between others' stigmatization of their social groups in interactive settings and the scarcity logic of individualist social ontology. To solve the multiple self-problem, he called it inter-sectionality that is the focus in all the articles of him in identity economics, and he suggests combining stratification and identity literature. In stratification, the individual is the representative agent of a group and able to reflect the average characteristics of the social group. In stratification economics, the description of inequality is group-based and in intergroup social conflicts. It is presumed that social identity equals personal identity. Therefore, we mention group-level inequality in stratification that personal identity does not matter because there is a direct relation between the individual and the social group. Ranking social identities is also another important emphasize of the article, due to defining the priorities in multiple selves, sub-objectives can be solved accordingly. To do so, he introduced relational (social role-based, interpersonal) and categorical (group-based, intergroup) social identity.

When the individual has social distance due to stigmatized or devalued social identity by the dominant society, she ordered a set of social identity by weighed coefficients in interactive social settings and in role-based, relational categories that are defined in relatively low in hierarchical level. In relational social identity, the individual can have more power to intervene. In this point, Davis (2014b) underlined the importance of Elmer's approach Ellemers et al. Ellemers et al. (1990, 2002) two concepts; mobility and ordered taxonomy for multiple identities. Attempt to enhance social identity, a kind of gaining higher status, can be successful with individual mobility from one group to another. However, individual mobility highly depends on the permeability of boundaries. Otherwise, to have a higher status can be only with the whole group members as a social change (Ellemers et al., 1990).

In Ellemers et al. (2002), the main parameters of central identity and its verified concerns under different social contexts examined. They asserted that they developed a taxonomy of reflections to different concerns when threats to identities and changing level of commitment that provides for ranking social identity categories. Consistently the following stratification, Davis (2014b) put the individual into stratification analysis that in a highly polarized society, the individual can be a representative agent of the particular. In contrast, in a less polarized society, it is still multiple self-problem. Therefore, individual self-play important role. Davis (2014b) claimed that according to the stigma-identity theory of social psychology, the critical parameter is the degree of commitment to the social group to analyze how to respond to stigmatization. He argued that if we do not consider individualist social ontology in our inequality analysis, in one sense, we reproduce social stratification.

3. Critique of Modeling Identity

3.1 Problematic Assumptions on Agents

3.1.1 Conceptual Ambiguity and Multiple-Self Problem

> *"In the recent literature on economics and identity, we find that identity is understood as a payoff, as a set of social categories, as an interiorized social norm, as the belief in profound personal values, as a perceptual lens or as non-instrumental deontological elements of action."*(Aguiar et al., 2010: 263)

The individual defines herself with a domain within any context and interacts with the others. However, Aguiar et al. (2010) added that there is no concrete reasoning to address the tie between identity and action. To reveal the tie, we need to know the social context and the salient identity of the agent. Moreover, to claim a strong tie between identity and action, we need continuous/regular patterns. Therefore, each existence should be defined in the related social frames. If it is possible to resolve or decompose the multiple identities of the agent, we will classify the identity impact on motivations.

The critical point is to determine the identity-related context in the model because not all sorts of identity determinations can be fit with the same modeling — biophysical references that are attributed to many meanings by the society, such as race and gender. Nationality, cultural or linguistic symbols, religion, social roles, job occupations, attitudes might differentiate with identifying characteristics of biophysical references.

In the models, the *identity* reflects a social identification process rather than a personal identity/self-image that inferred the internalization of social norms. Multiple self-problem comes up during the decision-making process. The representative agent would belong to different social categories with differentiated strength levels (Benjamin et al., 2010). The behavioral reaction depends upon the social frame. The weight of strength addresses the salient identity of her fits with the social frame.

Moreover, personal identity/ self-has, a set of self-image stock, refers to different social frames, too. Every single person owns a particular collection. The self-image stock is in a complex linkage with social identification. Its interrelated implication indicates the uniqueness or subjectivity of the individual. However, in the models, the individual has a single specified social identity and fail to contain the salient social identity of the individual. For instance, social groups are defined in competition to have resources, power, authority, and prestige (Abrams and Hogg, 1990). Accordingly, to understand discrimination between the groups, their salient characterization takes importance. If a social group identity delineates arbitrarily in any competition, the identity becomes more salient and face discrimination. When social identity is salient, representing group characteristics by an individual becomes more liable rather than by interpersonal level.

Rather than regarding the salient identity of the representative agent, Akerlof and Kranton (2000) considered *individual* as an embedded social agent. Although there is a matching measurement between the current and idealized form of social identity (ε_j), the ideal identity of the individual for herself remains ambiguous. There is no statement describing this parameter clearly. Therefore, it is safe to say that the multiple self-problem became emergent but not resolved in neoclassical models.

Davis (2006a) told that Sen could solve the problem with the concept of self-scrutiny. The agent manages multiple self-problem for deciding interaction levels with social categories. In his perspective, the self can represent the social identity it belongs to. He interpreted the individual in Sen as a socially embedded rational agent, who can evaluate the value and the objective of the interactions.

> *"People have multiple identities (Sen, 1999; 14), formed by their respective memberships to different groups, such as cultural, professional, or interest groups. However, "[g]iven the alternative identifications among which we can choose, the actual identities to which we can give recognition and priority are, to a considerable extent, ours to determine" (Sen, 2000)"* (Kirman and Teschl, 2004):.77]

Due to the unchanged utility notion, the unresolved problem leads to a contradiction within the dynamic process of interaction. In A. Kirman & Teschl (2004), through interaction with social groups, we see an ongoing change in personal identity. The agent is aware of her preferences. Therefore, she is self-reflexive and can evaluate her actions. Not only the conditions/social characteristics of her but also her self-perception defines her. In summary, her history, experience, self-image and her potential to realize her desires shape the agent.

Social interactions with many different subjects make the exchange relationship profitable for the agent.

Davis (2006a) suggested structuring identity function as the production function form to eliminate the multiple-selves problem. Therefore, we might be able to see the efficient allocation of multiple identities in differentiated preferences. Additionally, sub-objective functions are supposed to be the components of the agent's objective function to reveal the motivational basis. Multiple sub-objective functions can be ordered to maintain a personal identity because people tend to have monolithic personal identity forms to feel more comfortable rather than being in a different social context.

3.1.2 Autonomy Problem

Livet (2006) explained autonomy by referring to the concept of capability in Sen (2002). Autonomy explains an individual who can commit herself to her values and goals.

> "Autonomy is the capacity of revising preferences" (Sen, 2002:617; Livet, 2006: 327)

Through revisions of past actions, we can have a "justified path of revisions" that brings continuity of our identity. Each step of the action recursively following the next step. Therefore, each choice that we prefer to have a revision that refers to our commitment to ourselves. If there is more than one justifiable path of actions, we have the capability that offers us a smooth recursive continuity of self, autonomy. Accordingly, as an autonomous individual, we can structure our preferences.

In contrast, in neoclassical models neglect the identification process. One can assume that identification is constructed with justified path revisions. Even it might not be in a lifetime period. It is redefined continuously in interaction with society. The agent does not decide in an intertemporal period. Experience reasoning works just in a restricted time of repeating games. Most of the models explain the current time. The individual might be biased in her preferences without considering her experience even though future preferences might not be the function of past experiences, experiences shape anticipations. Therefore, it can be stated that the models consider the temporary dimension of the identity and ignore the autonomous character of the individual. This problem narrows down the subjectivity of the individual and embeds her in normative judgments.

3.1.3 Representation and Aggregation Problem

The motivation questions in this part are whether society is an aggregation of individuals and whether an individual can be a representative agent of a particular group. Modeling in neoclassical economics uses the representative agent for simplification. As Kirman (2002) discussed that, society is a composite of heterogeneous individuals, in contradiction, in economics, aggregate choices of the heterogeneous individuals presented as a homogeneous specific behavioral path.

> "*Well-behaved individuals need not produce a well-behaved representative agent; that the reaction of a representative agent to change need not reflect how the individuals of the economy would respond to change; that the preferences of a representative agent over choices may be diametrically opposed to those of society as a whole—it is clear that the representative agent should have no future.*" (Kirman, 1992:134)

Since the early studies, there has been a discussion on the representation problem that exists in the incorporated relation between social identity and personal identity. It carries the burden of the dilemma in explanation with the restricted mechanism of understanding.

The classical principle agent utility maximization is used to capture behavioral variation in differentiated identity; however, it asserts the universe of the inter-individual phenomenon. It is the same in identity economics that the representative agent is assigned in a social group with a set of stereotypes for behavioral prescriptions and norms that reflect average group behavior.

There is a quite similar mind in the classical game theory model, and all players come to the moment of decision with all of their preference orderings completely and categorically defined. This model, however, does not permit group-level preferences to be set, which significantly limits the use of classical game theory as a model of groups whose members possess sophisticated social relationships. This limitation is addressed by replacing categorical preference orderings with conditional preference orderings.

Without any doubt, identification is not a process only exists with the subjective assessment of the individual, but if the burden of the monetary and social cost exceeds the tolerable level, we may observe the differences at the individual level. Nevertheless, if theoretical models are not based on generalization and aggregation, it is not possible to model individual differences in dominant patterns.

3.1.4 Assignment Problem

In Akerlof and Kranton (2000), the explanatory variables of identity function (1) (c, E, and P) are given as a set of descriptions. They delineate idealized social identity with an average characteristic that perfectly matches with the behavioral prescription. Besides, social norms are ad-hoc assigned social categories ‘ norms. Nevertheless, the identification process of the agent inferred internalized social norms. Personal identity, self, defined with a set of self-image stock that each of them has a collection; implication indicates uniqueness. At the same time, the individual has a single specified social identity, as well.

However, it is not clear in the model whether or not the individual can choose her identity that she feels social belongs to or not. There is also ambiguity in the assignment in identities. There is no specified social frame, identity choice or assignment can refer to gender roles in households; race, ethnicity (Akerlof & Kranton, 2000), social categories, such as being jock or nerd (Akerlof & Kranton, 2002); job occupations (Akerlof & Kranton, 2005); gender roles in households. Although social frames and contexts differentiate which the individual faced, they present their model as a general explanation of any binary identification. However, the argument is still needed to be clarified because we have contradictory explanations in 2000 and 2010 as follows,

> "*Beyond actions, to some extent, an individual may also choose the category assignment c_j. Social categories may be ascriptive, and in general, the individual is likely to have some choice over identity, as indeed, people may even have some choice over their gender. Again, this 'choice' may be conscious.*" (Akerlof and Kranton, 2000: 719-720).

> "*In our analysis, we sometimes describe people as choosing their identity. Again, this phrasing could imply conscious choice, but we make no such presumption. People may try and fit in; they may feel more or less comfortable in different situations.*" (Akerlof and Kranton, 2010: 23)

Let us assume that by consideration of behavioral norms, the agent might choose her identity. However, also, social norms/behavioral prescriptions are exogenously defined and paired with binary identities. As we discussed before, the agent does not have the autonomy of her preferences. If she chooses her identity, then she fully internalizes the prescriptions/social norms of the identity, which means there is no grey area in the behavioral motivation of her. In either case, if the agent violates the prescription of the identity, she suffers from anxiety and cognitive dissonance.

Aguiar and Francisco finalize the discussion with these words; "*The rationality of an action is measured concerning correspondence with, or accommodation to, (socially) typified forms of behavior recognized by the agent. Akerlof and Kranton spoke of coinciding "with the ideal social category that others attribute to him.*" (Aguiar and Francisco, 2009: 558)

In our point of view, to oppose the individual normative conception of the neoclassical approach, the model matches the individuals with stereotype categories without considering freedom of choice within the choice theory. Thus, it becomes normative in a more sensitive topic, identity. For instance, Akerlof and Kranton's social identities are described with stereotypic categories. As a gender stereotyping, women (men) matched with beauty (aggression). Behavioral prescriptions are always exogenous to the model, excluding Fang and Loury (2005), Darity Jr et al. (2006), and Horst et al. (2006). For these reasons, it is not easy to claim, like Akerlof and Kranton (2005) wrote that we formalized the notion of identity, social category, norm, and ideal.

3.2 Contradictory Assumptions of the Models

Firstly, the ambiguous assumption is about the agent that the individual seems to be open to social influences. The agent tries to minimize the conflict between self-image and identity determined by society and seeks to preserve her identity by considering social effects. The critical ontological problem is the influence comes ex parte, just by social spheres.

One can accept that the individual might act entirely under social influence. However, the individual represents not only herself but also a collective identity of her social category. As a result, the individual's social category does not influence identity payoff. It will happen if she does not comply with the norms of her social category. At the same time, the behavior of other individuals belonging to the same identity as she affects the individual. However, the extent of this effect is implicitly given. The solution would be a model that is influenced by both the behavior of people belonging to the same identity and another identity (Darity et al., 2006).

Secondly, in the models, identity has been used as an instrumental tool for rationality to reach maximum utility. However, According to Augiar and Francisco (2008), economic rationality and identity rationality would conflict.

> "*There is a logical internal coherence based on the accommodation (correspondence or coincidence) of behavior to the expectations prescribed by the ideal social category. It follows a logic of utility maximization given the beliefs and desires of the agent. The problem is that the two lines of logic are not only different but do not have to be cumulative nor compatible. On the other hand, the two rationales may become increasingly incompatible depending on the emotions involved in the self-categorization of identity.*" (Augiar and Francisco, 2008:15).

For instance, because of social exclusion, the individual wants to isolate herself from the dominant identity because the cost of identity cannot be compensated. However, it is also necessary to work within the market, which is the necessity of economic rationality and to maximize the benefits. The model (Akerlof and Kranton, 2000) says that the individual tries to solve this conflict in favor of identity benefit, not regarding economic rationality. However, this is not an appropriate deduction for all identities. Many marginal identities in society have solved the conflict/dissonance with different methods of reconciliation.

Thirdly, in neoclassical economics, to explain rational preferences, the utility of preference should satisfy logical consistency, such as transitivity, reflexivity, and completeness. If one of them is violated, we cannot rank the preferences and reach to maximum utility. Davis (2006a) claims that the model of Akerlof and Kranton (2000) is needed to have an objective function of identity to rank the preferences.

Davis (2007) transforms Akerlof and Kranton's utility function (2000) to personal identity as a function of individual utility, which is, at the same time, a function of social identity. Almost all work of him indicated the suppressed weight of reflexivity of the individual in the objective function because the agent defined as incapable of managing more than one assigned social identity. To eliminate multiple selves' problems and improve the models to reveal the behavioral basis of differentiated preferences, he suggested structuring identity function as the production function form. Additionally, sub-objective functions are supposed to be the components of the agent's objective function. Multiple sub-objective functions can be ordered to maintain a personal identity because people tend to have monolithic personal identity forms to feel more comfortable rather than being in different social contexts.

3.2.1 Limited Interaction and Static Norms

Contrary to the atomistic perspective of human motivation in the decision-making process, identity economics does not consider the individual in an isolated environment. Although the individual has complex social interactions, in the models, there is a limited interaction universe, and even identity economics asserts its understanding of human behavior in a more complicated manner at the ontological level. Even if they seem to consider cognitive dimension by referring to the theory of cognitive dissonance (Festinger, 1962), in order to eliminate the dissonance, the agent uses her identity as an instrument to seek additional income and self-interest, However, when we consider emotional dimensions, people may prefer to suffer or be radical.

Previous articles define identity as passive, given, cyclical, and in the short run. The model of Darity et al. (2006) has striking characteristics that the agent with racial identity can change her strategy into racialist or individualist overtime. In the model, there are two indexed social groups, African and European. Changes in the benefits of racialism, the cost of altruism, and the cost of racial antagonism will alter the fraction of racialists, individualists and within the social groups change the distribution of income between groups. However, each of the payoff parameters is most certainly affected by the distribution of wealth. In each round, agents randomly interact, and their social group interaction is discounted with the probability. The inter-group interaction probability determines the growth rate of racialism. Overall, the impact of racial identity and inter-racial differences on economic and non-economic outcomes can be examined in the model. In many aspects, the article has a superiority to explain the persistence of racial discrimination. Wealth disparities between races regenerate supremacy of properties though imposing racial impacts as a "*cumulative effects of past and present*" (Darity et al, 2006:284).

In the models, norms or behavioral prescriptions are static. Individuals cannot affect society. R. E. Kranton (2016) would like to develop the weak side of the theory and focused on the question from where the social norms come. She initially highlighted social movements, family, economic gain, political power, and historical patterns of division of labor. These are the micro-foundations of identity in the article. The research can be evaluated as a defense of identity economics and a summary of the recent research after their first research (Akerlof & Kranton, 2000). Kranton redefined the utility of identity with the words; People could derive esteem and achieve self-consistency from any number of possible matches between norms and number of behaviors. However, there is no probability coefficient in their basic prototype model and extended implication for the model for Economics of Exclusion and Poverty (Akerlof & Kranton, 2000). To understand the mechanism, we attempt to explain the identification process and interaction universe of identities in society.

> "*…Identification makes no sense outside relationships, whether, between individuals or groups, there are hierarchies or scales of preference, of ambivalence, of hostility, of competition, partnership and co-operation, and so on..*" (Jenkins, 2008:6).

The social distinctions consider similarities and differences of others that referred to hierarchical order and social norms of the dominant society. The hierarchical order of dominant identity defines the preferences of social interaction with diversified identities. The hierarchical order of an individual and society may conflict due to different values and interests. Nevertheless, norms might reflect historical backgrounds and social dynamics that impact on each interaction. There is also an inherent conflict between the norms and the individual's own experiences. The hierarchy of the individual is a dynamic process that is emphasized by social hierarchy and norms and redefines preferences and behavioral tendencies in each particular social frame. An individual may test the social hierarchy of identities with her own experience. It refers to the identification process which is simultaneous in the realization of similarities and differences with the others. The individual accumulates the images of her experiences and conclusive results of the conflict of interest between her and society. However, for the member of the dominant identity, commitments to the norms might be marginalized during the interaction with different people belong to the hierarchically lower identity.

The dominant social identity is linked to the norms with commitments. If one of the salient characteristics of the minority group conflicts with the dominant identity in values, the depth of the clash might be defined by the degree of commitment by the dominant social identity members. The power of the commitment depends on the "solidity" of social norms. The solidity of social norms implies that norms are embedded in institutions of society. Formed and even legalized forms of the norms lose their subjectivity (normative perception) and become absolute. If an individual who tries to present her subjectivity is confronted with a strict hierarchy of /high solidity of social norms, to prohibit identity loss, she wants to be in interaction with those who are most similar to her. She tends to detach herself from society from the dominant society.

3.2.2 Methodological Problems

The empirical research based on surveys seems to present appropriate results in labor market outcomes rather than analysis of inequity behavior in social practices. Empirical models are successful since the endogeneity problem can be eliminated because the explanatory variables might the cause of other phenomena that feed each other in the same social framework. Therefore, empirical testing of the model is still developing. It is not easy to say that there is a straightforward behavioral pattern social frame.

The works of Akerlof and Kranton (2002, 2005, and 2008) developed models concerning sociological and ethnographic studies. However, in the recent research on identity economics, Akerlof and Kranton have used different methods to validate the theory. While Kranton adopts the more external approach to identity, Akerlof addressed the importance of narratives and beliefs.[3]

Kranton considers experimental research as the most appropriate to test the theory of identity economics. Huettel and Kranton (2012) addressed a new research area on behavioral economics, neuro-economics, incorporation between theoretical frameworks of identity economics and experimental research methods of neuroscience. Kranton continued her experimental research on groupie behaviors in democrats and republicans that underlined the relationship between extreme behavior and intergroup bias. She analyzed inequity behaviors regarding in-group and out-group differentiation (Kranton et al., 2016). In the same social context, they revealed more-likely individual trait in-group behavior that is differentiated from the previous results in another experimental research (Kranton et al., 2017). All the results of experimental research by Kranton have presented a systematic heterogeneity in social preferences regarding differentiated social contexts.

Akerlof and Snower (2016) focus on the omitted role of narratives in economics. They claimed that although the economic inadequacy became apparent Soviet Russia, the narratives of powerful politics played an important role in maintaining the power of the Soviet regime. They presented a brief historical account of behavioral motivations in Soviet time that still has an impact on current economic incentives. Its content might be too historical to be published in the Journal of Economic Behavior and Organization. Primarily, the basic notion refers to Bruner and Minds (1986) and Bruner (1990) who thought about understanding the world in two ways; (i) the pragmatic mode of thought that based on empirical observations, (ii) narrative mode based on people's motives and intentions.

4. Conclusion

Identity economics has acquired its literature in the last twenty years. Nevertheless, the theoretical and methodological consistency of the topic is still quite weak, or the claims are no longer as sharp as it was at the beginning. In the theoretical level, Akerlof and Kranton do not abandon the neoclassical approach. It can be asserted that they continue their modeling by simplifying social phenomena as variable and mechanizing them, self, social identity, norms, with a rough

3 Internal approach to identity modeling refers cognitive/mental process; such as beliefs, desires and preferences. Whereas, external approach to dentity is closer to the orthodox theory and methodology of rational choice that does not permit the reality of any mental process or thought that is not revealed directly by an action; it is the theory of revealed preferences with the axioms of microeconomics; such as transitivity, reflexivity, and completeness.

reductionist way, although they referred social psychology and sociology in all their research. By doing so, reasoning and causality relation might be biased, because the concepts they used are interrelated and do not have certain compromise opinions in all identity manners, such as gender, race, ethnicity, and religion.

Except for Davis, there is no attempt to clarify the arguments in the literature. For most of the followers of Akerlof and Kranton, identity has been considered as a variable rather than a vital part of the mechanism in explaining the behaviors. Davis developed critiques to achieve the theoretical simplicity of identity economics. Although identity is a very complex concept, Davis insists on explaining it in an economic mechanism. Davis developed critiques to achieve the theoretical simplicity of identity economics. Although identity is a very complex concept, Davis insists on explaining it in an economic mechanism. However, there are critical analyses addressed the autonomy of personal identity and internal motivations of human behavior.

In our opinion, instead of rewriting on the concepts already discussed in other social sciences, it would be more valuable to strengthen our methodology. Experimental research seems to be the applicable methodology of identity economics. Kranton has not got a smooth behavioral path in her research yet. The results of experiments provide us to claim a systematic heterogeneity in social preferences (R. E. Kranton, 2016; R. Kranton et al., 2017). However, she still does not have strong evidence to support the same claims in the theory of identity economics. Additional to experimental research, using ethnographic and sociological field researches can support the methodology. For instance, the Identity and Schooling article, which we consider is a case in point regarding the purpose and result consistency, is almost a reproduction of Coleman's sociological research.

Modeling identity might be evaluated as full of incoherence due to many problems that we criticized. However, identity economics bring us a broader parameter to understand differentiated social characteristics and preferences. We can try to simplify the modeling of identity and clarify progressive steps in the literature considering critical recommendations.

References

Abrams, D., & Hogg, M. A. (1990). An introduction to the social identity approach. *Social identity theory: Constructive and critical advances*, 1–9.

Akerlof, G. A. (1997). Social distance and social decisions. Econometrica: *Journal of the Econometric Society*, 1005–1027.

Akerlof, G. A., & Kranton, R. (2010). Identity economics. *The Economists' Voice*, *7*(2).

Akerlof, G. A., & Kranton, R. E. (2000). Economics and identity. *The Quarterly Journal of Economics, 115*(3), 715–753.

Akerlof, G. A., & Kranton, R. E. (2002). Identity and schooling: Some lessons for the economics of education. *Journal of Economic literature, 40*(4), 1167–1201.

Akerlof, G. A., & Kranton, R. E. (2005). Identity and the economics of organizations. *Journal of Economic Perspectives, 19*(1), 9–32.

Akerlof, G. A., & Kranton, R. E. (2008). Identity, supervision, and workgroups. *American Economic Review, 98*(2), 212–17.

Akerlof, G. A., & Snower, D. J. (2016). Bread and bullets. *Journal of Economic Behavior & Organization, 126*, 58–71.

Akerlof, G. A., & Yellen, J. L. (1990). The fair wage-effort hypothesis and unemployment. *The Quarterly Journal of Economics, 105*(2), 255–283.

Arrow, K., et al. (1973). The theory of discrimination. *Discrimination in labor markets, 3*(10), 3–33.

Arrow, K. J. (1971). Some models of racial discrimination in the labor market (Tech. Rep.). RAND CORP SANTA MONICA CA.

Aguiar, F., & de Francisco, A. (2009). Rational choice, social identity, and beliefs about oneself. *Philosophy of the Social Sciences*, *39*(4), 547-571.

Aguiar, F., Brañas-Garza, P., Espinosa, M. P., & Miller, L. M. (2010). Personal identity: a theoretical and experimental analysis. *Journal of Economic Methodology*, *17*(3), 261-275.

Battu, H., Mwale, M., & Zenou, Y. (2007). Oppositional identities and the labor market. *Journal of Population Economics, 20*(3), 643–667.

Battu, H., & Zenou, Y. (2010). Oppositional identities and employment for ethnic minorities: Evidence from England. *The Economic Journal, 120*(542), F52–F71.

Baumeister, R. F. (1987). How the self-became a problem: A psychological review of historical research. *Journal of personality and social psychology, 52*(1), 163.

Becker, G. S. (1957). *The economics of discrimination: an economic view of racial discrimination.* University of Chicago.

Benhabib, J., Bisin, A., & Jackson, M. O. (Eds.). (2010). *Handbook of social economics*. Elsevier.

Benabou, R., & Tirole, J. (2007). Identity, dignity, and taboos: Beliefs as assets.

Benjamin, D. J., Choi, J. J., & Strickland, A. J. (2010). Social identity and preferences. *American Economic Review, 100*(4), 1913–28.

Blader, S. L., & Tyler, T. R. (2009). Testing and extending the group engagement model: Linkages between social identity, procedural justice, economic outcomes, and extrarole behavior. *Journal of applied psychology*, *94*(2), 445.

Bourdieu, P. (2000). The politics of protest. An interview by Kevin Ovenden. *Socialist Review, 242*(18–20).

Brewer, M. B., & Gardner, W. (1996). Who is this" we"? Levels of collective identity and self-representation. *Journal of Personality and Social Psychology, 71*(1), 83.

Brown, R., & Capozza, D. (2016). *Social identities: Motivational, emotional, cultural influences*. Psychology Press.

Bruner, J., & Minds, A. (1986). *Possible Worlds.* MA: Harvard University Press, Cambridge.

Bruner, J. S. (1990). *Acts of meaning (Vol. 3)*. Harvard University Press.

Christoforou, A., & Davis, J. B. (2014). *Social capital and economics: Social values, power, and social identity* (Vol. 20). Routledge.

Costa-Font, J., & Cowell, F. (2015). Social identity and redistributive preferences: a survey. *Journal of Economic Surveys, 29*(2), 357–374.

Darity Jr, W. A., Mason, P. L., & Stewart, J. B. (2006). The economics of identity: the origin and persistence of racial identity norms. *Journal of Economic Behavior & Organization, 60*(3), 283–305.

Davis, J. B. (2006a). Akerlof and Kranton on identity in economics: inverting the analysis. *Cambridge Journal of Economics, 31*(3), 349–362.

Davis, J. B. (2006b). Social identity strategies in recent economics. *Journal of Economic Methodology, 13*(3), 371–390.

Davis, J. B. (2009). Identity and individual economic agents: a narrative approach. *Review of Social Economy, 67*(1), 71–94.

Davis, J. B. (2010). *Individuals and identity in economics.* Cambridge University Press. Davis, J. B. (2013). The theory of the individual in economics: Identity and value. Routledge.

Davis, J. B. (2014a). Social capital and social identity: Trust and conflict. In *Social capital and economics* (pp. 120–134). Routledge.

Davis, J. B. (2014b). Stratification economics and identity economics. *Cambridge Journal of Economics, 39*(5), 1215–1229.

Ellemers, N., Spears, R., & Doosje, B. (2002). Self and social identity. *Annual review of psychology, 53*(1), 161–186.

Ellemers, N., Van Knippenberg, A., & Wilke, H. (1990). The influence of permeability of group boundaries and stability of group status on strategies of individual mobility and social change. *British Journal of Social Psychology, 29*(3), 233–246.

Fang, H., & Loury, G. C. (2005). “Dysfunctional identities” can be rational. *American Economic Review, 95*(2), 104–111.

Festinger, L. (1962). *A theory of cognitive dissonance* (Vol. 2). Stanford university press.

Freud, S. (1921). Group psychology and the analysis of the ego.

Hogg, M. A. (2001). A social identity theory of leadership. *Personality and social psychology review, 5*(3), 184-200.

Hogg, M. A., & Vaughan, G. M. (2014). *Social psychology (vol. 7)*. Pearson.

Horst, U., Kirman, A., & Teschl, M. (2006). Changing identity: the emergence of social groups.

Huettel, S. A., & Kranton, R. E. (2012). Identity economics and the brain: uncovering the mechanisms of social conflict. *Philosophical Transactions of the Royal Society of London B: Biological Sciences, 367*(1589), 680–691.

Jenkins, R. (2008). *Social identity*. Routledge

Kirman, A. P. (1992). Whom or what does the representative individual represent? *Journal of economic perspectives, 6*(2), 117-136.

Kirman, A. (1997). The economy as an evolving network. *Journal of evolutionary economics, 7*(4), 339–353.

Kirman, A. (2002). Economic networks. *Handbook of Graphs and Networks: from the Genome to the Internet,* 273-294.

Kirman, A., & Teschl, M. (2004). On the emergence of economic identity. *Revue de philosophie économique, 9*(1), 59–86.

Klor, E. F., & Shayo, M. (2010). Social identity and preferences over redistribution. *Journal of Public Economics, 94*(3-4), 269–278.

Kranton, R., Pease, M., Sanders, S. (2016). Group bias, identity, and social preferences. Unpublished working paper.

Kranton, R., Pease, M., Sanders, S., & Huettel, S. (2017). Deconstructing bias: Individual groupiness and income allocation (Tech. Rep.). Working Paper.

Kranton, R. E. (2016). Identity economics 2016: Where do social distinctions and norms come from? *American Economic Review, 106(*5), 405–09.

Livet, P. (2006). Identities, capabilities, and revisions. *Journal of Economic Methodology, 13*(3), 327-348.

Metzinger, T. (2003). Phenomenal transparency and cognitive self-reference. *Phenomenology and the Cognitive Sciences, 2*(4), 353–393.

Phelps, E. S. (1972). The statistical theory of racism and sexism. *The American Aconomic Review, 62*(4), 659-661.

Putnam, R. D. (2000). Bowling alone: America's declining social capital. In *Culture and politics* (p. 223–234). Springer.

Sen, A. (1985). Goals, commitment, and identity. *JL Econ. & Org., 1*, 341.

Sen, A. (1999). The possibility of social choice. *American Economic Review*, 89(3), 349–378.

Sen, A. (2002). Opportunities and freedom. *Rationality and Freedom*, 583–622.

Sen, A. (2005). Human rights and capabilities. *Journal of human development, 6*(2), 151–166.

Sen, A. (2007). *Identity and violence: The illusion of destiny*. Penguin Books India.

Sen, A. K. (1977). Rational fools: A critique of the behavioral foundations of economic theory. *Philosophy & Public Affairs*, 317–344.

Sherif, M. (1954). *Experimental study of positive and negative intergroup attitudes between experimentally produced groups: Robbers cave study*.

Shayo, M. (2009). A model of social identity with an application to political economy: Nation, class, and redistribution. A*merican Political science review, 103*(2), 147–174.

Steele, C. M. (1997). A threat in the air: How stereotypes shape intellectual identity and performance. *American Psychologist, 52*(6), 613.

Tajfel, H. (1970). Experiments in intergroup discrimination. *Scientific American*, *223*(5), 96-103.

Tajfel, H. (1972). Experiments in a vacuum. In J. Israel & H. Tajfel, *The context of social psychology: A critical assessment.* Academic Press.

Tajfel, H. (1974). Social identity and intergroup behavior. Information *(International Social Science Council), 13*(2), 65–93.

Tajfel, H. (1978). *Intergroup behavior. Introducing Social Psychology*.–NY: Penguin Books, 401– 466.

Turner, J. C. (1982). Towards a cognitive redefinition of the social group. *Social identity and intergroup* relations, 15–40.

Turner, J. C., Hogg, M. A., Oakes, P. J., Reicher, S. D., & Wetherell, M. S. (1987). *Rediscovering the social group: A self-categorization theory.* Basil Blackwell.

Valtonen, J., et al. (2014). Social identity economics (Unpublished doctoral dissertation). Wichardt, P. C. (2008). Identity and why we cooperate with those we do. Journal of Economic Psychology, 29(2), 127–139.

Wundt, W. M., & Schaub, E. L. (1916). *Elements of Folk Psychology*. Transl. By EL Schaub.