Social influences of economic decision making: an identity economics approach

Dr. László Tóth[31], *Kende Rados*[32]
DOI 10.29180/9786156342560_11

Abstract
People make economic decisions not on a purely rational basis but driven by an identity of who they are or desire to become, through motivations and norms. These motivations cause decisions made, to be biased, instead of being based on a logical analysis of all accessible information. Thus, the emerging field of identity economics examines psychological factors to enhance our understanding of the decision-making process of economic actors. Our paper describes how utilizing the concept of social identity as part of identity economics can provide an explanation for the motivation-driven decision-making. We illustrate through case studies how individuals change their decisions based on which dimension of their social identities are salient, influencing their motivations through which social group they are members of or potentially want to belong to at the moment of decision-making. Additionally, there is also the issue of the individual's outlook of the future as a factor of behavior, how they perceive their identity in the future in terms of emotions, determination and their vision of the future. Further research in the field of identity economics will contribute to a more accurate understanding of economic decision-making behavior, since the mainstream economics approach and current alternative approaches are limited in their abilities to fully explain human economic behavior.

Keywords**:** identity economics, social identity, decision-making, transaction cost, social environment

"Economists view economic actors as self-interested - And when the definition of the self changes, so does self-interest" (Shayo, 2020, p. 356.).

INTRODUCTION

Would anybody give more tips while on a date or when they are dining with their business clients as opposed to when they dine alone? According to empirical research, (Conlin, Lynn and O'Donoghue, 2003) tipping behavior depends on internalized social norms and thus such behavior varies across cultures and across social settings, such as who the people are around us. But why would anyone tip a waitress differently dependent on who is joining them for a meal

[31] BBS FIMB Department of International Economics, toth.laszlo@uni-bge.hu
[32] Independent Researcher, radoskende@gmail.com

in a restaurant? Attempting to answer such questions calls for the inclusion of the social environment, as an explanatory factor into our analysis of economic decision making. In this paper, we will show the newly emerging field of *identity economics* and how it can help us linking the internal (cognitive) world of the decision maker with the social environment and its influence on the economics actors' behavior. The aim of this short essay is to highlight a possible direction that might foretell a conceivable future development path of economics as a science.

A brief history

As early as the late 19^{th} century, Veblen (1899) pointed out the peculiar behavior observed in the newly forming consumer society, where the members of the so-called leisure class, with the ability to accumulate disposable income, would engage in conspicuous consumption. Veblen emphasized that people are willing to spend resources to enhance or to maintain their social standing or status. Accordingly, it seems that people's economic choices are greatly influenced by who they are or who they desire to become. Of course, Veblen's observation was only one of the first signs of realizing the socially embedded nature of economic decisions.

It is well known that models of mainstream economics consider human beings as rational individuals, who maximize their own utilities without considering other people's payoffs. This restrictive view of economic decision makers is based on the homo economicus model. According to this portrayal of economic agents, economic decisions are made by the individual agent themself, without considering the exchange environment and its changes at all. In other words, economic decisions seem to be made in a "vacuum". Such an approach has been criticized by many from outside of economics and from within as well.

Behavioral economics was developed to challenge the unrealistic assumptions of rational choice and expected utility theories by pointing out that the erroneous decisions often observed when studying economic agents' behavior cannot be considered as simple random instances of irrationality. Behavioral economics was able to establish that there is a pattern in our irrational behavior. These advances were greatly influenced by the findings of cognitive psychology. However, cognitive psychology itself also mainly focuses on internal processes, while excluding the consideration of the influence of external factors on our economic decisions.

In economics, another school of thought has developed, alongside with behavioral economics, which emphasizes the role of the external environment and the embeddedness of economic transactions. This stream of research has united under the rubric of institutional economics. Researchers of institutional economics claim that to properly analyze economics transactions, we need to recognize the importance of institutions, understood as the "*rules of the game*" (North, 1992). According to institutionalists, both formal and informal rules can significantly influence economics outcomes. Only by describing and analyzing the institutional environment, can we truly understand economics agents' behavior.

Clearly, both behavioral economics, with its focus in the internal cognitive processes, and institutional economics, with its emphasis on the external environment, raise valid claims and concerns about the traditional, mainstream approach of economics. From this observation, the question arises: Can we combine or link these approaches without overcomplicating our analysis? In other words, in what direction will economics as a science develop in the future? Will it remain within the confines of mainstream economics and its methodological approach? Will one of the newer schools steer economics towards new directions and even new methodological approaches? In our paper, we will call attention to a relatively new approach, namely: *identity economics*, which we believe will be able to link the internal world of the decision maker with the external environment, while paving the way for a new direction in economics for the future.

The aim of our paper is not to enumerate the possible directions of the future development of economics as a science, but to outline one of a likely direction, as we see it now. In our current work, we set out to introduce and review some of the main approaches to identity economics, and through the description of some notable empirical cases we plan to establish the rational for considering this approach as a valid alternative to current approaches.

Since identity economics is a relatively new field, there is no unified theory or coherent literature present, hence our paper will begin by reviewing the most important approaches to the topic. Such a review is important, as it is apparent that these attempts to include identity into economic analysis are very convoluted. As it will be shown, this area of research is strongly characterized by diverging paths, lack of attempt of building on each other's work, and no coherent definitional basis for the basic concepts. Yet, the review could be valued as an enumeration of diverging approaches within a new field that in the future might lead to a synthesis, resulting in a coherent field or school.

1.1. REVIEW OF THEORETICAL APPROACHES TO IDENTITY ECONOMICS

In this section, we will provide a description of the main approaches to identity economics. We are beginning our review with the works of George Akerlof and Rachel Kranton, who are credited with bringing identity economics to the forefront of attention.

Akerlof and Kranton – identity as part of an individual's utility function

Identity economics introduces psychological and sociological concepts as factors which influence how individuals make economic decisions. Akerlof and Kranton (2000) introduce the person's identity or sense of self – who they are and who they want to be – into economics. The new viewpoint sees a person not as a singular individual without connections to the environment, but as a member of society. They argue that the rational utility maximization theory is inadequate to accurately explain how individuals make economic decisions. To remedy the problem, a new utility function was developed to incorporate social identity as an extension.

In the model, a person's sense of self determines how they should behave, dependent on the associated social categories. Social difference is an important factor, which relates to how a person answers the question of who they want to be. Salient identity can provoke detrimental, non-utility maximizer behavior, with the goal of conforming to a norm or to salve a damaged identity. Gender is one such aspect of identity which illustrates; how in a society, the assigned identity of a "man" or a "woman" has social norms and ideal physical attributes associated to it, that individuals strive to conform to. Violating the criteria generates negative emotions like anxiety and discomfort, both in the person and in others.

The authors also discuss externalities stemming from social identity. As an example, they argue that, from a social expectations point of view, dresses are associated with femininity and men are not supposed to wear them. If a man wears a dress, it causes negative externalities for other men, whose identities are threatened by the act, causing further externalities due to responses from other men. Overall, the authors consider the choice of identity to be the most important economic decision to be made. That is, a person chooses who they want to be, whether consciously or unconsciously. There are limitations to this choice, which alter the person's wellbeing as influenced and dictated by the social environment.

Akerlof and Kranton (2010) further elaborate on their concept of identity economics by detailing that individuals value goods depending on the relational proximity to their social identities. Goods, compatible with the salient identity, give positive utility when acquired, while unideal goods, unsupported by the effective social norms, are avoided due to their negative association with utility. For example, smoking in the 20th century was an encouraged, socially acceptable activity for men, while female smokers were looked down upon. These social norms changed when media campaigns started to appear, showing women partaking in smoking with positive connotations. The change of the media portrayal, had a behavioral effect, where women started striving to fit the new social norms by smoking alongside men. In the socially unaccepted period, a woman smoking would incur a loss in identity utility, whereas, she would gain identity utility from smoking post social norm shift.

Additionally, the authors argue that identity economics is also applicable to the economics of organizations. There is a positive relationship between work effort and remuneration, which is complicated by the existence of social categories. In this context there are the in-group members, those who identify with the values of the organization, and the out-group members who do not. The membership in these groups determines whether utility is gained or lost by exerting work-related effort. In-group members gain utility by putting in work to do their job to the best of their abilities, while out-group members lose utility by having to work too hard. In order to create an equal utility environment within the workforce, insiders would need to be paid less and outsiders paid more. The costs associated can be reduced by converting outsiders into insiders through changing their intrinsic motivations.

Education is another area where social identity is present and influences behavior. As an example, a student who only gets accepted into a university that was last on their list might not be enthusiastic about studying there, and as such have a low desire to conform to the requirements and the norms associated with it. This behavior would be demotivating, leading to low performance and, potentially, self-destructive behavior, wasting the opportunity to study and learn. This student would be considered as an outsider, who loses utility from doing school work.

On the other hand, a student who gets into their most desirable university would most likely be very enthusiastic about studying there, and would adopt the school's norms. In this case, that person would exhibit positive behavior, both for themselves and for the other people sharing the social identity. As the authors argue, the best schooling is where the student wants to be a student. Students identifying with the university and having the salient identity of being a student of the given university, directly correlates with the social status of the professors, as motivational professors are seen as successful, which success is reflected by the student's good academic performance. The enthusiastic student would be considered as an insider, who gains utility from doing school work with care. Schools can also influence students to become insiders. Putting in effort and earning academic achievements are the social norms associated with the students, meaning that students who conform to these standards are more likely to identify with the insider social group to gain utility instead of losing it.

In the job market, identity economics explains how gender segregation, in different jobs, is influenced by what jobs are socially expected of which gender. The segregation can be reduced by changing the responsible social norms to make it accepted and encouraged for both genders to take the jobs they want to, as opposed to what is acceptable for them. Racial differences are similarly affected in the job market, where identity dictates how different groups are viewed in terms of working or non-working. A discriminated-against minority would be disadvantaged in the insider working group as they are not expected to be there. Thus, if that person remains an outsider but also works, they would lose utility over not working. To change this issue, the insider identity needs to be changed to accommodate the racial groups eliminating utility loss.

Amatya Sen – identity as the basis of conflict

Sen (2007) looks at social identity from the conflict-generating perspective; how different salient identities and social groups can clash. Identity is formed based on a sense of history or cultural affiliation towards the members. This identity can be inclusive, but can also exclude others who do not share the group's values and cultural ties. Although an individual can have multiple identities, a strong bias towards one of them can lead to conflict and neglect of the others. From Sen's example, there is a person who is a Hutu, a laborer, from Kigali, a Rwandan, an African and a human being. These are all identities the person has, but not all are salient at once. That person can be persuaded to feel strongly about the identity of being a Hutu, who are hostile to Tutsis, an out-group, at the detriment of other possessed identities. They would conflict with each other, even though they have more social groups in common with the other as both being from Kigali, being Rwandan, African, laborers, and human beings.

The author argues that culture and communities have an identity fostering effect on group members that encourages a singular view on group membership, instead of embracing heterogeneity. This has the inherent effect on individuals to be more susceptible to conflict with other groups due to the focus differences, even if they share many common traits and cultural ties. Sen (2007) makes a distinction of two ways how cultural diversity exists. On the one hand, there is a view of society in a federation that prioritizes different communities and religions as separate groups under a collective, such as a nation. This view is criticized as conflict generating. On the other hand, there is an inclusionary multiculturalism where there is freedom of choice and action. Overall, encouragement is needed for freedom of choice and reason in regards to what groups to be members of, while it is important to be critical of historical and cultural fundamentalist influences which lead to emphasizing the differences as opposed to the similarities of the groups.

Bénabou and Tirole – identity as the basis of morality

Bénabou and Tirole (2011) argue that the existence of the economic man is disproven because of how people tend to behave morally even in interactions where their identity is hidden, with no concern for what others think about their behavior. However, what replaces the model is not clear, because, when framed differently, using weak arguments, morally right behavior can change to selfish behavior. The authors develop a model of moral behavior, which seeks to explain how moral identity influences decision making. On what they call the "demand side" are aspects that drive an individual to make a decision, these fulfill utility expected from economic or social assets, self-esteem increases, or a moral sense preventing or facilitating certain decisions. On the "supply side", there are the identity investments, which are derived from the notion that the individual is not aware of all of their motivations, they judge themselves, or their own identity, by their own actions. This provides a dilemma where they need to factor in how each decision would reflect on them from a moral viewpoint and whether it would portray them in a positive or negative way.

The behavior of morality is explained by arguing that individuals are not in possession of all available information about themselves. This way, individuals are likely to exercise behavior that is aimed at improving their identity and exploring their deep preferences of generosity, loyalty and faith. They can be affected by subtle changes in salience regarding cues and reminders of personal responsibility. These investments in self-exploration are dependent on how strongly a person feels about their identity, influenced by previous conclusions of information gathering. If a person has a weak connection to their identity, manipulations to that identity can create an effect of being more receptive to changing their identity towards the manipulation. Conversely, a person with a strong sense of identity would be firmer about staying true to their stance and not be as easily influenced by manipulations.

The identity preferences of individuals are also linked to others in social groups, which influence what actions are acceptable, based on whether they conform to or deviate from norms and morals. The behavior of in-group members also has an impact on identity, as they are in a shared group due to shared values. However, if the group members commit actions that are in violation of a group's standards, the existing identity of the individual or the future investments in it will lose value. On the other hand, a deviant action by the individual would cause other in-group members' actions to now be seen as threatening to the individual's identity. The same agent might act selfishly or selflessly depending on the current situation and how they relate to the individual's values, that is, if there is a way to frame a choice as being compatible with the desired identity an otherwise immoral choice can be seen as the right choice.

The model also offers an explanation for why people make escalating commitments, which are when the marginal benefits of continuous investment are too small to rationally justify. To explain it, take as an example the accumulation of wealth by means of working. A person might work because they see the accumulation of wealth as the means to happiness and the advancement of social status. This can lead to overdoing it to such a degree where the person continues to work until late evening every day, minimizing their free time and doing it to the detriment of their own health. At that point, the marginal gains of wealth are rationally not worth the sacrifices involved, but investment in the identity taken too far causes an imbalance. This is further compounded by the effect of oppositional behaviors, where an investment into one identity, for example, a wealthy social status, would make investment in another identity, for example, a hobbyist climber, seems less desirable, further emphasizing the accumulation of wealth to the detriment of everything else.

Davis – introduction of the social individual

Davis (2011) argues that economic rationality needs a rethinking centered on the individual and identity. Human rationality is shaped by the informational structure of the environment, while the individual's identity is shaped by the social environment. This rethinking should be applied in the behavioral economics space too, as related research mostly neglects the explanatory study of the identity of individuals, instead focusing on mental processes that influence decision making. The focus on the heuristics and biases approach, along with prospect theory, (Kahneman and Tversky, 1979) and libertarian paternalism focusing on nudge interventions (Thaler and Sunstein, 2003) is pointed out as the line of research focused on mental processes, which treats the rationality of people and their individuality as separate issues. These approaches forego the issue of identity to focus on uncovering cognitive errors influencing judgement, processes and anomalies in decision making.

Additionally, Davis (2011) critiques Akerlof and Kranton's (2000) approach to identity economics as being too conservative about how it deals with transforming the atomistic individual into a social individual. The model shows a person with a collection of multiple, disunified selves, but fails to consolidate it into a realistic portrayal of a distinct single person with multiple selves. The atomistic individual conceptions can only treat individuals as distinct and independent based on their own identity characteristics. However, these identities are separate from each other, which makes the models unable to explain how these identities create a functional person who acts as a single agent, rather than separately acting selves.

The author argues that atomism, as a basis to explain social economic decision making, is not the right approach, as it ignores the relationships between individuals. As such, further research should focus on this link between individuals, which factors in the external environment and the social relationships. Individuals are distinct and independent because social interaction in the world works in an intertwined way, where individuals are influenced by their interactions with other social groups. This view is in opposition of the previous internal-focused models which assign identities to individuals in an abstracted, isolated way, not explaining the interplay between those identities to create the entirety of a person.

Garai – identity as relationship

Previous approaches to identity economics have taken an internal cultural-biological certainty point of view. For example, these identities include nationality, gender, religion, and race. This has resulted in an atomistic model of an individual who has multiple identities assigned to them, but in a disjointed way, not presenting an image of a coherent individual who is influenced by the social environment and relationships with others. Garai (2017) presents an approach that shifts the focus for the internal environment to the external environment, with a social categorization-based identity point of view. In this theory, a person's social identity is influenced by relationships between individuals. This means that individuals are interconnected through their social interactions, which social groups they are members of, what the relationships are with other individuals and social groups, and the saliency of social identities regarding these relationships.

The internal sociological categories can be classified as mostly static attributes, in the same way a certain animal is a squirrel by nature. Meanwhile, Garai (2017) looks at identities as "historically generated". Instead of attributes, identities are classified as *relations* that develop and evolve over time, through various interactions between the individuals and their social groups. These relations are always expressed in regards to another relation. Conflict is possible, in these cases, and can be mediated by social categorization or the creation of a new, alternate category.

The interactions between the social groups, created by social categorization, are based on differences and similarities of the individuals' group memberships. To explain it, Garai (2017) provides an example about three individuals in the early 1930's Germany. All three individuals are German, which, in the internal categorization, is a common social group between them. However, there is the external context, which can modify this common relationship. In this example, the first person is a German proletarian. This assigns two social categories to the person, German and proletarian in equal measure. The second person is a German bourgeois. These two individuals share only the German social category, their second group membership is defined by difference instead of similarity. The third person is a German proletarian, who is also a Jew. In this person's case, German and proletarian are social groups they share with the first person, although, how the relationship will be classified depends on further external factors. If we consider the example's historical setting as a hostile political climate towards Jews, that hostility, an emphasized difference in social categorization, would take precedence over the other shared categories, causing them to be understated. Meanwhile the proletarian and bourgeois individuals would have their commonality getting emphasized in being both Germans acting for the benefit of the German leader, while their differences become insignificant.

This historically generated identity of the three individuals also has an impact on their economic transactions. The transaction costs between them change depending on the relationship of their currently salient social identities. In the example, if the Jewish proletarian person wanted to purchase a cabbage from the German proletarian, they would likely incur extra costs, due to the risks taken for conducting the transaction in opposition to the political system, and due to the hostilities driving up the price for the particular transaction. Meanwhile, from the perspective of the German proletarian, their social status is higher than the Jewish proletarian's, which drives their transaction costs down, to the detriment of the trading partner, whose transaction costs are rising, as other Germans are more likely to transact with the former than the latter partner.

Social actors, meaning individuals, groups, states, organizations, and other conglomerates are also willing to spend resources, including money, to increase their social status, thus enhancing their desired identities. This craving for social status elevation is not a function of equating utility value gained from the consumption of goods, but rather from the acquisition of the goods or the monetary transaction conducted and what they symbolize in terms of the specific social group membership attained or strengthened. This phenomenon may be rational, as the higher social status gained allows for the decrease of transaction costs, due to the social status difference between the transacting actors being greater leading to more a favorable position when competing for finite resources.

1.2. A REVIEW OF THE EMPIRICAL EVIDENCE

In this part of our paper, we set out to present a variety of empirically tested cases where social identity influences economic behavior. As we have shown above, there are several differing approaches to identity economics from a theoretical perspective, this lack of cohesion in the field will be further exposed by the various cases presented in the followings. However, the review of such studies will also help us to establish the validity of various possible methodologies when studying the phenomenon and show the importance and applicability of identity economics in various areas of economic behavior and in the studying of economic transactions.

Henkel and Zimpelmann (2022): Proud to Not Own Stocks: How Identity Shapes Financial Decisions

Financial decision making is influenced by identity, the perception of what individuals think about another social group, and how that affects their choices. A study, by Henkel and Zimpelmann (2022), uses large-scale survey data from the United States and the Netherlands to find what people's perceptions of stockholders as a social group are. The authors document that there is a widespread negative sentiment towards stockholders, in which case people view them as greedy, selfish and gambler-like individuals. In the paper, the authors develop a conceptual framework to explain the relationship between perceptions of stockholders and financial decision making.

In order to test the hypothesis, participants were presented with simple incentivized investment decisions, where the investments' association with the stock market is varied between subject groups. In one group, participants were endowed with $30 and given the choice to invest into the stock market as a risky option and a safe investment option not associated with the stock market. In the other group the same investment options were presented, but the wording was changed from stock market association to neutral terms. The experiments were repeated with obfuscated wording with switched groups to observe individuals' preference changes while avoiding consistency effects. The results show that using the stock market wording, 38% chose the risky option, while using the neutral wording, 52% chose the risky option, which means it is 27% less likely for a participant to choose the negatively associated option based on perception alone in otherwise financially identical situations.

Barasinska and Schäfer (2018): Gender Role Asymmetry and Stock Market Participation – Evidence from Four European Household Surveys

Social norms play an important role in financial decision making, aside from an individual's risk preferences. Barasinska and Schäfer (2018) published a study to measure how social norms associated with genders and the corresponding gender role prescriptions influence stock market participation in the four countries of Austria, Italy, the Netherlands and Spain. The gender roles are measured by household surveys, which indicate the socioeconomic characteristics and the degree of risk tolerance and stock investment volume and amount. Gender equality is also measured by the corresponding index for the studied countries. The Netherlands, Spain and Austria rank in the top-quarter, while Italy ranks in the bottom third for gender role prescriptions.

It is found that in Italy, the country with high gender role prescriptions, women's risk-taking behavior corresponds to the environment that expects them to not be active in financial markets. The data shows that while Italian women have higher risk tolerance levels, they under-invest in stock market instruments due to social norms and the social identity associated with them. Meanwhile in the other three measured countries with low gender role prescriptions, there is no significant effect of women foregoing stock investments below their reported risk tolerance levels. Additionally, it is found that regardless of the countries' gender role divergence, women who do invest into stocks hold the same portfolio share of investments in stocks as do their male counterparts. That is, the risky assets held in a portfolio are gender-independent. These findings suggest that social identity and the expected role of an individual influence financial decision making.

Rao, et al. (2000): Embeddedness, Social Identity and Mobility: Why Firms Leave the NASDAQ and Join the New York Stock Exchange

The influence of social identity is applicable also to organizations, as they are led by individuals who possess ties to other organizations and their leaders. Rao, et al. (2000) found that organizations strive to maintain a positive social identity that depends on their relationships and memberships with formal and informal groups. The authors measured the migration of organization from the NASDAQ stock market to the New York Stock Exchange during the timeframe of 1987 to 1994. Group members receive discrepant cues about their social identity when an in-group member exits the in-group and joins an out-group. In the present case, the in-group is the NASDAQ stock market, and the out-group is the New York Stock Exchange. The affiliation and ties of an organization to the social group defectors influences the response, and how the social identities of the remaining in-group members change.

The organizations' social identity is derived from stock exchanges, where ties to in-group and out-group members influence the status of that social identity. It is found, through interviewing representatives of relevant organizations, that when an organization leaves the NASDAQ stock market in favor of the New York Stock Exchange, the remaining organization suffers adverse symbolic damage to its image. The NASDAQ Stock exchange is viewed as a high-growth environment, while the New York Stock Exchange represents organizations with established history and tradition. If an organization that has positive ties to a migrant organization, for example if a technology company from the same sector defects, a new stock market will be associated with the sector. The remaining company, within the previous stock market, would feel pressured to follow suit because its social identity is in peril, as it is no longer part of the sector-associated stock market. Meanwhile, if the remaining organizations possess strong ties to each other, they will negatively view the defectors and positively stereotype the in-group members, mitigating the discrepant cues and their negative effect on their social identity.

1.3. FUTURE RESEARCH AND CHALLENGES

On the theoretical progress

An individual becomes an economic agent by engaging in economics transactions with other agents. Hence, the inherent nature of economic action implies that it is embedded into the external environment that is made up of other individuals, who may or may not form various groups. This social environment and its effects, including the future outlook of individuals and its effects on social identity in the present have been largely missing in the analyses of mainstream economics. Even behavioral economics, a field that challenges the mainstream, based on human psychology, has only relatively recently arrived at the recognition that people exhibit social preferences (Fehr and Fischbacher, 2002). According to this approach, agents, when making decisions, care about other agents' payoffs or well-being. This observation was further expended by the introduction of the notion of social identity into economics, theorized by the above-mentioned notable authors.

Stemming from social psychology, the concept of social identity allows researchers to unite three streams of social scientific research, when applied to the analysis of economic transactions: economics, psychology and sociology. Social identity, as described above, can be viewed as an outcome of social interaction with others in society. Our identities will entail our group membership in various social categories, while at the same time limit our choices by ascribing what rules (i.e.: norms, conventions, morals etc.) we need to adhere to, in order to acquire or maintain a given group membership. According to identity economics, agents will dedicate resources to maintain, to acquire, or even to distance themselves from certain categories of group membership.

By the ability of linking the social environment to individual cognition, identity economics, at least theoretically, makes a significant step towards a more unified view (from a social science perspective) of economics transactions, where we simultaneously consider the dynamic changes of our social environment with the rather static nature of our cognition. In this view, cognitive biases and heuristics, as uncovered by behavioral economists, may not lead to erroneous decisions, if the individual agent is able to match those decision shortcuts to the regularities of the social environment (Gigerenzer et al., 1999). A salient social identity dimension will direct the agent towards the acceptable behavior, set out by the group membership, entailed within the salient social identity dimension.

As the above review showed, there has been a considerable effort made to theoretically describe this process, to capture the dynamics of negotiating along various social identity dimensions. However, one must also recognize, from the main approaches, that when attempting to combine our understanding of the workings of the social identity concept, the biggest difficulty stems from matching these findings with the peculiar nature of mainstream economics methodology. Based on our review and analysis, we believe that one of the biggest difficulties will be adequately capturing the dynamic processes of social identity through the current, static economic modeling approach. Of course, one can conceive another theoretical development, as well. We could imagine a departure from the standard modelling methodology of economics towards the development of capturing this rather complex phenomena with a new approach, perhaps more in line with the experimental nature of social psychology.

On the empirical testing of identity economics

In the previous sections, we have established that the theoretical progress is uneven at best in the emerging field of identity economics. What makes it difficult to foretell the possible development paths of this approach is that, besides the theoretical difficulties apparent in the literature, the problems associated with empirical testing pose an even more difficult challenge to researchers. The relevant variables at play are numerous. Even in a laboratory social psychologists have a hard time designing experiments that meet the requirements of scientific rigor, while still capturing and isolating the mechanism associated with the individual's maneuverings around a multitude of social identity dimensions. This recognition predicts an increase in the complexities of experimental design.

Currently, there is only scattered empirical evidence in the literature that links the concept of social identity to various economics transactions, behavior, and applications. The current task is to design empirical tests, mainly laboratory tests, to further establish the validity of the theoretical approach of identity economics. However, in the future, a more coherent methodology should be developed with or without including current methodologies of mainstream economics and social psychology.

CONCLUSIONS

In this current essay, our goal was to introduce one of the possible development paths of economics, namely identity economics. We have reviewed the most notable theoretical approaches to this emerging field of study. We have arrived at the recognition that aside from the fact that among the authors of these prominent works in the literature there are 3 Noble-prize winning economists, this approach promises a possible linking of the external social environment (including the associated rules of the game through norms, conventions, morals, etc.) to individual cognition, an important future step sought by many researchers in social sciences.

Following the review of the main theoretical approaches, we introduced several examples, with empirical evidence, on how social identity might influence economic behavior and decisions. With the description of such works, we aimed to show the variety of possible applications of the identity economics approach to economic transactions. Of course, when reviewing an emerging field, we expected to find a lack of systematic testing of the phenomenon or a lack of unified methodology. However, instead of looking at these as shortcomings of the approach, we consider it as a future opportunity to achieve the often-coveted goal of unifying social scientific approaches to economic transactions by recognizing their embedded nature into social interactions, and the individual's and social groups' emotional and deterministic look of the future as factors.

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