

Social Identity and Redistributive Preferences: A Survey

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Abstract

Social identity is increasingly accepted as a key concept underpinning the endogeneity of economic behaviour and preferences. This feature is especially important in explaining redistribution preferences as well as attitudes towards redistribution and pro-social behaviour. This paper carries out a review of the literature on the question and examines how economic theory conceptualises and empirically measures social identity and its effects on preferences towards redistribution, social solidarity and redistributive institutions. Findings indicate that social identity does carry a weight in explaining the presence of social preferences and attitudes towards redistributive institutions.

Keywords: social identity, preferences for redistribution, inequality, diversity, redistributive institutions. JEL: H1, I3.

1 Introduction

The standard consumer sovereignty principle assumes that people make decisions based upon their own utilities that in turn represent their independent, exogenous preferences. Traditional models incorporate imperfections in individual behaviour resulting from lack of information and network externalities ensuing from other people's actions. More recently economists have reconsidered the assumption of preference interdependence, which implies that social and cultural environment with which the agent interacts at different points in time and space affects individual behaviour by affecting preferences and attitudes. This gives rise to the revisiting of a central issue in the economics discipline (Veblen 1899).

Social identity has been defined in social psychology as "that part of an individual's self-concept which derives from his knowledge of his membership in a social group" (Tajfel 1978), hence identity relies on a shared psychological or physical category. The extent to which identity influence preferences has wide-ranging implications for welfare economics, and calls into question the independence of welfare analysis that builds upon exogeneous individual preferences (Zizzo 2003). Social identity might be consistent with evidence suggesting that higher diversity can reduce altruism and redistribution (Luttmer 2001). Luttmer (2001) finds a suggestive negative relationship between diversity and preferences for redistribution.

Redistribution is one of the central features of welfare states. However, maintenance of redistributive institutions largely depends on individual support for taxing higher incomes more heavily and targeting expenditures to social need. Our focus in this paper is on individuals' willingness to redistribute. Different forms of redistribution and altruism are constrained by individual attitudes through some form of aggregation rule, hence changes in the willingness of individuals to pay taxes, to transfer resources to the neediest and support for redistribution-enhancing institutions might result in significant changes in social redistribution. The extent of subjective willingness to accept redistributive transfers and its relation to actual redistribution is something that calls for empirical investigation: it is important to establish a model that appropriately represents what appears to go on in the real world and to identify the key variables in the supposed relationship. If subjective preferences for redistribution determine tolerance of redistribution in practice, then the underlying mechanisms of such attitudes should be examined and integrated into economic models. Suggestive evidence shows that indi-

viduals' preferences for redistribution are interdependent in the sense that is influenced by the characteristics of other individuals around them (Luttmer 2001). So individuals appear to be more likely to redistribute to the groups they identify with, be that identification based on ethnicity, religious group, social class, region etc. The importance of shared identities lies in that when individuals fail to match with one identity they can develop oppositional identities (Battu and Zenou 2010), which is found to lead to labour market segregation and isolation.

Not only attitudes matter. Guiso et al (2006) argue that behaviour is the result of individual's attitudes and their social environment, a primary source of interdependence. Yet individual internalization of each social environment results in social identity. Social identity can hypothetically determine the extent of individual altruism towards the members of a group rather than those that fall outside the group limits. So changes in the definition and categorisation of what the group includes might have a non negligible influence on an individual's altruistic behaviour or redistribution attitudes. Groups develop common shared meanings ("cultures" as defined by Guiso et al. 2006), prior common values and social norms, and some of these dimensions are path dependent, rather than being chosen by individuals themselves, and under certain conditions can be regarded as exogenous.

The inclusion of social identity in decision making models, however it is conceived, challenges the assumption of preference independence by drawing upon some forms of collective definition of the self, and call for a revisit of the formation of both individual and social welfare functions. Social identity is environmentally learned through different mechanisms including vertical and horizontal transmission, and instrumentally determined by objectively identifiable psychosocial traits (e.g., language, social class and gender). Social identity is constructed and reinforced through several forms of social interaction containing information on social norms, values and preferences shared among a certain group. The group in turn shapes individuals' preferences by defining a "sense of belonging", namely, a collective definition of the self that parallels, and to some extent complements that of the individual one. To capture these externalities Akerlof (1997) presents two behavioural models: people either try to increase social distance (status seeking) or align themselves more closely (conformist behaviour) with certain social categories. Social norms are assumed influence behaviour because they affect the individual's preferences. An individual suffers disutility from deviating from his or her category norms, which causes behaviour to conform toward those norms

(Costa-i-Font and Jofre-Bonet 2012).

Akerlof and Kranton (2000) conceptualise identity formally by considering a set of social categories and associated prescriptions, so that identity encompasses both utility and disutility by conforming actions to prescriptions. Identity is envisaged as a sense of self or self-image nested on social categories, so individuals' social environment encompasses a set of prescriptive norms. Luttmer (2001) provides empirical evidence showing that individual preferences for redistribution depend on the characteristics of individuals around them. He shows evidence of a "negative exposure effect" whereby individuals decrease their support for welfare as the welfare reciprocity in their community rises. Similarly, they show evidence of a "racial group effect" that reveals that individuals increase their support for welfare spending as the share of the recipients from their own racial group increase. Bisin et al. (2008) and Battu et al. (2007) construct a model of ethnic identity formation focusing on how choice of identity is affected by cultural transmission. In their model, social interactions that lead to identity formation is a form of externality that explain why employment rates of white population is associated with that of non-whites. Klor and Shayo (2010) using experimental data find that individuals' preferences over redistribution are affected by the payoffs of her in-group members. Shayo (2009 and 2010) defines identity as resulting from individuals' status. Thus identification comes from two processes, a first one where individuals care about the status of the group (relative status) and, a second one defined by an individual willingness to resemble other group individuals (distance of proximity). The former could be categorized as a specific form of esteem dependent behaviour.

So identity gives rise to individual actions to protect the "social self" which include reciprocity and welfare-maximising actions and give rise to social preferences. The major examples of the influence of identity include the influence of social identity in the form of religion on the contribution to public goods and worker reciprocity (Benjamin et al. 2010). The latter lies in using environmental cues called "primes" that can temporarily make a certain social category more salient, causing a person's behaviour to tilt more toward the norms associated with the salient category. Furthermore, other studies suggest territorial identity as influencing tipping behaviour, for example blood and organ donation as well as participation in electoral processes, despite the net benefit of such behaviour is almost negligible. Using status as a clearing variable Shayo (2009) suggests that two equilibria may emerge. Firstly, the members of the lower class (who constitute a majority)

identify with their class. As a consequence they vote for a relatively high level of redistribution. This can in turn help strengthen class identity by endowing it with a higher status. In the second type of equilibrium, members of the lower class tend to think of themselves more as members of the nation as a whole than as members of a low-status part of it. The equilibrium also depends on proximity. A common national thread and extensive heterogeneity among the working class weaken working-class solidarity. Besides redistribution itself, social identity might exert an influence on redistributive institutions. The latter refers primarily to the welfare state, support for welfare services and social insurance schemes. But institutions undertake both redistribution (anonymous redistribution) and insurance (collective risk sharing). Both functions of the welfare state are arguably sensitive to the weakening of social identity. Alesina and Glaeser (2004) argue that solidarity within the welfare state will be weakened as a result of increasing social heterogeneity. They demonstrate that there is a negative correlation between “racial fractionalization” and the level of social spending. This view has been challenged by the fact that resilience of immigrants on welfare provided services explain why they are perceived as groups that largely receives social benefits (Boeri et al. 2002). However, (Dahlberg et al. 2012) finds casual evidence of increased immigration on the support for redistribution using exogenous variation from policy migration reform in Sweden.

This paper examines whether individual’s attitudes towards the other members of society, the institutions that guarantee redistribution and the underlying preferences towards a world of more redistribution are driven by social identity. By doing so we attempt to clarify a set of questions, namely:

- What do economists understand by social identity, and how does it differs from other similar concepts such as group, social motivations, group externalities and peer effects?
- How does the economics literature conceptualise preferences and attitudes towards fairness, particularly about redistributive institutions and policies?
- Is there evidence of a potential relationship between social identity, attitudes and preferences for redistribution and the welfare state attitudes?

Empirical evidence is available from both from econometric and experimental studies; the latter has the obvious advantage that controls for unobserved

effects can be monitored more easily. This paper attempts to classify existing evidence according to several criteria and summarises the state of the art along with pinpointing ways forward. The organisation of the paper is as follows. The next section discusses the meaning of social identity and its inception in economic theory. Section three discusses existing evidence on the determinants and preferences for redistribution and discusses how social identity might be consistent with stylised facts. Section four assesses the available evidence on the effects of social identity on redistribution or pro-social attitudes examining different relevant social dimensions. Section five provides a discussion of existing findings along with an evaluation of the ways forward, and section six concludes.

2 Identity and its meanings

2.1 Approaches to identity

Society can be divided into social groups based on different categorisations, such as class, ethnicity, language and so on. People identify with such elements in some of these categorisations and actions are assumed to follow from such identification. To account for this feature, the psychological theory of social identity developed by Tajfel and Turner (1979) can be applied to intergroup discrimination. Indeed, discrimination depends on how individuals categorise each other, identify in social categories and compare each other in a way that we favourably bias our actions and perceptions towards the group we identify with. Belonging to a group provides the individuals with self esteem and to conform to the social norms and distinguish itself as a separate entity or as part of a group (Abrams and Hogg 1990). However, the social categories into which people place themselves are parts of a structured society and exist only in relation to other contrasting categories; the value of each group identity derives from a comparison of those within the group with with the traits of those in some other reference group. Identity-driven behaviour is such that those traits that favour the in-group are usually emphasised group distinction will be minimised (Stets and Burke 2000), group outcomes of other group are perceived as the individual's own. People tend to associate themselves with highly successful groups though group membership, such as ethnic group or gender are not always chosen . Furthermore, not all members are equal, whilst weak members of a group will gain through the

mere identification with the group relatively strong members of the group, in contrast, strive to improve their identity through promotion to a higher group if possible rather than collective in-group effort (Ellemers et al. 1990). The process of identification with a group is endogenously determined, constructed in some degree, by changes in relevant social parameters in such way that group formation “is inherently variable, fluid, and context dependent”. McAdams (1995) even argues that groups use intra-group status rewards as a non-material means of gaining material sacrifice from members. Thus, individuals value the opinions of the groups to which they belong and seek to be acknowledged as members in good standing. However, in the case of interaction with other groups, McAdams (1995) argues that discrimination is a means by which social groups produce status for their members.

Different literature streams are summarised below, and suggest an array of questions that recognise the importance of the social environment. These approaches reflect different attempts of economic theory to deal with the preference endogeneity assumption, either by assuming some form of meta-preference (e.g., identity, social norms) constraining individual’s utilities and behaviour or different types of information externalities or social interactions.

2.2 Identity and Economics

How identity forms and manifests itself is a dynamic process linked to social interactions. Norms, values and rules, which bind members of a social group, are inherent in the formation of social identities. Sen (1977) in his avant-garde piece about the rational egoistic man of Edgeworth talked about psychological issues that underlie choice and relate to consumer decisions and production activities. He introduced the concepts of sympathy and commitment as part of the utility maximizing function, arguing that commitment as part of behaviour can result in non-gains-maximizing answers, even when answers are truthful. Akerlof and Kranton (2000) offer a novel theoretical framework of the utility maximization function by incorporating an individual’s self-identification as powerful motivation for behaviour. They imply that if individuals achieve their “ideal self” and are comfortable with their identity then their utility increases, otherwise, their utility decreases. In this framework, it is then possible that even rational individuals chose non-optimal occupations because of identity considerations.

Akerlof and Kranton (2000) introduced a redefinition of the Tajfel and Turner (1979) concept of identity in a standard neoclassic framework mean-

ing a person's self-image and sense of self insofar as it fits into a set of social categories that imply expected behaviours valued in an economic utility function. So social identity results from membership in some social group both chosen and given (e.g., gender, ethnic group), which induces prescriptions cause utility or disutility. They argue that individuals earn additional utility from an identity that matches their ideals. Norms and prescriptions arise endogenously from social interaction and overall outcomes are likely to differ from what is predicted by models based on methodological individualism because norms of appropriate and inappropriate behaviour differ across space and time. The individual suffers a loss in utility that depends on the distance of his or her behaviour from that of the self-chosen ideal. The Akerlof and Kranton (2000) concept of identity is a further development of the Akerlof (1997) contribution on social distance and social decisions. This work extends previous work by Becker (1991) and Becker and Murphy (1993) and has been applied to gender behaviour (Akerlof and Kranton 2000), education (Akerlof and Kranton 2002) and contract theory (Akerlof and Kranton 2005). In Akerlof and Kranton (2005) they focus on intra-group effects on cooperative behaviour. So, if an agent internalises an organisation's objective and norms, it might suffice as a form of motivation to sustain high effort. Insiders will exert more effort than outsiders because they gain identity payoffs, and accordingly corporate efforts to build organisational identity might exert returns. Bénabou and Tirole (2007) develop a complementary framework based on the individual management of beliefs and identity investment in social groups. Parents may purposely transmit "distorted" views about the reality of inequality and social mobility to their children in order to influence their incentives (Bénabou and Tirole 2006).

Wichardt (2008) argues that identity is multidimensional and it might be that tradeoffs arise in individuals' categorisations of identity, so that different traits defining individual's identity might not be perfectly aligned and become exclusive. The positive identity the individual then gains through the group is based on the general tendency to perceive all group members as equal and to attribute group success to oneself. Increased in-group homogeneity, acceptance and a small group size which facilitate this perception or increase the individual's share of the group's success, therefore, further increase the individual's identification or social affiliation with the respective group. In essence, each individual will focus especially on those groups which offer the most favourable comparisons in the given context and for which the individual's social affiliation is high.

Benjamin et al. (2010), using experimental evidence and building on a model inspired by Akerlof and Kranton (2000), examine how religious identity influence individuals' choices, and find that the saliency of religious identity stimulates individual contributions to public goods and other expectations on such contributions, Catholicism reduces risk aversion. However, they find that religious identity does not affect work effort, discount rates and generosity in a dictator game.

Bénabou and Tirole (2007) model a broad class of beliefs of individuals including their identity, which people value and invest in. They also study endogenously arising self-serving beliefs linked to pride, dignity or wishful thinking. Norms about “fitting in” differ across time and space (Akerlof and Kranton 2005). In regards to modelling identity and work incentives, Akerlof and Kranton (2005) envisage corporate culture as the division of the workers into different groups, the prescribed behaviour for each group and the extent to which workers identify with the organization or with the workgroup and adopt their respective goals. The Battu et al. (2007) model – where non-Whites identify with their social environment, their culture of origin, and where social networks can find them jobs – they find that individuals, who are otherwise identical, end up with totally different choices. Depending on how strong peer pressures are, non-Whites choose to adopt ‘oppositional’ identities because some individuals may identify with the dominant culture and others may reject it, even if it implies adverse labour market outcomes. In another empirical study, Battu and Zenou (2010) investigate the relationship between ethnic identity and employment. They find that in the UK, the individuals' identity choice is very much influenced by their social environment, that there is considerable heterogeneity in the non-White population in terms of preferences and that those non-whites who develop and manifest oppositional and extreme identities are penalized in the labour market, experiencing a 6% to 7% lower probability of being in employment.

Bisin et al. (2006) find that, in line with their theoretical analysis, identity with and socialization to an ethnic minority are more pronounced in mixed than in segregated neighborhoods. The strength of identification with the majority culture regardless of the strength of (ethnic) minority identity is important for labour market outcomes (Nekby and Rödin 2010). Reviewing the relevant literature outside economics, we find that among the suggested and widely used key elements of ethnic identity are the subjective expression of one's commitment to, sense of belonging to, or self-identification with the culture, values and beliefs of a specific ethnic group and social life (Masuda

et al. 1970, Makabe 1979, Unger et al. 2002). Most frequently employed are cultural elements such as language, religion, media and food preferences, celebrated holidays and behaviour (Phinney 1990, 1992, Unger et al. 2002). Bellini et al. (2009) confirm that diversity is positively correlated with productivity. Constant et al. (2009) conjecture that an immigrant moves along a plane formed by two positive vectors normalized from 0 to 1, with 1 representing maximum commitment. The horizontal axis measures commitment to and self-identification with the country of origin, and the vertical axis measures commitment to and self-identification with the host country. Constant and Zimmermann (2008) find that the ethnic identity of immigrants is a strong determinant of their labour force participation.

2.3 Pure and instrumental effects

Identity might interact with issues such as interest on certain information sources. The higher a group in the status hierarchy, the more this group can contribute to the positive social identity of its members. Accordingly, it is possible to distinguish from Akerlof and Kranton (2000) that pure membership effects form other instrumental reasons for using social identity to ascend socially, obtain additional income and generally self interest. Pure identity effects refers to the desire and utility gain that results from acting in compliance with one's own identity, which refers to internalised social rules and personality.

Instrumental identity lies in the assumption that individuals invest in different identity affiliations (Becker and Mulligan 1997, Fang and Loury 2005, Bénabou and Tirole 2007). Hence, identity can turn out to be a strategic action to maximize utility and payoffs.

2.4 Other related concepts

It is argued that social capital is determined by culture and institutions. For instance, institutions in place such as the welfare state might influence preferences for redistribution, but enduring social values underpin such institutions in the creation of capital. However social identity is embodied in individuals so that social capital contains social norms and culturally induced preferences.

A variable that parallels identity is proximity. Indeed, proximity reflects some idea of social distance, which indeed, reflects the extent to which lan-

guage and codes of communication compare across individuals. This is consistent with the finding that members of a specific group trust each other in ways non-members do not and communication among members takes place incurring in smaller transaction costs (Hargreaves Heap and Zizzo 2009).

Identity might be simply a measure of social distance, in that those with whom people identify are simply those to whom people feel closest and whose needs are perceived to be closest to their own. Hence, besides simple categorisations, the strength of identity is possibly a factor that matters but it is difficult to measure in natural groups and instead tends to be elicited in induced group identities. However, inevitably when identity is induced in an experiment it is hard to know the extent to which group identity is based on the right social categorisation.

2.5 Modelling Identity

Seminal model (Akerlof and Kranton 2000)

Identity is based on social categories C , each person j has these categories. Prescriptions P indicate social norms of each social category or an ideal for each category. An individual's utility function is as follows:

$$U_j = U_j(a_j, a_{-j}, I_j),$$

where I_j is the identity of person j , a_j the actions of j and a_{-j} the actions of others. Identity can be modelled as:

$$I_j = I_j(a_j, a_{-j}, c_j, P),$$

where P refers to prescriptions, and c_j refers to social categories.

Identity as a priming social norm (Benjamin et al. 2010)

An individual belongs to a social category, such as a language, religious or social group with a strength $s \geq 0$ which has a weight of $w(s)$ in the utility function. Let x denote some action that the individual may decide to take: let the individual's preferred action in the absence of identity considerations be x_0 and let the action prescribed by identity be x_c ; the individual's utility can be expressed as:

$$U = -[1 - w(s)] [x - x_0]^2 - w(s) [x - x_c]^2,$$

where the weight of a zero-strength category is nil, and the disutility of deviating from one's norm decreases with s . The individual chooses x to maximise utility for a given value of s ; so the first-order condition gives the optimal decision as:

$$x^* = [1 - w(s)] x_0 + w(s) x_c,$$

a weighted average of the preferred action with and without identity. The priming effect can be defined as follows:

$$\frac{dx^*}{ds} = w'(s) [x_c - x_0],$$

which indicates that evoking an individual's identity s in an experiment will trigger preference assimilation only for those highly identified with that identity, namely those whose actions are not too distant from those prescribed by a specific social category.

Identity as Status (Klor and Shayo 2010)

Shayo (2009) conceptualises identity as status (S_j) as follows: identification with a group means caring about the status of the group. So, consider a number of groups labelled $1, 2, \dots, J$ and let us suppose that everyone in some group j uses another group $r(j)$ as a point of reference. Actions a of the individuals and their payoffs are represented by the status of a group defined as a function of the group's payoffs as follows:

$$S_j = S_j(\pi_j(a), \pi_{r(j)}(a))$$

and the utility function is given by

$$U_j = u(\pi_j(a)) + v(\pi_{r(j)}(a))$$

where u and v are both strictly increasing functions and u is weakly concave

Oppositional identities (Bisin et al. 2011)

Battu et al. (2007) and Battu and Zenou (2010) contribute to the conceptualisation of identity by defining an individual's utility function as a set of actions based on binary events (for example, wear the veil, G, or do not wear

the veil, B) and the intensity of its identity , so that individuals maximise the following welfare expression:

$$W(x, \alpha) = u(x, \alpha) - \lambda(\alpha)QI - C(\alpha)$$

for $x = G, B$ where the term $\lambda(\alpha)QI$ refers to the “social” utility loss for individual of interacting with individuals of different groups, I_i and Q_i are, respectively, the psychological cost and the probability of an interaction, and $C(\alpha)$ is the direct cost of an interaction.

Based on the four different models of identity we can conclude that all consider identity a component to be added in the individual utility function, either directly (Akerlof and Kranton 2000) or indirectly through status (Shayo 2009). Hence, identity qualifies as a category that, when made salient, influences behaviour..

2.6 Measuring identity

Identity can be measured through several questions that contrast different types of identity, including territory (“more European than Italian”), gender (“being female matters”), ethnicity and the like. For instance, Manning and Roy (2007) adopt a measure of integration constructed from answers to the question: “What do you consider your national identity to be? Please choose as many or as few as apply.” This is similar to Aspachs-Bracons et al. (2008). Other studies build up synthetic indexes from questions regarding the importance of religion, attitude towards inter-marriage, and the importance of racial composition in schools.

Chen and Li (2009) formulate group identity based on a set of sequential allocation games experiments on students. Benjamin et al. (2010) focus on priming religious concept to strength religious affiliation on students and participation on behavioural games.

3 Reinterpreting Empirical Evidence

The economics literature has long been interested in exploring evidence on inequality and redistribution. Preferences for redistribution depend on current and future economic position.

Frey and Meier (2004) find that student donations to university funds are lower at the very beginning and at the very end of the respective student’s

time at the university. In other words, precisely when students are more identified with the group, the more they are more willing to donate.

Income determines support for redistribution, as well as marital status, employment status, education and age, race has a very strong effect: blacks are much more favourable to redistribution than whites (Alesina and Giuliano 2010). Women are more pro-redistribution than men, even though the effect of gender is much smaller than that of race. More educated individuals are more averse to redistribution. More left-wing individuals are more pro-redistribution even after controlling for income, which already points in the direction of models highlighted above where an ideological dimension matters. Protestants appear to be less favourable to redistribution.

The literature on the determinants of redistributive preferences has grown rapidly. First, as elaborated in the following, this article's theoretical framework relies on the premise that it is mainly economic self-interest that shapes pro-redistribution preferences. This premise also underlies the economic literature on social upward mobility (Alesina and La Ferrara 2005, Bénabou and Ok 2001, Piketty 1995) as well as class-based explanations of redistributive preferences, mainly found in sociology (Svallfors 2004). The second approach posits that not only an individual's income but also his or her values and beliefs prescribe preferences toward redistribution. Beliefs about the causes of inequality, considerations of fairness, religious beliefs, hope for reciprocity, and altruism have been suggested as the driving forces behind the formation of attitudes toward redistribution (Alesina and Angeletos 2005, Bénabou and Tirole 2006, Fong 2001, Scheve and Stasavage 2006,). The third approach "centers around the idea that an individual's preferences for redistribution depend upon its effect on the relative living standard of the individual" (Corneo and Grüner 2002, pp. 86-87). People hold interpersonal preferences, namely, preferences that depend on the characteristics of others. Group loyalty (Luttmer 2001), differences in status (Corneo and Grüner 2000), and race or ethnicity (Alesina and Glaeser 2004) have also been suggested as determinants of pro-redistribution preferences (Meltzer and Richard 1981). In this model, a flat-rate benefit paid through proportional taxes implies that individuals with incomes higher than the mean income will oppose redistributive spending. Individuals with incomes below the mean, on the other hand, will be in favor of redistributive spending up to the point where the benefit for them is outweighed by the efficiency costs of taxation. Empirically, this implies a negative relationship between income and support for redistribution. Finally, redistribution will also be demanded as insurance

against risks that are to insure privately (Moene and Wallerstein 2001).

4 Evidence

4.1 Social and Group Identity

Evidence from the literature in psychology (Pettigrew 1998) and the economics literature (Gang et al. 2002) suggest that there is a general tendency towards in-group preference because people are more inclined to concede rights and entitlements to their own group or to persons who are perceived as the same than to those regarded as different. Gang et al. (2002) find evidence of group effects on a prisoner's dilemma experiment using data from natural groups in the Swiss Army. However, when experimental data is examined then results are more mixed. Eckel and Grossman (2005) show that group identity is insufficient to enhance public good cooperation, though actions enhancing group behaviour do have a positive effect on cooperation. In contracts, Charness et al. (2007) find that using standard social identity measures, no significant effects are found in a battle of sexes game and McLeish and Oxoby (2007) find that negative outgroup opinion might enforce cooperation. Finally (Chen and Li 2009) find evidence that group identity has significant effects on distribution preferences. Hargreaves Heap and Zizzo (2009) distinguish the effect of identity resulting from simple belonging to a group from other idiosyncratic influences such as social norms and other group characteristics, and undertake a valuation of group membership using incentive compatible willingness to pay and to accept. Yet the importance of the latter lies in that in small and artificial groups evidence is found on social identity effects (Chen and Li 2009). Group identity enhances rewards and reduces punishments, disproves distribution preferences and social welfare maximising actions. Klor and Shayo (2010) find that over a third deviate from self interest and back group tax rate, however individuals responses to group-individual interest trade offs were affected by self interest.

4.2 National Identity and social class identification

Alesina and Fuchs-Schündeln (2007) show that preferences and attitudes towards the state different between eastern and western Germany as reflecting endurance and communist values. However, using contingent valuation

techniques for the world cup as a case study, Süßmuth et al. (2009) find that the effects are less lasting. Burlando and Hey (1997) find that in a public good experiment context, Italians are more likely to contribute than English. Other evidence that is consistent with the importance of national attachments is empirical evidence showing that attitudes towards migration reflect nationalist sentiments (O'Rourke and Sinnott 2006).

In dealing with national identity, it becomes essential to distinguish its cultural and legal dimensions. Whilst the latter is reflected into differences in attachments and objective factors defining a culture, the former relies on a related concept of citizenship which in some dimensions overlaps with that of identity.

Class identification is found to predict voting behaviour (Evans 2000). Empirical evidence from (Shayo (2009, 2010) suggests that indeed status does exert an influence in explaining identity related behaviour. Poorer individuals are more likely to be nationalistic (Shayo 2009), which is explained by a higher similarity to the national prototype.

Furthermore, the formation of a group requires the existence of an outer group and this is especially the case of national identity in such a way that the absence of an outer group can be argued to inhibit the formation of global politics when committing to global agreements is costly (Wichardt 2008). Casey and Dustmann (2010) also examine ethnic identity in Germany. Their findings suggest that children of immigrants identify more strongly with their home country than with the host country. Both mothers and fathers have a very weak sense of German identity and identify quite strongly with their native country. They also find that the time spent in Germany increases the probability of reporting a German identity. Nekby and Rödén (2010) analyze the question of ethnic identity in Sweden. Their results indicate that the feeling of togetherness with the Swedish majority culture is not systematically connected to the probability of feeling a strong connection with the minority culture.

4.3 Gender and Language

The importance of language is gathered in different studies. Cadsby and Maynes (1998) examine whether gender identity influences voluntary contributions to public goods and find that gender does not exert significant effects. However, in a threshold public goods experiment. Croson et al. (2003) find that gender identity is significant in a naturally occurring group.

Solow and Kirkwood (2002) find evidence of gender group behaviour on public good contributions. Benjamin et al. (2010) find that in two laboratory experiments making gender identity more salient induces some conformity with gender induced norms.

Consistently with the idea that communication between members of a group leads to lower transaction costs, a common language is expected to help to enhance a sense of belonging as it has been shown in the case of Catalonia and the Basque Country (Aspachs-Bracons et al. 2008). Language can be an important marker of social identity by affecting individuals interdependence, and individuals' might seek social mobility by being evaluate in using language in a more evaluated group. Language is explored as determinant of cultural identity and as explaining economic exchange in Germany (Falk et al. 2010). The importance of language is picked up in the association between, ethnolinguistic diversity and redistribution, the provision of public goods (Desmet et al. 2009).

4.4 Ethnicity and Migration

Migration changes the social composition of the welfare state clientele; under the conditions of greater social heterogeneity it becomes more difficult to gain the endorsement of the welfare state. Bay and Pedersen (2006) demonstrate how support for specific social welfare benefits greatly depends on the composition of the group receiving welfare. Greif (1994) shows that ethnic networks adopting a common set for institutional rules reduce the cost of coordination and enforcement. Darity et al. (2006) use an evolutionary game to explain the formation of racial identity being the result of both intra- and inter-group interactions. Keely and Tan (2008) find that general views on redistribution are heterogeneous according to race as well as income determinants including socioeconomic background, age, and gender. Specific views on welfare are heterogeneous primarily according to race.

Similarly, studies examining racial identity argue that individuals tend to assume the identity of the dominant group. Bodenhorn and Ruebeck (2003) find that mixed-race people benefited when they could form a distinct racial class between dominant white and subordinate black: they endogenise racial identity and make it contextual. Drawing from a Becker-like model, Stewart (1997) provides the initial attempt to formalize an economic analysis of identity. He argues that the intensity of racial-cultural identity of individual of group is a commodity that should be included in the individ-

ual's utility function. Individual racial-cultural identity as a direct argument of individual utility is affected by the prevailing norms of own- and other-group racial-cultural identity. Intertemporal change in the stock of own-group racial-cultural identity is a complex composite of individuals' demands for identity. Bernhard et al. (2006) find that in the context of native population in Papua New Guinea, there was evidence of intra-group altruism. Furthermore Darity et al. (2006) draw upon an evolutionary game model of the formation of racial identity. The construction of racial identity is the result of both intra- and inter-group interactions. Their findings indicate one type of equilibrium labelled as an individualist social norm, where all persons pursue an individualist identity strategy; thus race is insignificant for both market and non-market social interactions. A second type of equilibrium is a racialist social norm, where all persons pursue a racialist identity strategy: race is significant for both market and non-market social interactions. Fryer and Torelli (2005) find that "acting white" behavioural norms among blacks in the US (i.e., associating academic success to lack of identity) are more developed in racially mixed schools, and influence behaviour of certain minorities.

Attitudes towards the welfare state might be affected in the same way as attitudes towards migration by whether individuals are skilled workers or not, given that the welfare state affects individuals' wages of those better off, as well as skilled workers. Yet traditional economic models argue that attitudes towards an institution that carried out redistribution (redistributive institution) are determined by the net gain individuals receive. On the other hand, social values might shift this relationship, as welfare state attitudes reflect cultural preferences, which include locally formed values and memories of the past where individuals derive utility from attaining a better match between their identity and their actions.

4.5 Religion

Alesina and Giuliano (2009) find that certain religious affiliations are associated with a higher preference for redistribution. Furthermore, Guiso et al. (2003) find that religion matters as a driver of economic attitudes. Bisin et al. (2004) show that religious socialization across US states is more intense when a religion is in a minority. Furthermore, Bisin et al. (2008) examine religious identity in the UK. Using the Fourth National Survey of Ethnic Minorities (FNSEM), they carry on an empirical analysis of religious identity, to explore

quantitative and qualitative differences in the process of cultural integration between Muslims and other UK minorities. Their findings indicate, that Muslims having an intense religious identity is roughly twice as large as that of non-Muslims. For Muslims, the number of years since arrival does not seem to be related to their inclination to assimilate. In terms of estimated probability of having a strong religious identity, a Muslim born in the UK and having spent there more than 30 years is comparable with a non-Muslim just arrived in the country. Similarly, Constant et al. (2006) adopt a definition of integration that accounts for several cultural and religious factors, including social interactions, and find significantly different integration patterns for Muslims and Christians in Germany.

Manning and Roy (2007, 2010), using the UK Labour Force Survey in 2001, find “no evidence of a culture clash in general, and none connected with Muslims in particular.” More specifically, using this measure they report that a large fraction of those individuals in the sample who are born in Britain actually report a British national identity and that such fraction is larger for third than for second-generation immigrants.

Benjamin et al. (2010) finds that religious identity affects contributions to public goods, Protestantism (Catholicism) increases (decreases) contributions, Judaism increases worker reciprocity.

4.6 Risk attitudes, time preferences and sorting

Benjamin et al. (2010) find that when ethnic identity is made salient Asian-Americans make more patient choices and blacks make more risk averse choices. Furthermore, Watson and McLanahan (2009) find that relative income of a local reference group determine marriage decisions.

4.7 Political participation

Ben-Bassat and Dahan (2008) find using data from Arab communities that voters are more likely to vote for a candidate that shares their social group identity. Individuals not only cared about themselves in voting, but on the benefits of their hamula (an Arab community organisation).

5 Discussion

The recognition of the relevance of social identity implies the recognition that the social environment and culture matters, and raises the classic issue of preference endogeneity. Identity is argued to influence how people behave, which in turn affects individual social environment and in turn affects identity and behaviour again. The reflection problem has been extensively discussed by Manski (2000) as a limitation to identify social interactions and peer effects.

Another form of endogeneity lies in the influence of institutions, which can be separated from culture or the social environment individuals are subject to. However, culture and institutions might well reinforce each other, and empirical analysis is challenged by the need of disentangling one from the other.

At an institutional level, the welfare state was made out of a process of integration of national states, but at the same time it contributed to deepening and strengthening of the bonds between its members, so that the relationship between identity and redistribution is likely to be recursive. Indeed, different cultures may emphasize in different ways the relative merits of equality versus individualism, an issue discussed in detail by Alesina and Glaeser (2004), therefore some forms of circularity exists between individual and societal attitudes to inequality and preferences for redistribution. Methodologies to measure identity are varied. Two studies have explored the issue of social identity and pro-social behaviour using controlled experiments. Chen and Li (2009) have examined directly the question of group identity and social preferences using experimental evidence. Furthermore, Hargreaves Heap and Zizzo (2009) again using experimental evidence found that group membership reduce charitable giving to outsiders and that individuals value own group membership. Another type of evidence is that of econometric studies. Alesina and Giuliano (2010) examine individual's evidence for redistribution preferences using the General Social Survey and the World Values Survey and find that historical experiences and culture are key features.

There is robust evidence that individual self-interest fails to explain social behaviour, and this needs to be balanced out with "group self interest." Evidence across the board suggests that group identification and that different categorisations are important. One important question in modelling identity lies in separating those components of identity that are endogenous because they result from people's choices and those that are given. Individuals are

not entirely free to choose their own identity given that it may be imposed on them in light of others' behaviours and perceptions.

One of the conclusions of the identity literature are that member's interactions within the group make interaction with non-members less desirable. Namely, evidence suggests that stronger identification with a group will increase cooperation with this group relative to others. However, evidence from artificial and natural groups exhibits different results.

Preference interdependence might results from the existence of forms of social identification with some reference groups, in the form of so called reference dependent preferences (Loomes et al. 2003). Another possible behavioural explanation of the importance of identity in the formation of individuals' preferences is the existence of confirmatory bias, which implies that once an individual forms a strong hypothesis about something they tend to be inattentive to new information (Rabin 1998). Some other explanations of these effects lie in the neuro-economics literature where it is found that neuro-transmitters and levels of serotonin are linked to interdependent preferences (Zizzo 2002).

Traditionally social identity is a category that lies very much outside the realm of economics, and has been explored by social psychology and sociological literatures. On policy grounds, stigma in dealing with social identity lie possibly in the assumption of a concept of equality that equals uniformity, and that any recognition of prevalence value for an individual or a society of a specific identity is a form of exclusion, xenophobia and when racism individualised. Yet, this feature opens up the debate on the economics of culture as nurturing social choice.

Among the most important questions that still need further examination, there remain: tying up social identity with other related approaches such as club goods. Similarly, some studies associate identity as a form of status and as a stream of the literature on esteem. Finally, at the moment most studies employ a partial measure of social identity based on some categorisation, but still research needs to identify which dimensions of identity are more relevant beyond nationality, race and ethnicity.

References

- Abrams, D. and M. A. Hogg (1990). An introduction to the social identity approach. In *Social Identity Theory: Constructive and critical ad-*

vances. Harvester and Wheatsheaf.

- Akerlof, G. A. (1997). Social distance and social decisions. *Econometrica* 65, 1005–1027.
- Akerlof, G. A. and R. E. Kranton (2000). Economics and identity. *The Quarterly Journal of Economics* 115, 715–753.
- Akerlof, G. A. and R. E. Kranton (2002). Identity and schooling: Some lessons for the economics of education. *Journal of Economic Literature* 40, 1167–1201.
- Akerlof, G. A. and R. E. Kranton (2005). Identity and the economics of organizations. *Journal of Economic Perspectives* 19, 9–32.
- Alesina, A. and G.-M. Angeletos (2005). Fairness and redistribution. *The American Economic Review* 95, 960–980.
- Alesina, A. and N. Fuchs-Schündeln (2007). Good-bye Lenin (or not)? the effect of communism on people’s preferences. *American Economic Review* 97, 1507–1528.
- Alesina, A. and P. Giuliano (2009, March). Preferences for redistribution. NBER Working Paper 14825, National Bureau of Economic Research, 1050 Massachusetts Avenue Cambridge, MA 02138.
- Alesina, A. and P. Giuliano (2010). The power of the family. *Journal of Economic Growth* 15, 93–125.
- Alesina, A. and E. L. Glaeser (2004). *Fighting Poverty in the US and Europe*. Oxford: Oxford University Press.
- Alesina, A. and E. La Ferrara (2005). Preferences for redistribution in the land of opportunities. *Journal of Public Economics* 89, 897–931.
- Aspachs-Bracons, O., I. Clots-Figueras, J. Costa-Fontand, and P. Masella (2008). Compulsory language educational policies and identity formation. *Journal of the European Economic Association* 6, 434–444.
- Battu, H., M. Mwale, and Y. Zenou (2007). Oppositional identities and the labor market. *Journal of Population Economics* 20, 643–667.
- Battu, H. and Y. Zenou (2010). Oppositional identities and employment for ethnic minorities: Evidence from England. *The Economic Journal* 120, 52–71.

- Bay, A. H. and A. W. Pedersen (2006). The limits of social solidarity: Basic income, immigration and the legitimacy of the universal welfare state. *Acta Sociologica* 49, 419–436.
- Becker, G. S. (1991). A note on restaurant pricing and other examples of social influences on price. *The Journal of Political Economy* 99, 1109–1116.
- Becker, G. S. and C. B. Mulligan (1997). The endogenous determination of time preference. *The Quarterly Journal of Economics* 112, 29–758.
- Becker, G. S. and K. M. Murphy (1993). A simple theory of advertising as a good or bad. *The Journal of Political Economy* 108, 941–964.
- Bellini, E., G. I. P. Ottaviano, D. Pinelli, and P. G. (2009). Cultural diversity and economic performance: Evidence from European regions. Working Paper 2009.63, Fondazione Eni Enrico Mattei.
- Ben-Bassat, A. and M. Dahan (2008). Social identity and voter turnout. Working Paper 2331, Center for Economic Studies.
- Bénabou, R. and E. A. Ok (2001). Mobility as progressivity: Ranking income processes according to equality of opportunity. NBER Working Paper W8431, National Bureau of Economic Research.
- Bénabou, R. and J. Tirole (2006). Incentives and prosocial behavior. *The American Economic Review* 96, 1652–1678.
- Bénabou, R. and J. Tirole (2007). Identity, dignity and taboos: Beliefs as assets. CEPR Discussion Paper 6123, Centre for Economic Policy Research, 90-98 Goswell Rd, London EC1V 7RR, UK.
- Benjamin, D. J., J. J. Choi, and G. Fisher (2010). Religious identity and economic behavior. Working Paper 15925, The National Bureau of Economic Research.
- Benjamin, D. J., J. J. Choi, and A. J. Strickland (2010). Social identity and preferences. *American Economic Review* 100, 1913–1928.
- Bernhard, H., E. Fehr, and U. Fischbacher (2006). Group affiliation and altruistic norm enforcement. *The American Economic Review* 96, 217–221.
- Bisin, A., E. Patacchini, T. Verdier, and Y. Zenou (2006). ‘Bend it like Beckham’: Identity, socialization, and assimilation. CEPR Discussion

Paper 5662, Centre for Economic Policy Research, Centre for Economic Policy Research 90 - 98 Goswell Road London EC1V 7RR, UK.

- Bisin, A., E. Patacchini, T. Verdier, and Y. Zenou (2008). Are Muslim immigrants different in terms of cultural integration? *Journal of the European Economic Association* 6, 445–456.
- Bisin, A., E. Patacchini, T. Verdier, and Y. Zenou (2011). Ethnic identity and labor-market outcomes of immigrants in Europe. *Economic Policy*, 57–92.
- Bisin, A., G. Topa, and T. Verdier (2004). Religious intermarriage and socialization in the United States. *The Journal of Political Economy* 112, 615–664.
- Bodenhorn, H. and C. S. Ruebeck (2003). The economics of identity and the endogeneity of race. NBER Working Paper 9962, National Bureau of Economic Research, 1050 Massachusetts Avenue Cambridge, MA 02138.
- Boeri, T., G. Hanson, and B. McCormick (Eds.) (2002). *Immigration Policy and the Welfare System*. Oxford: Oxford University Press.
- Burlando, R. and J. D. Hey (1997). Do Anglo-Saxons free-ride more? *Journal of Public Economics* 64(1), 41–60.
- Cadsby, C. B. and E. Maynes (1998). Gender and free riding in a threshold public goods game: Experimental evidence. *Journal of Economic Behavior and Organization* 34, 603–620.
- Casey, T. and C. Dustmann (2010). Immigrants’ identity, economic outcomes, and the transmission of identity across generations. *The Economic Journal* 120, 31–51.
- Charness, G., L. Rigotti, and A. Rustichini (2007). Individual behavior and group membership. *American Economic Review* 97, 1340–1352.
- Chen, Y. and S. X. Li (2009). Group identity and social preferences. *The American Economic Review* 99, 431–457.
- Constant, A., L. Gataullina, and K. F. Zimmermann (2009). Ethnosing immigrants. *Journal of Economic Behavior & Organization* 69, 274–287.

- Constant, A., L. Gataullina, K. F. Zimmermann, and L. Zimmermann (2006). Clash of cultures: Muslims and christians in the ethnosizing process. IZA Discussion paper 2350, Institute for the Study of Labor.
- Constant, A. F. and K. F. Zimmermann (2008). Measuring ethnic identity and its impact on economic behavior. *Journal of the European Economic Association* 6(2-3), 424–433.
- Corneo, G. and H.-P. Grüner (2000). Social limits to redistribution. *American Economic Review* 90, 1491–1507.
- Corneo, G. and H.-P. Grüner (2002). Individual preferences for political redistribution. *Journal of Public Economics* 83, 83–107.
- Costa-i-Font, J. and M. Jofre-Bonet (2012). Anorexia, body image and peer effects: Evidence from a sample of European women. *Economica* forthcoming.
- Croson, R., M. Marks, and J. Snyder (2003). Groups work for women: Gender and group identity in the provision of public goods. *The Negotiation Journal* Vol. 24(4), 411–427.
- Dahlberg, M., K. Edmark, and H. Lundqvist (2012). Ethnic diversity and preferences for redistribution. *Journal of Political Economy* 120, 41–76.
- Darity, W. A. J., P. L. Mason, and J. B. Stewart (2006). The economics of identity: The origin and persistence of racial identity norms. *Journal of Economic Behavior & Organization* 60, 283–305.
- Desmet, K., I. Ortuño-Ortín, and R. Wacziarg (2009). The political economy of ethnolinguistic cleavages. Working Paper 15360, The National Bureau of Economic Research.
- Eckel, C. C. and P. J. Grossman (2005). Managing diversity by creating team identity. *Journal of Economic Behavior & Organization* 58, 371–392.
- Ellemers, N., A. V. Knippenberg, and H. Wilke (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, 233–246.
- Evans, G. (2000). The continued significance of class voting. *Annual Review of Political Science* 3, 401–417.

- Falk, E. B., E. T. Berkman, T. Mann, B. Harrison, and M. D. Lieberman (2010). Predicting persuasion induced behavior change from the brain. *Journal of Neuroscience* 30(25), 8421–8424.
- Fang, H. and G. Loury (2005). ‘Dysfunctional identities’ can be rational. *American Economic Review* 95, 104–111.
- Fong, C. (2001). Social preferences, self-interest and the demand for redistribution. *Journal of Public Economics* 82, 225–246.
- Frey, B. and S. Meier (2004). Pro-social behavior in a natural setting. *Journal of Economic Behaviour and Organization* 54, 65–88.
- Fryer, R. G. J. and P. Torelli (2005). An empirical analysis of acting white. *Journal of Public Economics* 94, 380–39.
- Gang, I. N., F. L. Rivera-Batiz, and M. S. Yun (2002). Economic strain, ethnic concentration and attitudes towards foreigners in the European Union. Discussion Paper 578, Institute for the Study of Labor.
- Greif, A. (1994). Cultural beliefs and the organisation of society: A historical and theoretical reflection on collectivist and individualists societies. *Journal of Political Economy* 102, 912–950.
- Guiso, L., P. Sapienza, and L. Zingales (2003). People’s opium? religion and economic attitudes. *Journal of Monetary Economics* 50, 225–282.
- Guiso, L., P. Sapienza, and L. Zingales (2006). Does culture affect economic outcomes? *Journal of Economic Perspectives* 20(2), 23–48.
- Hargreaves Heap, S. P. and D. J. Zizzo (2009). The value of groups. *American Economic Review* 99, 295–323.
- Keely, L. C. and C. M. Tan (2008). Understanding preferences for income redistribution. *Journal of Public Economics* 92, 944–961.
- Klor, E. F. and M. Shayo (2010). Social identity and preferences over redistribution. *Journal of Public Economics* 94, 269–278.
- Loomes, G., C. Starmer, and R. Sugden (2003). Do anomalies disappear in repeated markets? *The Economic Journal* 113, 153–166.
- Luttmer, E. F. P. (2001). Group loyalty and the taste for redistribution. *Journal of Political Economy* 109, 500–528.
- Makabe, T. (1979). Ethnic identity scale and social mobility: The case of Nisei in Toronto. *Canadian Review of Sociology* 16, 136–146.

- Manning, A. and S. Roy (2007). Culture clash or culture club? national identity in Britain. Discussion Paper 790, Centre for Economic Performance.
- Manning, A. and S. Roy (2010). Culture clash or culture club? national identity in Britain. *The Economic Journal* 120, 72–100.
- Manski, C. (2000). Identification problems and decisions under ambiguity: Empirical analysis of treatment response and normative analysis of treatment choice. *Journal of Econometrics* 95, 415–442.
- Masuda, M., G. Matsumoto, and G. Meredith (1970). Ethnic identity in three generations of Japanese Americans. *The Journal of Social Psychology* 81, 199–207.
- McAdams, R. H. (1995). Cooperation and conflict: the economics of group status production and race discrimination. *Harvard Law Review* 108, 1003–1084.
- McLeish, K. N. and R. J. Oxoby (2007). Identity, cooperation and punishment. Discussion Paper 2572, Institution for the Study of Labor.
- Meltzer, A. H. and S. F. Richard (1981). A rational theory of the size of government. *Journal of Political Economy* 89, 914–927.
- Moene, K. O. and M. Wallerstein (2001). Inequality, social insurance, and redistribution. *The American Political Science Review* 95, 859–874.
- Nekby, L. and M. Rödin (2010). Acculturation identity and employment among second and middle generation immigrants. *Journal of Economic Psychology* 31, 35–50.
- O’Rourke, K. H. and R. Sinnott (2006). The determinants of individual attitudes towards immigration. *European Journal of Political Economy* 22, 838– 861.
- Pettigrew, T. F. (1998). Intergroup contact theory. *Annual Review of Psychology* 49, 65–85.
- Phinney, J. S. (1990). Ethnic identity in adolescents and adults: Review of research. *Psychological Bulletin* 108, 499–514.
- Phinney, J. S. (1992). The multigroup ethnic identity measure: A new scale for use with diverse groups. *Journal of Adolescent Research* 7, 156–176.

- Piketty, T. (1995). Social mobility and redistributive politics. *Quarterly Journal of Economics* 110, 551–583.
- Rabin, M. (1998). Psychology and economics. *Journal of Economic Literature* 36(1), 11–46.
- Scheve, K. and D. Stasavage (2006). Religion and preferences for social insurance. *Quarterly Journal of Political Science* 1, 255–286.
- Sen, A. K. (1977). Rational fools: A critique of the behavioural foundations of economic theory. *Philosophy and Public Affairs* 6, 317–344.
- Shayo, M. (2009). A model of social identity with an application to political economy: Nation, class, and redistribution. *American Political Science Review* 103, 147–174.
- Solow, J. L. and N. Kirkwood (2002). Group identity and gender in public good experiments. *Journal of Economic Behavior and Organization* 48, 403–412.
- Süssmuth, B., M. Heyne, and W. Manning (2009). Induced civil pride and integration. Working Paper 2582, Center for Economic Studies.
- Stets, J. E. and P. J. Burke (2000). Identity theory and social identity theory. *Social Psychology Quarterly* 63, 224–237.
- Stewart, K. (1997). Are intergovernmental transfers in Russia equalizing? Occasional Paper EPS 59, UNICEF, Florence.
- Svallfors, S. (2004). Class, attitudes and the welfare state: Sweden in comparative perspective. *Social Policy AND Administration* 38, 119–138.
- Tajfel, H. (1978). *Differentiation between social groups: Studies in the psychology of intergroup relations*. Academic Press.
- Tajfel, H. and J. C. Turner (1979). An integrative theory of intergroup conflict. In W. G. Austin and S. Worchel (Eds.), *The Social Psychology of Intergroup Relations*. Monterey, CA: Brooks-Cole.
- Unger, J. B., P. Gallagher, S. Shakib, A. Ritt-Olson, P. H. Palmer, and C. A. Johnson (2002). The AHIMSA acculturation scale: A new measure of acculturation for adolescents in a multicultural society. *Journal of Early Adolescence* 22, 225–251.
- Veblen, T. (1899). *The Theory of the Leisure Class*. Mentor.

- Watson, T. and S. McLanahan (2009). Marriage meets the Joneses: Relative income, identity, and marital status. NBER Working Paper 14773, National Bureau of Economic Research, 1050 Massachusetts Avenue Cambridge, MA 02138.
- Wichardt, P. C. (2008). Identity and why we cooperate with those we do. *Journal of Economic Psychology* 29, 127–139.
- Zizzo, D. J. (2002). Between utility and cognition: The neurobiology of relative position. *Journal of Economic Behavior and Organization* 48, 71–91.
- Zizzo, D. J. (2003). Empirical evidence on interdependent preferences: Nature or nurture? *Cambridge Journal of Economics* 27, 867–880.