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## Social Identity and Redistributive Preferences: A Survey

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# Social Identity and Redistributive Preferences: A Survey

## Abstract

Social identity has become accepted as a key concept underpinning the endogeneity of economic behaviour and preferences. It is important in explaining attitudes towards redistribution and pro-social behaviour. We examine how economic theory measures social identity and its effects on preferences towards redistribution, social solidarity and redistributive institutions. Empirical evidence indicates that social identity carries weight in explaining the presence of social preferences and attitudes towards redistributive institutions.

JEL-Code: H100, I300.

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

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# 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. But it has long been recognised in economics that this may be an oversimplification: the social and cultural environment with which the agent interacts affects the agent's behaviour by influencing preferences and attitudes (Veblen 1899). Of course standard decision-making models can be adapted to incorporate departures from such a framework, resulting from limited information, agency relationships and network externalities involving other people's actions. However, economists have only recently examined the phenomenon of preference interdependence in greater depth and so it is useful to revisit a such central issue in the economics discipline. One specific route to incorporate preference interdependence is to explicitly model identity and its effects on behaviour.

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). So identity relies on a shared psychological or physical category. But how does identity influence traditional decision-making models? We argue that the extent to which identity influences preferences has wide-ranging implications for welfare economics and calls into question the independence of welfare analysis built upon exogenous individual preferences (Zizzo 2003). More specifically, the effects of social identity may provide some clues as to why population diversity reduces altruism and redistribution: for example Luttmer (2001) finds a suggestive negative relationship between diversity and preferences for redistribution.

This paper provides an overview of the literature of identity and its effect on redistribution attitudes. We examine whether an 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. In doing so we address the following questions:

- What do economists understand by social identity and how does it differ from other similar concepts such as social motivation, group externalities and more general concepts of network effects and culture?
- 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, preferences for redistribution and attitudes toward the welfare state?

Empirical evidence is available from both econometric and experimental studies; the latter has the obvious advantage that it controls for unobserved effects and can be monitored more easily (internal validity), at the cost of losing some external validity. We attempt to classify the existing approaches and evidence to provide a summary picture of the state of the art and to suggest some ways forward.

The organisation of the paper is as follows. Section 2 introduces the idea of identity in economics and its possible relationship with social preferences. Section 3 discusses the evidence on the determinants and preferences for redistribution and outlines how social identity may help in explaining some stylised facts; it examines the meanings of social identity in economic theory. Section 4 assesses the available evidence on the effects of social identity on redistribution and pro-social attitudes, drawing upon different relevant social dimensions. Section 5 provides a discussion of the existing findings along with an evaluation of the ways forward and offers some conclusions.

## 2 Redistributive Preferences and Identity

Redistribution is one of the central features of welfare states. Clearly, the maintenance of redistributive institutions largely depends on individual support for taxing higher incomes more heavily and targeting expenditures to social need. Our focus here is on individuals' willingness to redistribute. Different forms of redistribution and altruism are constrained by individual attitudes through some form of aggregation rule; changes in the willingness of people to pay taxes, to transfer resources to the neediest and support for redistribution-enhancing institutions may induce significant changes in 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 framework 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.

One potential constraint lies in the group formation of preferences. By this we mean the assumption that people’s preferences for redistribution are interdependent in the sense that they are influenced by the characteristics of other people around them (Luttmer 2001). People appear to be more likely to redistribute to the groups they identify with, be that identification based on ethnicity, religious group, social class, nation state or region. The importance of shared identities lies in this: when people fail to match with one identity category they may not put weight on redistribution towards members of that category, or they may develop oppositional identities which can explain segregation and isolation (Battu and Zenou 2010).

Not only attitudes matter in explaining behaviour. Economic behaviour is the result of the interaction between people’s attitudes and their social environment, the latter being a principal source of interdependence. The extent to which individuals internalise their social environment by adopting the values of a social group is reflected in differences in social identity. In that way social identity can potentially determine the extent of individual altruism towards the members of a group vis-a-vis those outside the group. As a consequence, changes in the definition and categorisation of what the group values and whom it includes may have a non-negligible influence on an individual’s altruistic behaviour or attitudes toward redistribution. Groups develop common shared meanings (“cultures” as defined by Guiso et al. 2006), constrained by prior common values and social norms; some of their members’ behaviour is path dependent, rather than being chosen by individuals themselves at every point in time.

The inclusion of social identity in decision-making models, however it is conceived, challenges the assumption of preference independence by drawing upon some form of collective definition of the self. It calls for a reconsideration of the formation of both individual and social-welfare functions. Social identity is environmentally learned and instrumentally determined by objectively identifiable psychosocial traits (such as language, social class and gender). Similarly, it is constructed and reinforced through several forms of social interaction spreading information on social norms and values. The group 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. To explain these externalities further, Akerlof (1997) presents two behavioural models: people either try to increase their social distance (when they are status seeking) or they align themselves more closely (by adopting a conformist behaviour) with certain social categories.

In the later case, an individual suffers disutility from deviating from his or her category norms, which causes behaviour to conform toward those norms even when it encompasses sacrifices to their own well-being (Costa-i-Font and Jofre-Bonet 2012).

The seminal paper by Akerlof and Kranton (2000) conceptualises these ideas formally by considering a set of social categories and associated prescriptions, so that identity gives rise to a utility gain from conforming individual's actions to the prescriptions of each social category. Identity is envisaged as a sense of self or self-image nested in social categories: a person's social environment encompasses a set of prescriptive norms, so that people are willing to sacrifice material pay-offs to meet such social norms. Luttmer (2001) provides empirical evidence showing that individual preferences for redistribution depend on the characteristics of people around them. He shows evidence of a "negative exposure effect" whereby people decrease their support for welfare programmes as the welfare reciprocity in their community rises. Similarly, they show evidence of a "racial group effect" suggesting that people 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 are conceptualised as a network externality that can explain several economic phenomena, for instance why employment rates of white population are associated with that of non-whites. Using experimental data Klor and Shayo (2010) find that people's preferences over redistribution are affected by the payoffs of other in-group members. Shayo (2009) generalises Akerlof and Kranton (2000), and Klor and Shayo (2010) consider identity as resulting from perceived group status, namely the relative position of a group in a hierarchy of categories (such as occupation or education) and its distance from, or similarity with, that of other members of the group. Group identification comes from two processes: the first process is where people care about the status of the group (relative status) and the second process is defined by an individual's conscious willingness to resemble other group members (distance or proximity). The former could be categorised as a specific form of esteem-dependent behaviour.

Broadly speaking, one may claim that social identity gives rise to individual actions to protect the "social self" which include reciprocity and welfare-maximising actions, which in turn give rise to social preferences. Examples of the influence of identity include religious identity effects on the

contribution to public goods and worker reciprocity (Benjamin et al. 2010). The latter can be tested experimentally by means of environmental cues (also called “primes”) that can temporarily make a certain social category more salient to certain groups, causing a person’s behaviour to tilt more toward the norms associated with the salient category. Social identity, as we will discuss later, can be shown to influence, for example, tipping behaviour, blood and organ donation or even participation in electoral processes (the vote turn-out puzzle), despite the tangible net individual benefit of such behaviour being regarded as being almost negligible. Using status as a “market-clearing” variable Shayo (2009) suggests two possible equilibria to explain the vote turn out puzzle. In the first one, 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 income (working) 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. Findings suggest that a common national thread and extensive heterogeneity among the working class weakens working-class solidarity.

Besides redistribution itself, social identity may exert an influence on redistributive institutions. The latter refers primarily to the welfare state, support for welfare services and social insurance schemes. Welfare states undertake both redistribution (anonymous redistribution) and insurance (collective risk sharing): both may be sensitive to the weakening of social identity. Alesina and Glaeser (2004) argue that support for 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 reliance of immigrants are perceived as groups that overwhelmingly receive welfare benefits (Boeri et al. 2002) even when empirical evidence of such belief is very weak. However, recently Dahlberg et al. (2012) finds some evidence of increased immigration effects on the support for redistribution using exogenous variation from policy migration reform in Sweden.

Now let us turn to the way identity has been given meaning within the context of economic analysis.



## 3 Identity and its meanings

### 3.1 Approaches to identity

Society can be divided into social groups based on various categorisations, such as class, ethnicity, language and so on. People identify with 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 inter-group discrimination in the form of a club good. Indeed, discrimination depends on how people categorise each other, identify themselves with social categories and compare each other in a way that may favourably bias their actions and perceptions towards the group they identify with. Such identification takes place early in life for some categories. For instance, Weiland and Coughlin (1979) show that White and Mexican-American children as young as four exhibit some clear form of identity: apparently it turns out to engender an ethnic preference for white classmates.

Belonging to a group provides people with self esteem and social norms; conforming with the group norms nurtures a distinction from the rest of society (Abrams and Hogg 1990). However, the social categories into which people place themselves exist only in relation to other contrasting categories. Hence, 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 and within-group distinction will be minimised (Stets and Burke 2000); group and individual outcomes are perceived as interdependent. People tend to associate themselves with highly successful groups, although membership – as in the case of ethnic or gender group – is not always chosen. Furthermore, not all members are equal: whilst weak members of a group gain through the mere group identification, relatively strong members of the group strive to improve status by group identification (Ellemers et al. 1990).

It is possible to conclude that the process of identification with a group is endogenously determined, or even socially constructed to some degree. The latter explains 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. People 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.

Alternative approaches outside economics suggest that identity refers to 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). The early work by Tajfel and Turner (1979) finds that people exhibit an intra-group preference either when the group is central to their self-definition (and a given comparison is meaningful) or, when it is instrumentally useful. Most frequently employed uses of identity include cultural features such as language, religion, media and food preferences, holiday celebrations and associated behaviour (Phinney 1990, 1992, Unger et al. 2002). Bellini et al. (2009) confirm that diversity is positively correlated with productivity.

Various strands of the economics literature 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 (such as identity or social norms), or by describing the role of information externalities or social interactions. The economic environment may explain anomalies such as deviation for pure self-interested preferences, by creating externalities that modify individual payoffs and ultimately influence attitudes towards redistribution.

## **3.2 Identity and economics**

### **3.2.1 Concepts of identity**

#### **Social identity and choice**

How identity influences choice and manifests itself is a dynamic process linked to social interactions throughout the life course. In his path-breaking piece about Edgeworth's rational egoistic man Sen (1977) refers to psychological processes 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 actions, even when individuals are true to their preferences.

However, it is the work of Akerlof and Kranton (2000) that is recognised as the seminal contribution: this adopted a novel utility maximization framework incorporating individual's self-identification as a powerful motivation for behaviour. They introduced a redefinition of the Tajfel and Turner (1979) concept of identity in a standard neoclassical framework. A person's self-image results from fitting into a set of social categories that imply expected behaviour valued in an economic utility function. Social identity results from membership of some social group either chosen or given (such as gender or ethnic group), which induces prescriptions that in turn cause utility or disutility. If people achieve their "ideal self" and are comfortable with their identity then their utility increases, otherwise, their utility decreases. Norms and prescriptions arise endogenously from social interaction and overall outcomes are likely to differ from what is predicted by models based on pure individualistic models of choice because norms of appropriate and inappropriate behaviour differ across space and time. For instance, within this framework, it is then possible that even rational agents will choose suboptimal occupations based on identity considerations, including public service and duty.

### **Identity and social categorisations**

The Akerlof and Kranton (2000) concept of identity can be envisaged as an extension of the Akerlof (1997) contribution on social distance and social decisions. This work extends previous work by the authors and is inspired by Becker (1991) and Becker and Murphy (1993). Applications include 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 may 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 may produce returns. Hence, redistributive preferences to a group may result from identity providing some form of non-monetary or social reward.

Identity can also result from ideas and beliefs. Bénabou and Tirole (2007) develop a complementary framework based on the individual management of beliefs and identity investment. In such a setting, for instance, 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. It may be that tradeoffs arise in people's categorisations of identity, so that the various weights for different categories may not be perfectly aligned and can even become mutually contradictory. Identity may be the result of a choice of the social categories that provide higher perceived status. The idea that there are identity gains through group membership assumes that all group members are equal and that each attributes group success to himself. Increased in-group homogeneity and a small group size facilitate 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.

### **Identity as beliefs**

By contrast Bénabou and Tirole (2007) explicitly specify a broad class of individual beliefs influencing their self-identity, that people value and invest in, which in turn produce both tangible and intangible returns. Following this line of argument, a preference for redistribution would be motivated by giving satisfaction to an idea of oneself as a "generous person" insofar as it would produce an intangible or cognitive gain. They also study the effect of endogenously arising self-serving beliefs linked to pride, dignity or wishful thinking as nurturing social identification, all of which can both affect pro-social behaviour and social preferences.

### **Identity as culture**

The main drawback of Akerlof and Kranton (2000) lies in that it offers no account of how identities are formed. Partly to account for this Fang and Loury (2005) adopt a cultural approach to identity based on defining identity as the result of social interaction rather than an expression of people's beliefs or choices. In other words, social identity is the outcome of many individuals making a common choice. As in Bénabou and Tirole (2007) identity is all about self-perception. However, they define choices about identity as those made by rational agents anticipating subsequent interaction and its payoffs. It is argued that individuals adopt a similar identity because it helps them manage collective action problems. Different social contexts would give rise to

different identity equilibria. The application of this approach helps to explain racial and social inequalities and more generally how social (dis)integration results from cultural differences between disadvantaged groups that exacerbate pre-existing inequalities.

### **3.2.2 Pure and instrumental identity**

Identity may interact with factors such as self-interest so that it is possible to distinguish given (pure) identity from instrumental (impure) identity. The latter is the result of a self-interested choice motivated by the attainment of higher status. The higher a group in the status hierarchy, the more this group can contribute to the positive payoffs from its members. Accordingly, it is possible to distinguish this from Akerlof and Kranton (2000): pure membership effects form other instrumental reasons for using social identity to ascend socially, obtain additional income and generally self interest. Pure identity effects refer to the desire and utility gain that results from acting in compliance with one's own (inherited or not chosen) identity, which refers to internalised social rules and personality.

Instrumental identity relies on the assumption that individuals invest in different identity affiliations (Becker and Mulligan 1997, Fang and Loury 2005, Bénabou and Tirole 2007). Identity can turn out to be a strategic action to maximize utility and payoffs, rather than an inherited trait.

### **3.2.3 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 may influence preferences for redistribution, but enduring social values and cultural beliefs underpin such institutions too. Social identity is embodied in individuals so that social capital can be seen as an expression of social norms and culturally induced preferences rather than a conscious choice.

Closely related to identity is the concept of proximity. Indeed, proximity reflects some idea of social distance, which reflects for instance the extent to which language and codes of communication as well as shared meanings compare across individuals. This is consistent with the finding that members of a specific group trust each other in ways that non-members do not and that communication among members takes place, incurring smaller transaction costs (Hargreaves Heap and Zizzo 2009).

Identity may be simply be an expression of social distance: those with whom people identify are simply those to whom people feel closest and whose needs are perceived to be closest to their own. Going beyond simple categorisations, the strength of identity is possibly a factor that matters but that has until now received limited attention. One explanation for this is that strength of identity is a difficult construct to measure in natural groups. 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.

### 3.2.4 Modelling identity

#### Canonical model (Akerlof and Kranton 2000)

Although, as we have discussed in the previous section, one could define identity in different ways, the economics literature focuses mainly on one convenient model of identity that has been extensively developed. In this model, identity is based on categories, prescriptions and actions. Each person in society belongs to one or more social categories and the prescriptions indicate social norms associated with each social category or an ideal for each category. A person  $j$ 's utility depends on actions and identity as follows:

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

where  $I_j$  is the identity of person  $j$ ,  $a_j$  denotes the actions of  $j$  and  $a_{-j}$  are the actions of others. In turn 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.

As an extension of the Akerlof and Kranton (2000) approach Benjamin et al. (2010) use the technique of priming in order to infer what the social norm of a particular group is. They use a specific functional form for utility and conceptualise one specific social categorisation to be primed with a certain strength. The person 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  $x_c$ ; then 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 a person'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.

### **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 the individual of interacting with people 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. In addition, the model contains an explanation for the persistence of identity based on the interaction of parental and peer influence.

### **Identity as Status Shayo (2009)(Klor and Shayo 2010)**

Another extension of Akerlof and Kranton (2000) is Shayo (2009) and Klor and Shayo (2010) where identity is conceptualised 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 every

individual  $i$  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. A person's utility can include a measure of perceived cognitive distance as an additive component  $d_{ij}$  that varies with peoples chosen social identification with a group  $j$ . The social-identity equilibrium can then be defined as a profile of actions (and identifications with a group  $j$  if perceived distance is included) that maximises people's utilities given their pay-offs. Shayo (2009) includes a preference for conformity as an extension of Akerlof and Kranton (2000)

Based on the alternative different models of identity we can conclude that all of them consider identity a component to be added in the individual utility function, either directly (Akerlof and Kranton 2000) or indirectly through status (Shayo 2009). Here identity qualifies as a category that, when made salient, influences behaviour. A distinct element of Shayo (2009) lies in the inclusion of a theory of the endogenous determination of identities in equilibrium.

### **An alternative approach : endogenising identity**

Bénabou and Tirole (2007) endogenise both the identity payoffs as well as the categorical prescriptions in Akerlof-Kranton alongside people's cognitive costs of their actions. They do so by taking an investment perspective whereby individuals have a stock of identity capital  $A_{t+1}$  that is the result of some form of investment  $a_t$  with a return  $r_t$  as follows:

$$A_{t+1} = A_t + r_t a_t.$$

An individual's utility function depends on his knowledge about himself  $v_i$  which may not be known with certainty, his stock of identity  $A_t$  that can be experienced ex-ante and his investment decisions to maximise  $U(v_i, A_t, a_t)$ .



One of the potential applications of this type of modelling lies in understanding how individuals make tradeoffs between the relative value of different dimensions of their self-identity and make implicit investment decisions based on such tradeoffs.

An alternative way of endogenising identity can be found in the two-stage approach of Fang and Loury (2005) where social networks individuals are embedded in their identity choices. They model what they call an identity code, a function that maps incomes into indicators  $C_i(y)$ . Once such configurations are fixed, Fang and Loury argue that these codes determine individual risk-sharing choices.

### 3.3 Measuring identity

Identity can be measured using survey questions. The latter include measures of 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) and others. Other studies build up synthetic indexes from questions regarding the importance of religion, attitude towards intermarriage and the importance of racial composition in schools. Constant et al. (2009) conjecture that an immigrant moves in a plane characterised by two positive numbers normalised to lie between 0 to 1, with 1 representing maximum commitment and 0 the minimum 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.

An alternative to survey questions is the use of experimental evidence. 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 a religious concept to strengthen religious affiliation on students that in turn induces participation on behavioural games.

## 4 Reinterpreting the 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. However, the classic Meltzer and Richard model argued that redistribution depends on the mean to median ratio of income distribution (as proxying the median voter support for redistribution) has not been empirically validated.

The empirical evidence on the determinants of redistributive preferences has grown rapidly since Meltzer and Richard (1981), but generally it has not been able to show a clear empirical regularity that fits the prescriptions of classical approaches. We may identify three approaches. The first of these 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, Benabou and Ok 2001, Piketty 1995) as well as class-based explanations of redistributive preferences, mainly 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).

In addition to the different approaches in the literature, one can identify specific variables that correlate with redistribution preferences. Specifically, income proxies self-interest which may affect support for redistribution. Other variables such as marital status, employment status, education and age, race have a very strong effect: blacks are much more favourable to redistribution than whites (Alesina and Giuliano 2010). However, it is unclear how the evidence on these factors matches the theory.

In the classic (Meltzer and Richard 1981) model, redistribution is effectively determined by a decisive individual (under majority rule this is the voter with median income): those with income below that of the decisive individual would vote for more redistribution; those with income above such a level would vote for less redistribution, although this is not empirically estab-

lished. Empirically, this implies a negative relationship between income and support for redistribution. Finally, redistribution should be distinguished from insurance against risks that are less efficiently insured privately (Moene and Wallerstein 2001). Women are more pro-redistribution than men, even though the effect of gender is much smaller than that of race. More educated people are more averse to redistribution. Left-wing supporters 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.

Arguably, one of the potential features missing from this framework is an explicit model of identity. In such a case, people are thought of holding interpersonal preferences, namely, preferences that depend on values, attitudes and other people's choices. Consistent evidence of the latter is the following: Frey and Meier (2004) find that student donations to university funds are lower at the very beginning and at the very end of a student's time at university. In other words, precisely when students are more identified with the group, the more they are more willing to donate. Group loyalty (Luttmer 2001), differences in status (Corneo and Grüner 2000) and race or ethnicity (Alesina and Glaeser 2004) are identified as determinants of pro-redistribution preferences. Below we will subsequently describe examples of empirical evidence suggestive of an effect of different types of identity on redistributive preferences.

## 4.1 Group Identity as Work Incentive

Evidence from the literature in psychology (Pettigrew 1998) and economics (Goette et al. 2006) suggests that there is a general tendency towards in-group preference because people are more inclined to concede rights and entitlements to persons who are perceived as the same (rather 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 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 contrast, Charness et al. (2007) find that, using standard social identity measures, no significant effects are found in a battle of sexes game whilst McLeish and Oxoby (2007) find that negative out-group opinion enforces 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. The importance of the latter lies in the fact that, in small and artificial groups experiments, social identity effects can be manipulated (Chen and Li 2009). Findings suggest that group identity enhances rewards and reduces punishments, establishes distributional preferences and social welfare-maximising actions. Consistent with this Klor and Shayo (2010) find that over a third of the population deviates from self interest in supporting group tax rates.

In regards to modelling identity and work incentives, Akerlof and Kranton (2005) envisage corporate culture as triggering the division of workers into different groups, the prescribed behaviour for each group and the extent to which workers identify with the organization or with the work group and, as a result in adopting their respective organisational goals.

## 4.2 National and Class Identity Clubs

Alesina and Fuchs-Schündeln (2007) show that preferences and attitudes towards the welfare 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 such effects are less lasting. Burlando and Hey (1997) find evidence of significant cultural effects, showing that that in a public-good experiment context, Italians are more likely to contribute than English. Other evidence that is consistent with the latter 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 both cultural and legal dimensions. Whilst the latter is reflected in differences in attachments and norms, the former relies on a related concept that in some dimensions coincides 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 people are more likely to be nationalistic (Shayo 2009), which is explained by a greater similarity to the national prototype.

Furthermore, the formation of a group requires the existence of an outer group in such a way that the absence of an outer group can be argued to inhibit cooperation when committing to global agreements is costly (Wichardt 2008). Casey and Dustmann (2010) examine ethnic identity in Germany and find 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. As expected, they also find that the time spent in Germany increases the probability of reporting a German identity. In contrast, Nekby and Rödén (2010) analyse 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 Clubs

Language and gender form naturally occurring groups that merit special study. 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 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 people's interdependence and people may seek social mobility by using the language of a more highly evaluated group, such as the Catalan case. Language is explored as a 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, or the provision of public goods (Desmet et al. 2009).

## 4.4 Ethnicity and Migration

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 – reveals that people, 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 people may identify with the dominant culture and others may reject it, even if it implies adverse labour market outcomes. In a further empirical study Battu and Zenou (2010) investigate the relationship between ethnic identity and employment. They find that in the UK people’s identity choice is greatly 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 socialisation of an ethnic minority are more pronounced in mixed than in segregated neighbourhoods. The strength of identification with the majority culture regardless of the strength of (ethnic) minority identity is important for labour market outcomes (Nekby and Rödén 2010).

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 of 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 people tend to adopt the identity of the dominant group. Bodenhorn and Ruebeck (2003) find that mixed-race people benefited when they could form a distinct racial class falling between dominant white and subordinate black. Earlier contributions include Stewart (1997), that provided an initial attempt to formalize an economic analysis of identity. He argues that the intensity of

racial-cultural identity is a commodity that should be included in the individual's utility function. Individual racial-cultural identity is an argument in the individual utility that is affected by the prevailing norms of own- and other-group racial-cultural identity. Consistently, the intertemporal change in the stock of own-group racial-cultural identity is a complex composite of individuals' identities. Bernhard et al. (2006) find evidence of identity-driven altruism in the context of native population in Papua New Guinea, there was evidence of intra-group altruism. 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. More specifically, people not only cared about themselves in voting, but on the benefits of their hamula (community organisation). Furthermore Darity et al. (2006) use 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 racist social norm, where all persons pursue a racist 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 (in other words, associating academic success to lack of identity) are more developed in racially mixed schools, and influence behaviour of certain minorities. 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. Finally, Constant and Zimmermann (2008) find that the ethnic identity of immigrants is a strong determinant of their labour force participation.

In explaining attitudes towards the welfare state one might argue that they are influenced by whether people are skilled workers or not, given that the welfare state affects the net earnings of the better off, including as skilled workers. If traditional economic models hold, then attitudes towards a redistributive institution should only be determined by the net gain people receive from them. On the other hand, attitudes towards the welfare state may reflect social values instead. The latter include cultural preferences or locally formed values and memories of the past where people derive utility from attaining a better match between their identity and their actions.

## 4.5 Religion Clubs

Alesina and Giuliano (2009) find that certain religious affiliations are associated with a higher preference for redistribution. Benjamin et al. (2010), reports experimental evidence building on a model inspired by Akerlof and Kranton (2000), examine how the saliency of religious identity influences people's choices. They find that the saliency of religious identity stimulates individual contributions to public goods. However, they do not find supportive evidence that religious identity affect work effort and generosity in a dictator game. 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 undertake 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 having an intense religious identity is roughly twice as large for Muslims as for non-Muslims. For Muslims, the number of years since arrival does not seem to be related to their inclination to assimilate to their home country. Interestingly, other findings indicate that a Muslim born having spent there more than 30 years is comparable with a non-Muslim just arrived to the UK. 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, 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. Finally, Benjamin et al. (2010) find that religious identity affects contributions to public goods, Protestantism (Catholicism) increases (decreases) contributions, and Judaism increases worker reciprocity. These results suggest that religious identity does exert an effect on people's social behaviour.



## 5 Discussion

Incorporating social identity into economic analysis can provide useful alternative explanations to overcome the empirical limitations of the traditional Meltzer and Richard (1981) approach to explain why societies redistribute. Identity may influence how people behave – specifically their pro-social behaviour – as well as more general attitudes towards redistribution. However, the empirical identification of identity on redistributive preference is far from straightforward. Identity can exert second-order effects on redistributive institutions, that in turn have an effect on individual preferences for redistribution. For instance, the welfare state, as a (potentially) redistributive institution, was assembled from pre-existing social bonds. At the same time it can be argued that, as an institution, welfare programmes may have contributed to strengthening such bonds between its members, so that the relationship between identity and redistribution is likely to be recursive. 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 form of circularity exists between individual and societal attitudes to inequality and preferences for redistribution.

Methodologies to identify and measure identity are varied and still being developed; they can be divided into those derived from experimental evidence and those derived from survey evidence. Two studies have explored the association of social identity and pro-social behaviour using controlled experiments that hold strong internal validity. Chen and Li (2009) have examined directly the question of group identity and social preferences using experimental evidence. Hargreaves Heap and Zizzo (2009) found that group membership reduces charitable giving to outsiders. Another type of evidence comes from econometric studies, which generally contain high external validity when carefully undertaken. Alesina and Giuliano (2010) examine evidence for an individual's redistribution preferences using the General Social Survey and the World Values Survey and find that historical experiences and culture matter. Experimental and econometric findings taken together are consistent with the general idea that social identity and preferences for redistribution are causally connected. Similarly, we may conclude that there is robust evidence that individual self-interest alone fails to explain social behaviour.

One important question in modelling identity lies in separating those components of identity that are endogenous because they result from people's

choices (instrumental identity) and those that are given. People are not entirely free to choose their own identity given that it may be imposed on them in the light of others' behaviour and perceptions. Some consensus in the identity literature indicates that interactions within social groups make interaction with non-members less desirable: stronger identification within a group will increase cooperation with this group relative to others. However, evidence from artificial and natural groups exhibits different results.

A question that remains to be researched further concerns the mechanisms through which identity operates. Preference interdependence may result from the presence of forms of social identification within some reference groups, in the form of so called reference dependent preferences (Loomes et al. 2003). Another possible behavioural explanation lies in the existence of a 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 can be found in the neuro-economics literature where neuro-transmitters and levels of serotonin are found to correlate with preference interdependence (Zizzo 2002).

It can be argued that, although social identity has been a category falling outside the realm of economics (mainly studied within the social psychology and sociology literatures), identity cannot be ignored if economic phenomena such as redistributive preferences are to be adequately understood and empirically modelled. Among the most important questions that need further examination we should highlight the need of connecting further social identity with other related approaches such as club goods. Whilst the mainstream literature associates identity as following from categories underpinning status, there is a parallel literature that links identity with self-esteem and beliefs in which people invest. Finally, it is important to point out that at the moment most studies employ a partial measure of social identity based on some categorisation (e.g., nation, gender, language etc), but we know little about which categories matter the most, and how people trade them off.

As far as policy is concerned, the recognition of the importance of social identity within economics suggests the need to go beyond simplistic notions of equality and opens the door to the understanding of policy solutions to stigma, exclusion, xenophobia and racism among other social behaviour. More generally, it points to the role of identity as a key social choice.

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