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Identity conflict: A framework and empirical investigation^{*}

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Abstract

We develop a theoretical framework to analyse the implications of individuals belonging to multiple groups and trying to maintain multiple identities. Using the term identity conflict to refer to any outcome where individuals face penalties for failure to satisfy the norms of all groups, we show that identity conflict arises in various settings where group norms differ, and also in settings where the actions required to satisfy all group norms coincide. In addition, we show that identity conflict may not materialise even if group norms differ. Exploiting data on subjective wellbeing in a nationally representative survey, we show that identity conflict is a real phenomenon in the context of national and religious identities. Our results suggest that the cost of identity conflict is large, and of similar magnitude to that of experiencing discrimination in the labour market. Moreover, we find that education, as opposed to religious affiliation, shapes the cost of identity conflict.

Keywords: Identity economics, identity conflict, subjective wellbeing

JEL codes: D7, Z1

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1 Introduction

Identity economics acknowledges that humans are social creatures, and that belonging to any socially defined group of individuals reaps the benefits of an identity subject to satisfying, to some extent, the group's norms for behaviour. In their seminal paper, Akerlof and Kranton (2000) augment the standard utility function, where decision-making takes into account own tastes, with an identity component to capture the benefit of group membership and incentives to conform to group norms.¹ Failure to comply with a group's norms is punished by a loss of identity and tradeoffs therefore exist between maintaining an identity and pecuniary motives, with utility shaped by the degree to which an individual's behaviour conforms to the group's norms. The usefulness of this identity framework is demonstrated through its application to a wide range of issues including the economics of gender, poverty and social exclusion.

To date theoretical contributions in identity economics largely address the implications of identity for behaviour and economic outcomes (e.g., Akerlof and Kranton, 2000, 2010; Georgiadis and Manning, 2013) as well as the formation of identity (e.g., Bisin and Verdier, 2001; Darity Jr. et al., 2006; Bénabou and Tirole, 2011; Bisin et al., 2011b, 2016; Collier, 2019). It also recognises the distinction between the short-run, where individuals take norms as given, and the medium/long-run, where norms might be endogenous and even subject to manipulation (e.g., see Kranton, 2016, for a survey and discussion). However, most formalisations involve individuals maintaining a single identity. The possibility that people belong to multiple groups and possess multiple identities has received scant attention in this literature. One notable exception is Wichardt (2008), who develops the Akerlof and Kranton (2000, 2005) framework to pursue the idea that individuals respond to a conflict between the norms of two groups by favouring the identity of one group over the other. In this framework, an individual belongs to two social groups and chooses between two distinct actions. The choice between actions leads to conflict between the two group identities since each action favours a different identity. A context-dependent and group-specific parameter reflects the individual's valuation of one group identity relative to the other group identity and an economic outcome (capturing pecuniary motives), with larger valuations raising the tendency to conform with that group's norm. Since the size of group-specific parameters is context dependent, the choice between actions, and which identity to favour, may differ across settings. With reference to the existing sociological literature, Wichardt (2008) surmises this group-specific parameter is likely to be large in small and/or homogenous groups.

In contrast to Wichardt (2008), where difficulties aligning with the norms of both groups are ultimately resolved by favouring the identity of one group over the other, we consider an alternative scenario where individuals belonging to more than one group try to maintain all identities. In the theoretical section that follows, we extend the framework of Georgiadis and Manning (2013), also deriving from Akerlof and Kranton (2000), which considers a single group and a single action. While

¹See also Akerlof and Kranton (2005, 2010). Similar themes are explored, albeit in entirely different conceptual frameworks, in, for instance, Bernheim (1994) and Sen (1984, 1993, 1999).

Georgiadis and Manning (2013) recognise that the action space could be multi-dimensional they limit their analysis to a single dimension as suitable for their purposes. Our contribution lies with formally introducing multiple groups and actions in multiple dimensions in order to consider the trade-offs that exist between group norms in addition to those that exist between personal tastes and group norms. Specifying a continuum of actions in a multi-dimensional action space moves beyond the binary choice of favouring one identity over another as in Wichardt (2008), allowing instead for degrees to which an individual favours one identity over another. We use the term identity conflict to describe any situation where the required actions to move closer to the norms of one group reduce conformity with the norms of another group and the individual faces costs in relation to the loss of that groups identity. An interesting implication of our framework is that identity conflict is not restricted to settings where group norms differ and may arise even when the actions required to fully satisfy the norms of distinct groups coincide. Moreover, identity conflict may not materialise even though group norms differ. Thus our framework sheds new light on when and why identity conflict arises in settings where individuals belong to multiple social groups.

To test the basic features of our framework, we use data on subjective wellbeing, which are increasingly used as an empirical proxy of utility in testing economic principles (see for example Di Tella et al., 2001; Van Praag and Baarsma, 2005). We nest our empirical analysis in the economics of immigration and integration literature, which considers the determinants and labour market consequences of ethnic, religious and national identities (Bisin et al., 2008; Battu and Zenou, 2010; Manning and Roy, 2010; Bisin et al., 2011a; Islam and Raschky, 2015). A common theme in this literature is that ethnic minorities sit between two cultures. Using a unique question in the UK Citizenship Survey, which addresses the potential for conflict between national and religious identities, we show that individuals reporting some conflict between these identities experience lower levels of life satisfaction. This finding also has broader implications for the study of identity economics insofar as it provides indirect evidence on a core assumption made in this literature i.e. that people face penalties for deviating from the norms of a group. Our results suggest that the cost of identity conflict is non-trivial and is similar in magnitude to that of experiencing discrimination in the labour market.

As our empirical research explicitly concerns religious identity, and as Muslims have received considerable attention in the immigration and integration literature (see for example Constant et al., 2006; Bisin et al., 2008; Georgiadis and Manning, 2013), we also investigate whether the outcomes of Muslims are different to others in our empirical application. Interestingly, however, we find little evidence that the cost of identity conflict varies between Christians and Muslims. On the other hand, the cost of identity conflict is larger for low-educated individuals, which is consistent with these individuals lacking the skills to navigate the demands of multiple identities.

In a world where people belong to multiple groups, there is always the risk that people will struggle to satisfy the norms of all groups to which they belong. If identity conflict emerges, utility is impacted negatively, which represents an issue for both the individual and the society they inhabit. Our research demonstrates that identity conflict is a real phenomenon in the context of national and religious identities and provides the first estimate of its cost. It also sheds light on policy levers that might lessen the cost of identity conflict, for example, targeting levels of formal education.

The remainder of this paper is structured as follows: Section 2 outlines our theoretical framework, Section 3 introduces our data, Section 4 presents our empirical analysis, while Section 5 concludes.

2 Theoretical framework

Our theoretical framework builds on the work of Akerlof and Kranton (2000), and in particular Georgiadis and Manning (2013), who model utility as the sum of two quadratic loss functions that together capture the importance of own preferences and identity concerns in decision-making processes. As noted earlier, while Georgiadis and Manning (2013) recognise the possibility of multiple identities, we formally extend their analysis here to examine the actual trade-offs and tensions involved in trying to maintain multiple identities, and specifically the scope for identity conflict to materialise.

Consider an individual who faces a decision to locate at some point, an *n*-vector, \boldsymbol{x} , in the *n*-dimensional action space, $E \subset \mathbb{R}^n$, where each dimension corresponds to the quantity or quality of a distinct action.² Utility comprises a conventional component, that is independent of identity concerns, reflecting the individual's own (non-identity based) tastes with respect to these actions. This is modelled according to $A - \frac{1}{2}\boldsymbol{a'v}$ where A is the maximum conventional, or non-identity, utility available to the individual and \boldsymbol{a} and \boldsymbol{v} are *n*-vectors where the k^{th} element of \boldsymbol{v} is given by $v_k = (x_k - \tilde{x}_k)^2$.³ Hence, in the absence of identity concerns, $\tilde{\boldsymbol{x}}$ is the optimising vector for the individual in the action space. The elements of \boldsymbol{a} are penalty weights for movements away from the conventional utility optimising selection of \boldsymbol{x} in each of the *n* dimensions reflecting the underlying opportunity costs. These may be viewed as characterising the individual's flexibility or rigidity with respect to their own (non-group identity) norms in each dimension.

Utility also comprises an unconventional component reflecting identity concerns, $\sum B^g - \frac{1}{2} \boldsymbol{b}^{g'} \boldsymbol{w}^g$, where B^g represents the utility benefits available to the individual from fully conforming to the norms of group g in each dimension.⁴ We refer to $\bar{\boldsymbol{x}}^g$ as the actions required for a particular individual to *fully* satisfy the norms of identity group g and use this interchangeably with the 'norms' of group g. The k^{th} element of \boldsymbol{w}^g is given by $w_k^g = (x_k - \bar{x}_k^g)^2$ and is assigned the penalty

²We do not limit the action space to \mathbb{R}^{n}_{+} , as some actions may take negative as well as zero or positive values.

³The key characteristic of this part, v, of the loss function is that the penalty is convex in the distance differential, $x_k - \tilde{x}_k$. Note, however, that the function symmetrically penalises a given overshoot $x_k - \tilde{x}_k = t$ and undershoot $\tilde{x}_k - x_k = t$ (t > 0). In practice, while the actual penalty may be asymmetric in this respect, such considerations do not qualitatively affect our analysis.

⁴Note, B^g can be negative or zero as well as positive. An individual may not wish to have a particular identity $(B^g < 0)$ but the costs associated with non-conformity to that group's norms may lead them to adopt actions to some extent satisfying those norms so as to reduce non-conformation costs.

weight, b_k^g . If a group's norms specify particular actions for all dimensions in the action space, the norms are represented by a single vector in that action-space. If group g's norms specify actions in all dimensions but one, k (i.e. the group does not care about actions in dimension k), then the penalty weight in that dimension is zero, $b_k^g = 0$, and the norms are represented by a line parallel to the k^{th} axis along which all points equally well satisfy the group's norms.⁵

Where a group's norms depend on a particular action in dimension k, the penalty weight, b_k^g can be viewed as a combination of the flexibility/rigidity of group q to the individual moving away from its norms in dimension k and the individual's ability to mitigate utility loss from penalties associated with deviation from the norms. Let β_k^g be the penalty weight imposed by group g for movements away from their norms in dimension k, and I_k^g , where $I \in [0, 1]$, be an index inversely related to the individual's immunity towards, or ability to mitigate, any penalty, such that their realised penalty weight for that dimension is given by $b_k^g = \beta_k^g I_k^g$. Hence, where group g's norms specify a particular action in dimension k (i.e. group g cares about action k), the individual might not suffer utility loss for deviating from the group's norms in the k^{th} dimension because (i) the group has a zero penalty $(\beta_k^g = 0)$, (ii) the individual is fully immune to, or able to mitigate any effect of, the penalty upon their utility $(I_k^g = 0)$, or (iii) both. It may appear that the absence of a penalty for movements away from a group's specified norms in one dimension is equivalent to the group not having norms in that dimension since $b_k^g = 0$ in both cases. However, as we shall see later, there can be important distinctions between the two cases. Also, note that while the location of a group's norms and the identity loss penalties may vary by individual characteristics, for expositional simplicity, we omit individual-specific indexing throughout much of the following discussion.

Without loss of generality, we base our theoretical discussion on a stylised example involving two socially defined identity groups, $g \in \{F, S\}$, where F represents an individual's (extended) family and S represents a sports team. We choose these group identities as the various scenarios we wish to explore are readily illustrated within this setting, and these group identities are also adopted in Wichardt's (2008) study of multiple identities. We also draw on examples from the film Bend it like Beckham (2002) (henceforth, *BilB*), where sports team and family group identities play a prominent role, to illustrate certain aspects of our theoretical framework.⁶ Hence, individuals solve the following problem:

$$\max_{\boldsymbol{x}} U(.) = A + B^{F} + B^{S} - \frac{1}{2} \boldsymbol{a}' \boldsymbol{v} - \frac{1}{2} \left(\boldsymbol{b}^{F} \right)' \boldsymbol{w}^{F} - \frac{1}{2} \left(\boldsymbol{b}^{S} \right)' \boldsymbol{w}^{S}$$
(1)

where the first-order conditions yield the following expression for the optimising co-ordinate, x^* ,

⁵In the case that the group's norms do not depend on actions in two (more than two) dimensions then the norms are represented by a plane (hyper-plane) over the relevant dimensions.

⁶Bisin et al. (2016) also signpost their work with this film in a separate but not unrelated issue of ethnic identity and integration in the context of marriage choices and identity formation.

taking into account the conventional and identity-based aspects of utility:

$$x_{k}^{*} = \frac{a_{k}\tilde{x}_{k} + b_{k}^{F}\bar{x}_{k}^{F} + b_{k}^{S}\bar{x}_{k}^{S}}{a_{k} + b_{k}^{F} + b_{k}^{S}}$$
(2)

In practice, the norms of a group are unlikely to encompass actions in each and every dimension of the action space, for example, the sports team norms may not extend to the amount of music the individual listens to. The role of all choices (in terms of relevant opportunity costs) in other dimensions of the action space are then captured by the loss function for the individual's own tastes: $A - \frac{1}{2}a'v$. However, for simplicity and ease of graphical exposition, we continue our discussion assuming that *all norms* are identified across the same two same dimensions, $k \in \{1, 2\}$. Let x_1 represent the number of weekly sports team training sessions attended and x_2 represent the number of annual family events attended. Hence, from Eq. (1) the individual now maximises:

$$\max_{x_1, x_2} U(.) = A + B^F + B^S - \frac{1}{2} [a_1, a_2] \begin{bmatrix} (x_1 - \tilde{x}_1)^2 \\ (x_2 - \tilde{x}_2)^2 \end{bmatrix} - \frac{1}{2} [b_1^F, b_2^F] \begin{bmatrix} (x_1 - \bar{x}_1^F)^2 \\ (x_2 - \bar{x}_2^F)^2 \end{bmatrix} - \frac{1}{2} [b_1^S, b_2^S] \begin{bmatrix} (x_1 - \bar{x}_1^S)^2 \\ (x_2 - \bar{x}_2^S)^2 \end{bmatrix}$$
(3)

To introduce the concepts of no conflict, conflict and identity conflict we begin with a simple model where there is perfect information and the penalty weights for deviations from the norms are exogenous and fixed for a given individual. In our framework there is no conflict if the individual can fully appropriate the gains associated with the set of norms that includes both their own norms (i.e. non-identity norms) and the norms of each group (i.e. identity norms). In other words, there is no conflict if the individual can achieve the maximum available utility, $U(.) = A + B^F + B^S$. It follows from Eq. (2) that there is no conflict under three conditions. The first, and perhaps most obvious, is the case where the set of norms are co-located as is illustrated in Figure 1(a) where $\bar{x}^S = \bar{x}^F = \tilde{x}$. In this scenario, the amount of sports training and family events required to satisfy the sports team norms is exactly the same as that required to satisfy the family norms. Moreover, in the absence of identity concerns, these are also the individual's preferred actions. Perhaps, from the perspective of the sports team, attending training sessions is valued because it shows team-enhancing commitment and improves the team's chance of winning matches while attending family events is valued because it improves the teams's image if team members are family orientated. From the perspective of the family, training is perhaps valued because it reflects the family identity of fitness, health or sporting provess while family events provide opportunities for bonding. At the same time, however, beyond a certain point, both groups find training and family events to be excessive. For instance, the sports team prefers the individual to train in moderation to avoid injuries while they view attendance at too many family events as a character flaw. Similarly, the family views excessive sports training as one-dimensional and encourages the pursuit of wider interests while too many family events risk family discord. Thus both the sports team and the family penalise too little or too much of a given activity but, under co-location, in a happy coincidence, both groups' norms agree identically with the individual's own norms on the required actions in these dimensions. In *BilB* such co-location occurs for Jules (one of the main characters, played by Keira Knightly) since her own norms, the sports team and her father's norms coincide, such that she experiences no conflict in maintaining these identities.



However, there is another characterisation of co-location, we label this *partial co-location*, which in the context of a multi-dimensional action space, provides more interesting insights with respect to when conflict, and identity conflict, may or may not arise. Consider the situation in Figure 1(b) where each of the group norms, \bar{x}^g ($g \in \{F, S\}$), is represented by a different vector in the 2-dimensional action space, but the penalty weight on actions in the x_1 dimension (weekly training sessions) is zero for group S $(b_1^S = 0)$, while the penalty weight for group F is zero in the other dimension $(b_2^F = 0)$. Hence, an individual can vary x_1 (x_2) without experiencing a utility loss associated with the identity of group S(F). So, while the group norms are not co-located, the individual can avoid identity/utility losses from deviation from the norms of group S(F) along the horizontal (vertical) dashed line rr'(qq'). From the definition of b_k^g above, zero utility penalty for deviating from specified norms can arise because the group does not impose a penalty ($\beta_k^g = 0$) and/or because the individual is immune to the penalty $(I_k^g = 0)$. In this context, we refer to the collection of points in the action space, where *deviation* from a group's norms involves no identity loss, as the group's 'quasi-norms'. Partial co-location of the set of norms then arises if these dashed lines representing the groups' quasi-norms, both pass through the individual's non-identity norms, \tilde{x} , as illustrated in Figure 1(b): the individual can locate at \tilde{x} without incurring losses and experiences no conflict. Suppose that the individual prefers to attend five family events per year and train once per week: $\tilde{\boldsymbol{x}} = (1,5)$. However, fully satisfying the family norms requires $\bar{\boldsymbol{x}}^F = (1,7)$ while fully satisfying the sports team norms requires $\bar{x}^S = (3, 5)$. Partial co-location occurs if the individual is able to train once per week and attend five family events per year without incurring a loss of utility

from any group penalties for deviating from their norms. For example, the sports team might not always select the individual to play for the first team if training is missed while the family may greet the individual less enthusiastically after a family event is missed but neither outcome causes the individual a utility/identity loss. In *BilB*, Jules schools Jess (played by Parminder Nagra) on the art of navigating her own mother's norms for sporting activity that differ from her own norms and that of the sports team - she simply ignores her mother's objections - suggesting that either Jules' mother does not actually impose penalties for deviating behaviour or that Jules is immune to the penalties imposed. Hence, in this instance, the norms are partially co-located. BilB further includes examples to illustrate how partial co-location might arise. For example, when Jess initially joins the football team, at her older sister Pinky's (played by Archie Panjabi) advice, she hides her involvement with the team to avoid conflict with the family norms for sporting activity, and this subterfuge is successful for a while. In addition, while Pinky believes that she herself, through subterfuge, has avoided penalties from deviating from an established family norm in conducting a 'secret' relationship, it later transpires that her mother knew of this deviating behaviour but chose not to confront and penalise it. Thus, while the family norms included specific actions regarding the conduct of certain relationships, with assumed sanctions for deviating behaviour, no penalty was actually applied for deviating from these norms. Note that in practice, where a group's norms specify particular actions in a given dimension, penalty weights might only be zero locally as opposed to globally (as implied by the horizontal/vertical quasi-norms in Figure 1(b)): a group may not penalise small deviations or small penalties might be easier to deflect. In reality, the realised penalty weights b_k^g may be endogenous and increasing in the size of the deviation from a group's norms in a given dimension, for instance: $b_k^g = \beta_k^g(w_k^g) I_k^g(w_k^g)$, where $\beta_k^{g'}(w_k^g), I_k^{g'}(w_k^g) \ge 0.7$ As a consequence the vertical/horizontal lines representing the groups' quasi-norms in Figure 1(b) may not extend far away from the point vector norms.

Finally, there will be co-location and no conflict where the individual, and/or one or more of the groups, do not specify (i.e. do not care about) actions in a given dimension (or dimensions) such that a situation akin to that in Figure 1(b) arises, but where the vertical/horizontal dotted lines are actual norms rather than quasi-norms. For instance, there is co-location at \tilde{x} in Figure 1(b) if, say, neither the individual nor the sports team care about actions in the x_1 dimension (their norms are both represented by the horizontal line rr') and the family does not care about actions in the x_2 dimension (their norms are represented by the vertical line qq'). More generally, conflict and utility loss will not arise so long as there is at least one point in the *n*-dimensional action space where all norms and/or quasi-norms intersect. However, as the previous example from *BilB* helps to illustrate, there is a potentially important difference between (i) a group not specifying actions in a given dimension (norms extending beyond a single vector to a line, plane or hyper-plane), and (ii) a group specifying actions in a given dimension but not penalising deviating behaviour (quasi-norms extending beyond a single vector). In the latter case, one individual might experience

⁷Again, the specification here is symmetric to variations beyond and below the norms.

conflict (changing their behaviour to accommodate the non-co-location of group norms) whereas another individual who better understands the 'grey' areas and how to operate within them (since they know when they *do not* need to change behaviour to accommodate specified norms that are not penalised) might not. In *BilB*, Pinky's ignorance as to the true penalty 'menu' for deviating from family norms on the conduct of relationships drove her to (potentially distortionary) subterfuge that could have caused unnecessary conflict. We return to this issue later on when we introduce imperfect information.

Since 'no conflict' emerges where $U(.) = A + B^F + B^S$, the characterisation of 'conflict' is where $U(.) < A + B^F + B^S$, and hence due to differences in terms of required actions across own and group norms, the individual experiences a utility loss relative to a situation in which norms or quasinorms are co-located. Within the broad set of conflict possibilities we are particularly interested in 'identity conflict' (defined above), and how seeking to maintain multiple group identities relative to maintaining a single identity shapes behaviour. Specifically, the desire to maintain own (nonidentity) norms and the norms of a single group involves a balancing act, with the individual generally choosing to locate somewhere between own norms and that of the group. However, with multiple group identities to maintain, the nature of the balancing act between any pair of norms will, in general, vary according to the location and penalty weights of the other norms. For instance, tensions between any two group identity norms will typically be a function of the location and penalty weights with respect to own norms: two different individuals facing identical group norms and penalties may experience entirely different tensions with respect to maintaining these group norms. As we have already seen above, conflict and identity conflict need not arise in the case of an individual seeking to maintain multiple group identities even if those group norms are not co-located. However, as we will see, below, in the context of multiple group identities, identity conflict is possible even when group norms are actually co-located.

Figure 2 illustrates identity conflict in various situations where groups norms are not co-located. In Figure 2(a), the individual's non-identity norms, sit directly between the two group norms, and hence any movement towards satisfying the norms of one group requires moving farther away from the norms of the other group. In this case, with non-zero realised penalty weights, identity conflict arises because the family (sports team) norms require the individual to attend more family events (training sessions) and train less (attend fewer family events). In *BilB*, Jess experiences identity conflict as satisfying the football team's norms (playing the football final) directly pulls her away from satisfying her family norms (attending her sister Pinky's wedding). Figure 2(b) tells a slightly different story as in this case some movement (i.e. vertically from \tilde{x}) may help to satisfy the norms of both groups, but ultimately at some point there is a conflict between satisfying the norms of one group at the expense of the other. Finally, in Figure 2(c) identity conflict arises once the individual has reached out from \tilde{x} to \bar{x}^S . Any further movement towards satisfying \bar{x}^F involves movement away from the norms located at \bar{x}^S . The quadratic loss function formally establishes the notion that more of an action is not always better. In Figure 2(c), the sports team penalises overtraining while the family pushes the individual to zealously pursue sporting achievement. For example, in BilB, the team coach Joe (played by Jonathan Rhys Meyers) is coaching, rather than playing, football due to a career-ending injury, caused by excessive training while trying to satisfy his father's norms, to the detriment of himself and his team.⁸





Figure 3(a) illustrates how identity conflict may arise in situations where group norms are colocated. While the same actions are required to *fully* satisfy the norms of both groups, in general, the individual will optimally locate somewhere between \tilde{x} and $\bar{x}^F = \bar{x}^S$, and not necessarily on the straight line joining these points (the dashed line in Figure 3(a)). The penalty weights in the quadratic loss functions may differ by dimension in the action space and across each set of norms (the group identity norms and the non-identity norms). These variations in the weights, in

⁸Note that the extent to which individuals feel that utility loss is attributable to identity conflict might depend upon where the individual's non-identity norms are located relative to group norms. However, for our empirical application, it is important that individuals are able to recognise that there is conflict in the sense that it is significant between the identities they are trying to maintain rather than the exact size of any associated utility loss. We return to the issue of an individual recognising or attributing conflict to maintaining multiple identities below.

combination with differing locations of norms, determine the trade-offs, and ultimately, the location of optimising choices in accordance with Eq. (2). To illustrate, suppose own norms are $\tilde{x} = (2, 2)$ and there is only one group identity, say F, with $\bar{\boldsymbol{x}}^F = (10, 10)$ and denote the optimising location, \boldsymbol{x}_{F}^{*} . If the same weights apply to each dimension $(a_{1} = a_{2} \text{ and } b_{1}^{F} = b_{2}^{F})$ then \boldsymbol{x}_{F}^{*} will be on the dashed line in Figure 3(a). If, however, the weights are not the same across the two dimensions, for instance, with penalty weights $(a_1, a_2) = (1, 1)$ and $(b_1^F, b_2^F) = (0.5, 1)$, the optimising co-ordinate in the action space using Eq. (2) is $\boldsymbol{x}_{F}^{*} = (4.7, 6.0)$, which lies above the straight line joining $\tilde{\boldsymbol{x}}$ and \bar{x}^F . The same logic applies if S is the only group and x_s^* is the optimising location, such that unless $b^F = b^S$, x^*_S will not be located at the same point as x^*_F , even though $\bar{x}^F = \bar{x}^S$. Hence, even though group norms are co-located, the individual's choice is based on the set of norms that also includes own norms, and once these are taken into account, the actions required to best satisfy the norms of one group conflict with the actions required to best satisfy the norms of the other group. Figure 3(a) captures this situation, where the grey dots identify the individual's optimising location in the absence of group S, x_F^* , and in the absence of group F, x_S^* . Such incidences of identity conflict might, in practice, be quite visible to the individual, especially given that adoption of group identities is likely to have a temporal dimension. For example, in *BilB*, Jess has a family identity to maintain when she makes the choice to gain a sports team identity. While she might have initially located at a point akin to x_F^* , her decision to adopt a sports team identity might have involved moving to a point akin to x_s^* , were it not for the need to maintain her family identity. That $x_F^* \neq x_S^*$ is indicative of identity conflict.

Figure 3: Identity conflict with co-located group norms and no identity conflict with partially co-located group norms



Figure 3(b) illustrates how conflict, but *not* identity conflict, arises when group norms are partially co-located. Here, the family and sports team 'quasi-norms' (defined earlier), respectively, rr' and qq', are partially co-located at $\bar{\boldsymbol{x}}^{FS}$. Since $\bar{\boldsymbol{x}}^{FS} \neq \tilde{\boldsymbol{x}}$ there is *conflict*, $U(.) < A + B^F + B^S$,

and the individual optimally locates at a point \boldsymbol{x}^* (not illustrated in the Figure). However, it is the case that as long as \boldsymbol{x}^* is located at the point \boldsymbol{a} in the Figure, then there is no *identity conflict*. To see this, consider once again the optimising location with respect to the individual's own nonidentity norms and the norms of single group g, \boldsymbol{x}_g^* . With reference to Eq. (2), the equation for the optimising vector, it is straightforward to see that \boldsymbol{x}_F^* will lie vertically between $\tilde{\boldsymbol{x}}$ and $\bar{\boldsymbol{x}}^F$ on the line $\boldsymbol{u}\boldsymbol{u}'$.⁹ Similarly, \boldsymbol{x}_S^* , is the optimising location when seeking to accommodate own norms and that of the sports team, and lies on the dotted horizontal line $\boldsymbol{v}\boldsymbol{v}'$. While \boldsymbol{x}_F^* and \boldsymbol{x}_S^* are not co-located they are partially co-located at \boldsymbol{a} and it is straightforward to see that \boldsymbol{x} must be located at \boldsymbol{a} . Hence, from \boldsymbol{x}_F^* (\boldsymbol{x}_S^*), the addition of the other identity S(F) involves a change in behaviour but no utility loss: there is no identity conflict.¹⁰

To facilitate a simple exposition our framework adopted a number of restrictive assumptions. We have addressed one such assumption, fixed and endogenous penalty weights, above. Another simplifying assumption is that of perfect information whereas, in practice, imperfect information may arise for various reasons and have important implications for whether or not conflict or identity conflict materialises. Here, we formally recognise that the actions required to satisfy, or even the ability to identify, a given group's norms may be a function of individual characteristics, X, which might include age, gender, religion, education and so on. In *BilB*, for example, according to Jess's mother it was ok for Jess to play football with friends when she was younger but these actions are at odds with family norms now she is older.

Recognising information imperfections, if the true location of the norms of group g for an individual with characteristics X is given by $\bar{\chi}^{g}(X)$, the perceived location of these norms in dimension k may be given by:

$$\bar{x}_k^g = \varphi_k^g(\bar{\chi}_k^g(X), X) \tag{4}$$

Here, individual characteristics may affect both the actions required to achieve a group's norms but also the accuracy in perception of those actions, and raises the possibility that conflict and identity conflict might differ by these characteristics. By way of illustration, if a popular, but ultimately inaccurate, stereotype exists regarding the norms of a group, individuals without the ability to recognise the true location of those norms may try to adhere to that stereotype, causing unnecessary conflict with the norms of another group (or own norms) in so doing. One characteristic that may help people to accurately identify group norms is education.

We further recognise that realised penalty weights may also be a function of individual charac-

 $^{{}^{9}\}boldsymbol{x}_{F}^{*}$ will be on the vertical line uu' because deviations left or right from $\tilde{\boldsymbol{x}}$ involve utility loss under the individual's own norms while left or right movement away from $\bar{\boldsymbol{x}}^{F}$ has no penalty loss relative to the family norms. On the other hand, vertical movements away from $\tilde{\boldsymbol{x}}$ and $\bar{\boldsymbol{x}}^{F}$ both incur utility losses hence \boldsymbol{x}_{F}^{*} will lie at some point vertically between these two points reflecting the relative tradeoffs.

¹⁰This is easily seen from Eq. (2). To illustrate, in determining the optimising vector \boldsymbol{x}_F^* in the x_2 dimension, note $b_2^S = 0$ since \boldsymbol{x}_F^* is the optimising vector when considering only own norms and group F's norms (ignoring group S's norms). However, the optimising vector \boldsymbol{x}^* (across all norms) in the x_2 dimension, produces the same result since $b_2^S = 0$ as the individual is immune to, and/or there are no penalties employed for deviations from the norms of group S in the x_2 dimension.

teristics. For example, an individual with characteristics X may face penalty $\beta_k^g(X)$ from group g for deviating from its norms in dimension k but may also be able to mitigate the penalty according to the index $I_k^g(X)$. Hence, in this instance, the realised penalty weight for an individual with characteristics X may be given by $\lambda_k^g(X) = \beta_k^g(X)I_k^g(X)$. Under imperfect information, individuals may also differ in their ability to judge realised penalty weights, with perceived penalty weight for deviating from group g's norms in dimension k given by:

$$b_k^g = \psi_k^g(\lambda_k^g(X), X) \tag{5}$$

Thus individuals may erroneously believe the penalty weights of one group to be very large for them, when in fact the weights are small (see our discussion of Pinky's 'secret' relationship in *BilB* above), which could in turn influence where individuals locate in the action space. As with norm location, above, erroneous beliefs about the penalties associated with one group's norms may result in unnecessary sacrifices of the norms of another group, leading to larger than necessary losses of identity/utility, but where an individual's characteristics, such as education, helps to resolve information imperfections, utility losses may be smaller.

Imperfect information can also work the other way round - that is group g may not be able to accurately observe where a particular individual has located in the action space and this information asymmetry may vary by individual characteristics. So, for instance, it may be particularly difficult to identify how much an individual is deviating from a group's norms if they have a lot of mobility, such as a job which involves being away from the community where the relevant group identity is 'judged' and potentially 'penalised'. In *BilB*, Jess is able to avoid conflict only for a short period because her physical proximity to her family (e.g. living at home) made it harder to hide her football kit and local press coverage of her sporting success increased the visibility of her actions. So despite facing the same norm locations and penalties as others, those who have greater freedom of mobility might be better placed to avoid penalties for deviating behaviour, and therefore experience lower utility losses due to conflict. A well established literature suggests education is positively associated with geographical mobility (see for instance Greenwood, 1997; Molloy et al., 2011), lending further support to the argument that education might help to mitigate losses from conflict and the incidence of identity conflict.

Figure 4 illustrates a situation where none of the norms are co-located. However, for an individual with characteristics X it might be the case that a combination of their ability to understand the actual penalty 'menu' and mitigate some penalties or avoid detection, might result in them facing quasi-norms for each group indicated by the dashed and solid bordered shapes, which they can exploit to avoid any conflict. However, an individual with different characteristics may not have access to these conflict-eliminating quasi-norms or may not be aware of them and as a result experience conflict as they reconcile the three disparate norms ultimately resulting in relative loss of utility due to conflict.

Figure 4: No identity conflict with overlapping quasi-norms



In summary, in this section we extend the analysis of Georgiadis and Manning (2013) to formally examine the trade-offs and tensions that exist when individuals try to maintain multiple identities. In doing so we highlight some important, yet hitherto under-explored, aspects of identity conflict. For example, we show that identity conflict is not restricted to settings where group norms differ and may arise even when the actions required to fully satisfy the norms of distinct groups coincide. We further suggest that an individual's characteristics, such as their education, might affect their capacity to identify the location of group norms, their ability to act to mitigate the impact of penalties from deviating from group norms and, via their increased mobility, the capacity of identity groups to monitor any deviating behaviour. This latter conjecture is, of course, largely a matter for empirical investigation, and in what follows we consider the issue of identity conflict from an empirical perspective.

3 Data

We test the basic features of our framework using real-world data. For this purpose, we exploit the existence of a nationally representative UK survey that collects information on the potential for conflict between national and religious identities. Such tensions may arise as religious norms are typically more conservative than secular norms. We therefore nest our empirical analysis within the economics of immigration and integration literature, which focuses on the determinants and impact of majority and minority group identities, operationalised via ethnic, religious and national identities (see for example Constant et al., 2006; Bisin et al., 2008; Georgiadis and Manning, 2013). Specifically, we use the 2009/10 and 2010/11 waves of the Citizenship Survey,¹¹ which interviews

¹¹Department for Communities and Local Government and Ipsos MORI, Citizenship Survey, 2009-2010 [computer file]. Colchester, Essex: UK Data Archive [distributor], April 2011. SN: 6733, http://dx.doi.org/10.5255/UKDA-SN-6733-1. Department for Communities and Local Government and Ipsos MORI, Citizenship Survey, 2010-2011 [computer file]. Colchester, Essex: UK Data Archive [distributor], December 2012. SN: 7111, http://dx.doi.org/10.5255/UKDA-SN-7111-1.

approximately 16,000 individuals aged 16+ living in England and Wales and spans 2001-2011. Initially administered bi-annually, it moved to yearly surveys coinciding with the financial year (April-March) from 2007 onwards. The Citizenship Survey focuses on community cohesion and race relations, and comprises a core sample of approximately 10,000 individuals as well as an ethnic minority boost sample of approximately 7,000 individuals, allowing meaningful analysis of both populations. National identity is obtained from individuals via the question 'What do you consider your national identity to be? Please choose as many or as few as apply' with response categories 'English', 'Scottish', 'Welsh', 'Irish', 'British' and 'Other'. We exclude individuals who report 'Irish' (<1%) and 'Other' (15%) national identities as well as non-responses (<1%). These exclusions aim to ensure that individuals are referring to a British national identity when considering the potential for conflict between national and religious identities. To establish religious affiliation respondents are asked 'What is your religion even if you are not currently practising?' with response categories 'Christian', 'Buddhist', 'Hindu', 'Jewish', 'Muslim', 'Sikh', 'Any other religion' and 'No religion at all'. The majority of the sample identify as Christians (53%), followed by Muslims (22%), Hindus (4%), and Sikhs (2%). We drop those who are not religious from our sample (17%) as well Buddhists (<1%), Jews (<1%) and followers of unspecified religions (<2%) though our results are not sensitive to dropping less well-represented religions. A separate indicator variable is created to identify Muslims while Hindus and Sikhs are combined (although these are distinct religions they share commonalities and have empirically similar effects in our analysis). Respondents are also further asked 'Do you consider that you are actively practising your religion?', with Christians least likely and Muslims most likely to consider they are active participants in their religion.

In 2007, the Citizenship Survey introduced a Self Identity module. As part of this module, respondents are asked 'How important is your religion to your sense of who you are?' and 'How important is your national identity to your sense of who you are?' with response categories 'Very important', 'Quite important', 'Not very important', and 'Not at all important'.¹² These measures of identity are in keeping with existing measures employed in the immigration and integration literature. For example, Battu and Zenou (2010); Bisin et al. (2011a) use attitudes and behaviours indicating a preference for the ethnic minority culture such as religiosity, maintaining traditions and customs, and hostility to inter-ethnic marriage while Manning and Roy (2010); Georgiadis and Manning (2013) use self-reported national identity. Respondents who think both their religious and national identities are quite/very important (62%) are asked a follow-up question 'You said that both your national identity and religion are important to you. Do you ever feel there is a conflict between these?' with response categories 'All of the time' (2%), 'Most of the time' (5%), 'Some of the time' (11%), 'Rarely' (16%) and 'Never' (63%).¹³ This follow-up question, which is a unique feature of the Citizenship Survey, allows us to identify a potential conflict between group

 $^{^{12}\}mathrm{Less}$ than 1% of respondents select 'Don't know'.

¹³A further 2% of respondents spontaneously reply 'Don't know'. All 'Don't know' responses are placed into the base category of any dummy variables created but our results are not sensitive to this choice.

norms. Georgiadis and Manning (2013) use earlier waves of the Citizenship Survey to analyse the intensity of conflict between national and religious identities and find that intensity of conflict is higher among Muslims while certain neighbourhood characteristics (i.e. the extent to which people respect ethnic differences) reduce the intensity of conflict. While factors influencing the degree to which people report conflict are of considerable interest, our goal is to test the basic features of our framework, which centres on whether conflict between national and religious identities reduces utility. To facilitate the interpretation of our analysis, we construct a single indicator variable, which balances the frequency of conflict with sample size considerations. This indicator variable is equal to one if respondents feel there is a conflict between their national and religious identities at least some of the time. For ease of presentation we label this variable 'Conflicting identities' but it more apply represents 'National and religious identities are important and are in conflict at least some of the time'. Our main sample therefore consists of those individuals who think both their national and religious identities are quite/very important though we extend this sample to include individuals who think that neither, or just one, of these identities is important when examining the benefits of group membership. We include both ethnic majority and ethnic minority individuals in our sample because any potential conflict between national and religious identities need not be confined to ethnic minority populations.

Data on subjective wellbeing is collected by the Citizenship Survey from 2009/10 onwards. Such data are used as an empirical proxy of utility in other research testing economic principles (see for example Di Tella et al., 2001; Van Praag and Baarsma, 2005). Respondents are asked 'All things considered, how satisfied are you with your life as a whole nowadays?' with response categories 'Very satisfied', 'Fairly satisfied', 'Neither satisfied nor dissatisfied', 'Fairly dissatisfied' and 'Very dissatisfied'. Responses to this question are somewhat right-skewed with 87% indicating they are 'Very satisfied' or 'Fairly satisfied' and 1% indicating that they are 'Very dissatisfied'. We therefore construct an indicator variable, which is equal to one if individuals indicate they are 'Very satisfied' and is equal to zero otherwise.¹⁴ As questions on the importance of, and conflict between, identities immediately precede the question on life satisfaction, the order of questions could, in principle, lead to a context effect. This may arise if a lead-in question induces a positive (negative) mood resulting in more positive (negative) wellbeing appraisals or if a lead-in question makes a topic temporarily accessible when making wellbeing appraisals. A meta-analysis presented in Schimmack and Oishi (2005) suggests that context effects are, in general, small. Their findings also suggest that topics that are irrelevant but made temporarily accessible by lead-in questions are excluded from wellbeing appraisals while topics that are important are chronically accessible and would feature in wellbeing appraisals regardless. This raises the possibility that topics that are moderately important but not chronically accessible are susceptible to context effects although Schimmack and Oishi (2005) are unable to provide support for this in their research. On the other hand, Deaton and Stone (2016) find that lead-in questions relating to political and economic circumstances produce a large context

¹⁴We have also tried exploiting the entire distribution of responses and our main results are very similar.

effect, and moreover, that it is the answer to, rather than the existence of, these questions that produces the context effect. One plausible, yet untested, explanation for these findings put forward by Lucas et al. (2016) is that these lead-in questions changed the interpretation of the subsequent wellbeing question to represent a further evaluation of political and economic circumstances. Taken together, this might suggest that a context effect, if present in this analysis, would produce an upper bound estimate of the cost of identity conflict.

The Citizenship Survey also collects socioeconomic and demographic information on respondents, including gender, household composition, employment and financial situation. However, education is not asked of respondents aged 70+ and therefore we exclude these individuals from our sample (17%). A rarity in survey data, the Citizenship Survey contains an array of questions to gauge lifestyle and environmental conditions, such as interactions with people of different race and faith groups, and fears or experiences of discrimination. Thus we are able to control for a rich set of variables in our analysis. Table 1 reports summary statistics for our main sample (i.e. individuals who feel that both national and religious identities are important) and the extended sample (i.e. also including individuals who feel that neither, or just one, of these identities is important). Sample means across the main and extended sample are generally very similar, although there is a greater proportion of Muslims, ethnic minorities and first generation immigrants in the main sample, indicating a greater propensity for these individuals to value both identities.

4 Empirical analysis

In our framework, we use the term identity conflict to describe any outcome where an individual faces penalties for failure to satisfy the norms of all groups to which they belong, and where as a direct consequence, utility is reduced. To test this description of identity conflict, we seek to examine whether individuals experiencing conflicting identities report lower levels of subjective wellbeing, and estimate the following equation:

Very satisfied with
$$life_i = \beta_0 + \beta_1 Conflicting identities_i + \gamma' X_i + \varepsilon_i$$
 (6)

where Very satisfied with $life_i$ is a dummy variable that is equal to one if an individual indicates that they are very satisfied with life as a whole and *Conflicting identities_i* is a dummy variable equal to one if an individual indicates that their national and religious identities are very or quite important but are in conflict at least some of the time. X_i includes the variables listed under control variables in Table 1, which takes into account demographic characteristics, socioeconomic circumstances and exposure to discrimination.

It is useful here to discuss the limitations of our empirical analysis with respect to how well it matches the framework presented and how reliable the resulting estimates are. In our framework, identity conflict may arise where the norms of both groups differ and penalty weights are non-zero, as in Figures 2 (a), (b) and (c), or where group norms coincide and penalty weights are non-zero but differ across actions in different dimensions, as in Figure 3 (a). We cannot distinguish between these alternative scenarios leading to identity conflict in our empirical analysis: $\beta_1 < 0$ simply implies that non-zero penalty weights apply across the board (and, as an aside, provides indirect evidence supporting a key assumption in identity economics that sanctions apply for failing to comply with group norms). It is infeasible with our data to separately identify the magnitude of specific penalty weights: β_1 simply captures the combined effect of all penalty weights. However, the overall reduction in life satisfaction arising from the imposition of these penalty weights provides a useful summary of the cost of identity conflict, which is of considerable interest in its own right. For instance, minor losses in utility due to identity conflict do not present much cause for concern whereas large utility losses may warrant policy intervention. To our knowledge we are the first to estimate this cost. We acknowledge, however, that our analysis may be subject to omitted variable bias and/or reverse causality. Fortunately, the Citizenship Survey contains swathes of information not routinely collected in social surveys, including discrimination experienced in various settings, diversity of friendship circles, immigration history, and neighbourhood characteristics, which should reduce the scope for omitted variable bias. Some of these control variables may themselves be subject to the same concerns though without these controls our estimate of the cost of identity conflict is larger suggesting they perform a useful function. As regards reverse causality, while our framework asserts the direction of causality runs from identity conflict to reduced utility, we cannot rule out that life satisfaction determines how important people feel their national and religious identities are, and whether there exists a conflict between these identities, in an empirical context. These concerns should be borne in mind when interpreting our results. Nevertheless, we would argue that our analysis represents a crucial first step towards rectifying the dearth of evidence on an important topic.

Our results are presented in Table 2. For brevity, we present only the estimated coefficient on 'Conflicting identities' but a full set of results can be found in Table A1 in the Appendix. Column 1, based on our main sample of individuals who think that their religion and national identities are quite/very important, indicates that reporting conflicting identities does indeed reduce life satisfaction. The probability of reporting very satisfied with life falls by 7 percentage points for individuals indicating there is a conflict between their national and religious identities relative to other individuals.¹⁵ These results suggest a non-trivial cost of identity conflict. By way of comparison, this cost

¹⁵Note that individuals who indicate their national and religious identities are rarely in conflict form part of the reference category. If we extend our definition of conflicting identities to also include these individuals, with the reference category now comprising individuals who never experience conflicting identities, we observe an 8 percentage point reduction in the probability of reporting very satisfied with life. In general, there is a monotonic relationship between frequency of experiencing conflict and the cost. For example, those who report their identities are in conflict 'Rarely', 'Some of the time', 'Most of the time' experience an 8, 9 and 12 percentage point decline in the probability of reporting very satisfied with life, respectively, relative to those reporting their identities are never in conflict. Surprisingly, the 2% of individuals who report their identities are in conflict 'All of the time' appear to be largely unaffected by their predicament, perhaps because they are able to accept they cannot please all groups and carry on regardless. Interestingly these individuals are disproportionately Muslim and regionally concentrated (i.e. 30% live

is similar in magnitude to the cost of experiencing racial or religious discrimination in the labour market (see Column 1 of Table A1).

Column 2 focuses exclusively on individuals who indicate that they actively practice their religion, among whom the propensity to report conflicting identities rises slightly to 19%. Moreover, Christians are least likely to actively practice their religion while also being most likely to experience conflicting identities if not actively practicing. The cost of identity conflict, however, remains at a similar magnitude among those who actively practice, with an 8 percentage point decline in the probability of feeling very satisfied with life. In column 3, we consider the cost of identity conflict among ethnic minorities. This also changes the religious mix insofar as almost all Hindus, Sikhs and Muslims have an ethnic minority background compared with 32% of Christians. However, since 52%of White British actively practice their religion and 18% of ethnic minorities do not, there remain substantial differences between the samples used in columns 2 and 3. Results in column 3 suggest that the cost of identity conflict is similar for ethnic minorities. The stability of these results across different samples, which vary the composition of those experiencing conflicting identities and those that do not, increases the credibility of our findings. Moreover, these results are robust to a wide range of control variables that might otherwise explain this association. For example, exposure to racial/religious discrimination in the labour market or local area might increase the likelihood that people experience conflicting identities and reduce life satisfaction. Alternatively, more recent immigrants may be keen to embrace all aspects of British culture increasing the possibility of conflict between these identities while not yet having cultivated support networks to buffer against stressful situations thus leading to lower life satisfaction. Many other factors, such as diversity of friendship circle, language skills and area poverty, also have the potential to shape conflict between identities and life satisfaction. Yet while discrimination, area poverty, area ethnic tensions, and general beliefs about whether people can maintain separate cultural and religious identities are all associated with reduced life satisfaction, there remains a cost to identity conflict. Overall, therefore, we would argue that these results provide evidence that identity conflict is a real phenomenon.

In Column 4, we expand the sample to additionally include other religious individuals who did not indicate that both their religion and national identities are quite/very important. This allows us to investigate the benefit of having multiple identities relative to the drawback of identity conflict. We therefore construct an indicator variable 'National and religious identities are important', which is equal to one if an individual indicates that both their national and religious identities are quite/very important to them, with the reference category comprising individuals who think that neither, or just one, of these identities is important. Our results suggest that a strong attachment to both identities increases the likelihood of being very satisfied with life by 6 percentage points, suggesting that the cost of identity conflict wipes out any benefits accrued from membership of multiple groups. To investigate the benefits of group membership further, in column 5, we also include two additional binary variables to indicate that an individual considers only their national

in West Midlands) but are otherwise remarkably similar to the rest of the sample.

(religious) identity to be important, with the reference category now comprising individuals who think neither of these identities is important. Relative to this reference category, individuals who think that only their national identity matters are 2 percentage points more likely to indicate they are very satisfied with life, which is slightly beneath the increase attributed to valuing only a religious identity, while this rises to 8 percentage points for individuals who think that both identities are important to their sense of who they are. Thus it appears to be more beneficial to have multiple, rather than singular, identities as long as it remains possible to satisfy the norms of all groups.

So far we have modelled the cost of identity conflict as invariant across religious groups although in practice these groups may differ in many respects. Several academic papers have specifically analysed the integration of Muslims (see for example Constant et al., 2006; Bisin et al., 2008; Georgiadis and Manning, 2013) following widespread suspicion, sparked by terror attacks, that Muslims remain apart from wider society. Constant et al. (2006); Bisin et al. (2008) show that Muslims living in Germany and the UK are more likely to retain ethnic and religious values compared to others though Georgiadis and Manning (2013) find little evidence to suggest Muslims exhibit weaker levels of attachment to the UK. Given the academic interest in the fate of Muslims we pursue a similar line of enquiry here. In the context of our analysis, national/religious groups may impose different penalties for deviations from group norms and/or may differ in their ability to monitor individuals' actions. Muslims might face larger penalties for failing to conform to national group norms because of increasingly hostility towards Muslims in Britain¹⁶ that would tend to reduce the leeway for Muslims to deviate from national group norms relative to others. Similarly Muslims might face larger penalties for deviating from religious group norms if, as has been argued by Huntingdon (2002), Islam is intolerant of such behaviour. We explore whether the cost of identity conflict varies by religious affiliation by estimating the following specification:

Very satisfied with
$$life_i = \tilde{\beta}_0 + \tilde{\beta}_1 Conflicting identities_i + \tilde{\beta}_2 Conflicting identities_i \times Muslim_i$$

 $\tilde{\beta}_3 Conflicting identities_i \times Hindu/Sikh_i + \gamma' X_i + \nu_i$ (7)

where Conflicting identities_i × Muslim_i is equal to one if an individual is both Muslim and reports that national and religious identities are in conflict at least some of the time (and is similarly defined for Hindu/Sikh individuals). Recall that we already control for whether an individual is Muslim or Hindu/Sikh via X_i . If Muslims are subject to larger penalties for failure to conform to group norms, we would expect $\beta_2 < 0$, as this would indicate that there is an additional cost of identity conflict for Muslims relative to Christians (with $\beta_3 < 0$ similarly indicating a greater cost for Hindu/Sikhs).

Results are presented in Table 3, where for ease of exposition, we present the cost of identity conflict on life satisfaction for each faith group in the main body of the table ($\tilde{\beta}_1$ for Christians, $\tilde{\beta}_1 + \tilde{\beta}_2$ for Muslims and $\tilde{\beta}_1 + \tilde{\beta}_3$ for Hindus/Sikhs) and the differential cost of identity conflict for Muslims

¹⁶See http://www.cam.ac.uk/research/news/media-fuelling-rising-hostility-towards-muslims-in-britain, https://www.independent.co.uk/voices/why-the-british-media-is-responsible-for-the-rise-in-islamophobia-html

 $(\tilde{\beta}_2)$ and Hindus/Sikhs $(\tilde{\beta}_3)$ at the foot of the table. These results suggest that Christians who report conflicting identities are 8 percentage points less likely to indicate they are very satisfied with life relative to other Christians, with a 7 percentage point gap for Muslims reporting conflicting identities relative to other Muslims. This provides little support for the notion that Muslims are subject to larger penalties for failure to conform to group norms. Indeed the estimated differential cost of identity conflict for Muslims relative to Christians is just 1 percentage point and this difference is not statistically different from zero. Moreover since, on average, 33% of Muslims report that they are very satisfied with life while 38% of Christians do, these percentage point reductions represent just over a 20% change in the respective proportions of both groups reporting they are very satisfied with life. Somewhat surprisingly, while we consistently find that Hindus/Sikhs are less likely to be very satisfied with life compared to Christians (see Table A1 in the Appendix) there appears to be a small, if any, cost to identity conflict for these individuals. Hindus/Skihs reporting conflicting identities are just 3 percentage points less likely to be very satisfied with life compared to other Hindus/Sikhs. However, the smaller sample size for this group means that neither this estimate of identity conflict nor the differential cost of identity conflict for Hindus/Sikhs relative to Christians is statistically different from zero, making it hard to draw firm conclusions from these results.

Our discussion in Section 2 on the impact of imperfect information on the cost of identity conflict suggests that this cost may vary with individual characteristics. For example, some characteristics may influence an individual's ability to identify group norms or mitigate the impact of penalties following any deviation from group norms. One such characteristic is likely to be education, which should increase an individual's capacity to accumulate knowledge of group norms, appreciate nuances in these norms and adopt a more flexible approach to satisfying own and group norms. Moreover, education facilitates geographical mobility, which would tend to reduce the capacity of groups to monitor behaviour. We therefore consider how the cost of identity conflict varies for those with and without formal education.¹⁷ The results presented in Table 4 clearly indicate that the cost of identity conflict is larger for less educated individuals (i.e. those without any formal qualifications). For example, high-educated individuals reporting a conflict between national and religious identities are 6 percentage points less likely to feel very satisfied with life relative to other high-educated individuals, while this difference is almost twice as large, at 11 percentage points, between low-educated individuals. This differential cost of identity conflict by education level is statistically significant. Since individuals lacking formal education are also likely to be older, we have also considered to what extent this differential cost might be explained by age but find a similar cost of identity conflict for younger and older individuals.

¹⁷We have also considered finer education categories, such as holding a degree, A-levels or GCSE's, but the main difference appears between those who have or do not have formal qualifications. Interestingly, there is little evidence to support differences in the cost of identity conflict between those holding a diploma in higher education and those with foreign education relative to those without formal qualifications. As a diploma in higher education has minimal entry requirements and is usually obtained while in employment this result suggests that formal qualifications matter if they are obtained via the British schooling system.

In summary, we find evidence that individuals who believe their national and religious identities are in conflict report lower levels of life satisfaction compared to others, which suggests that identity conflict is a real phenomenon. Moreover, the cost of identity conflict is non-trivial, reducing life satisfaction by the same amount as experiencing discrimination in the labour market. In spite of the behaviour of Muslims attracting the attention of researchers in the immigration and integration literature, we find that religious affiliation makes little difference to the cost of identity conflict, with Christians and Muslims affected in the same way. On the other hand, we find that that cost of identity conflict is lower among individuals with formal education, which is likely to equip people with the necessary skills to interpret the location of group norms and penalties for deviating from these norms. This suggests that, in the context of national and religious identities, it is the behaviour of individuals rather than of groups that determines the cost of identity conflict.

5 Conclusion

We build on the work of Akerlof and Kranton (2000), Wichardt (2008) and Georgiadis and Manning (2013) to examine the tensions that may arise as individuals try to maintain multiple identities. Specifically, our theoretical framework allows for multiple identities as well as norms defined in terms of actions in multiple dimensions. Using the term identity conflict to refer to any outcome where an individual experiences penalties for failure to satisfy the norms of all groups, we show that identity conflict emerges under various situations where group norms differ. However, a novel implication of our framework, which offers important new insights on the subject of identity economics, is that identity conflict may arise even when the actions required to fully satisfy the norms of distinct groups coincide, and may not materialise even when these required actions defining group norms differ.

We test the basic features of our framework exploiting a unique question in the Citizenship Survey that focuses on the potential for conflict between national and religious identities. Specifically, our framework suggests that individuals experiencing conflicting identities, ceteris paribus, ought to exhibit lower levels of utility. We show this to be the case using data on life satisfaction as a proxy for utility. Our results suggest that the cost of identity conflict is of similar magnitude to the cost of experiencing discrimination in the labour market. This finding also has broader implications for the identity economics literature insofar as it provides indirect evidence of a core assumption i.e. that people face penalties for deviating from the norm of a group. Although we cannot rule out the possibility that other explanations are responsible for our empirical findings, we are able to show that the cost of identity conflict remains stable across different samples and is robust to controlling for a number of important confounding variables that are not routinely available in survey data. While the cost of identity conflict does not vary by religious affiliation, we find evidence that formal education, or lack thereof, is important in shaping this cost. Policies to alleviate identity conflict might therefore focus on increasing levels of formal education. To our knowledge, this is

the first formalisation of identity conflict and the first use of subjective wellbeing data to provide supporting evidence of its existence in the identity economics literature, which suggests there are many potential avenues for future research. A natural starting point might be to consider the cost of identity conflict in other contexts and/or to better address causality.

References

- Akerlof, G. A. and R. E. Kranton (2000). Economics and identity. The Quarterly Journal of Economics 115(3), 715–753.
- Akerlof, G. A. and R. E. Kranton (2005). Identity and the economics of organizations. Journal of Economic Perspectives 19(1), 9–32.
- Akerlof, G. A. and R. E. Kranton (2010). *Identity Economics: How Our Identities Shape Our Work, Wages, and Well-Being.* Princeton: Princeton University Press.
- Battu, H. and Y. Zenou (2010). Oppositional identities and employment for ethnic minorities: Evidence from England. *The Economic Journal 120*(542), F52–F71.
- Bénabou, R. and J. Tirole (2011). Identity, morals, and taboos: Beliefs as assets. The Quarterly Journal of Economics 126(2), 805–855.
- Bend it like Beckham (2002). [Film] Directed by G. Chadha. Beverly Hills, California, USA: 20th Century Fox.
- Bernheim, D. B. (1994). A theory of conformity. Journal of Political Economy 102(5), 841–877.
- 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(2-3), 445–456.
- Bisin, A., E. Patacchini, T. Verdier, and Y. Zenou (2011a). Ethnic identity and labour market outcomes of immigrants in Europe. *Economic Policy* 26(65), 57–92.
- Bisin, A., E. Patacchini, T. Verdier, and Y. Zenou (2011b). Formation and persistence of oppositional identities. *European Economic Review* 55(8), 1046 1071.
- Bisin, A., E. Patacchini, T. Verdier, and Y. Zenou (2016). Bend it like Beckham: Ethnic identity and integration. *European Economic Review* 90(C), 146–164.
- Bisin, A. and T. Verdier (2001). The economics of cultural transmission and the dynamics of preferences. *Journal of Economic Theory* 97(2), 298 319.
- Collier, P. (Forthcoming, 2019). Diverging identities: a model of class formation. Oxford Economic Papers.
- Constant, A. F., L. Gataullina, K. F. Zimmermann, and L. V. Zimmermann (2006). Clash of cultures: Muslims and Christians in the ethnosizing process. IZA discussion paper, IZA.
- Darity Jr., W. A., 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(3), 283 305.
- Deaton, A. and A. A. Stone (2016). Understanding context effects for a measure of life evaluation: How responses matter. *Oxford Economic Papers* 68(4), 861–870.
- Di Tella, R., R. J. MacCulloch, and A. J. Oswald (2001). Preferences over inflation and unemployment: Evidence from surveys of happiness. *The American Economic Review* 91(1), 335–341.

- Georgiadis, A. and A. Manning (2013). One nation under a groove? Understanding national identity. Journal of Economic Behavior & Organization 93(0), 166 185.
- Greenwood, M. (1997). Internal migration in developed countries. In M. Rosenweig and O. Stark (Eds.), *Handbook of Population and Family Economics*. Amsterdam: North-Holland.
- Huntingdon, S. (2002). The clash of civilisations: And the remaking of world order. New York: Free Press.
- Islam, A. and P. A. Raschky (2015). Genetic distance, immigrants' identity, and labor market outcomes. *Journal of Population Economics* 28(3), 845–868.
- Kranton, R. E. (2016). Identity economics 2016: Where do social distinctions and norms come from? *American Economic Review* 106(5), 405–09.
- Lucas, R. E., S. Oishi, and E. Diener (2016). What we know about context effects in self-report surveys of well-being: Comment on Deaton and Stone. Oxford Economic Papers 68(4), 871–876.
- Manning, A. and S. Roy (2010). Culture clash or culture club? National identity in Britain. *The Economic Journal* 120(542), F72–F100.
- Molloy, R., C. Smith, and A. Wozniak (2011). Internal migration in the United States. *Journal of Economic Perespectives* 25(3), 173–196.
- Schimmack, U. and S. Oishi (2005). The influence of chronically and temporarily accessible information on life satisfaction judgments. *Journal of Personality and Social Psychology* 89(3), 395–406.
- Sen, A. (1984). *Resources, values and development*. London: Basil Blackwell.
- Sen, A. (1993). Capability and well-being. In M. Nussbaum and A. Sen (Eds.), The quality of life. Oxford: Clarendon Press.
- Sen, A. (1999). Reason before identity: The Romanes Lecture. Oxford: Oxford University Press.
- Van Praag, B. M. S. and B. E. Baarsma (2005). Using happiness surveys to value intangibles: The case of airport noise. The Economic Journal 115(500), 224–246.
- Wichardt, P. C. (2008). Identity and why we cooperate with those we do. Journal of Economic Psychology 29, 127–139.

Tables

| Table | 1: | Summary | statistics |
|-------|----|---------|------------|
|-------|----|---------|------------|

| | Main sample | | Additional sample | |
|--|-------------|---------------------|-------------------|------|
| | mean | sd | mean | sd |
| Dependent variable: | | | | |
| Very satisfied with life | 0.35 | 0.48 | 0.34 | 0.47 |
| Key variable of interest: | | | | |
| Conflicting identities | 0.18 | 0.39 | 0.11 | 0.32 |
| Variables relevant to the extended sample: | | | | |
| National and religious identities are important | 1.00 | 0.00 | 0.62 | 0.49 |
| Religion only important | 0.00 | 0.00 | 0.05 | 0.21 |
| National identity only important | 0.00 | 0.00 | 0.25 | 0.43 |
| Control variables: | | | | |
| Muslim | 0.38 | 0.48 | 0.27 | 0.44 |
| Hindu/Sikh | 0.10 | 0.30 | 0.08 | 0.27 |
| Actively practices religion | 0.71 | 0.45 | 0.52 | 0.50 |
| Ethnic minority | 0.64 | 0.48 | 0.49 | 0.50 |
| Female | 0.57 | 0.50 | 0.54 | 0.50 |
| Aged 30-39 | 0.24 | 0.43 | 0.23 | 0.42 |
| Aged 40-49 | 0.21 | 0.41 | 0.22 | 0.41 |
| Aged 50-69 | 0.33 | 0.47 | 0.34 | 0.48 |
| Partner | 0.56 | 0.50 | 0.55 | 0.50 |
| Two adults | 0.48 | 0.50 | 0.49 | 0.50 |
| Three or more adults | 0.27 | 0.44 | 0.24 | 0.43 |
| Kids | 0.38 | 0.49 | 0.35 | 0.48 |
| Very good health | 0.39 | 0.49 | 0.40 | 0.49 |
| Good health | 0.40 | 0.49 | 0.39 | 0.49 |
| High education | 0.73 | 0.44 | 0.76 | 0.43 |
| Employed | 0.55 | 0.50 | 0.58 | 0.49 |
| $\ln(hours+1)$ | 1.89 | 1.76 | 2.04 | 1.76 |
| Unemployed | 0.05 | 0.21 | 0.05 | 0.21 |
| $\ln(\text{income}+1)$ | 9.44 | 2.18 | 9.56 | 2.08 |
| Unknown income | 0.15 | 0.36 | 0.14 | 0.34 |
| Financial hardship past year | 0.55 | 0.50 | 0.57 | 0.49 |
| Homeowner | 0.60 | 0.49 | 0.62 | 0.49 |
| Racial/religious discrimination in labour market | 0.06 | 0.23 | 0.05 | 0.21 |
| Religious discrimination in public services | 0.05 | 0.22 | 0.04 | 0.20 |
| Racial/religious harassment in local area | 0.08 | 0.27 | 0.07 | 0.25 |
| Fears racial/religious attack in local area | 0.20 | 0.40 | 0.16 | 0.36 |
| No respect for ethnic differences in local area | 0.09 | 0.29 | 0.10 | 0.29 |
| Believes people cannot maintain separate cultural/religious identities | 0.19 | 0.39 | 0.23 | 0.42 |
| All friends of same race | 0.29 | 0.46 | 0.34 | 0.47 |
| All friends of same faith | 0.25 | 0.43 | 0.26 | 0.44 |
| Born abroad | 0.38 | 0.49 | 0.29 | 0.45 |
| Arrived in UK within past 5 years | 0.02 | 0.15 | 0.02 | 0.13 |
| Interview translation help required | 0.05 | 0.22 | 0.04 | 0.19 |
| North East | 0.03 | 0.16 | 0.04 | 0.19 |
| North West | 0.11 | 0.32 | 0.13 | 0.33 |
| Yorkshire & Humber | 0.11 | 0.31 | 0.10 | 0.30 |
| East Midlands | 0.06 | 0.25 | 0.07 | 0.25 |
| West Midlands | 0.13 | 0.34 | 0.12 | 0.33 |
| East of England | 0.06 | 0.23 | 0.07 | 0.25 |
| South East | 0.08 | 0.27 | 0.10 | 0.30 |
| South West | 0.04 | 0.20 | 0.06 | 0.23 |
| Wales | 0.03 | 0.18 | 0.04 | 0.19 |
| Deprived area | 0.43 | 0.50 | 0.36 | 0.48 |
| Interviewed in Winter | 0.26 | 0.44 | 0.25 | 0.43 |
| Interviewed in $2010/11$ wave | 0.51 | 0.50 | 0.51 | 0.50 |
| Interviewed as core sample member | 0.43 | 0.49 | 0.57 | 0.50 |
| Ν | 11332 | | 18265 | |

The main sample comprises individuals who think that both their national and religious identities are quite/very important. The extended sample includes all individuals regardless of their attachment to national and religious identities. Individuals who indicate they have no religion or national identity are excluded from the analysis altogether.

| i | | - | <u> </u> | | |
|---|-----------------------|------------------------------|-----------------------------|----------------------------------|----------------------------------|
| | Main sample (1) | Actively practices (2) | Ethnic minorities (3) | Additional sample (4) | Additional sample (5) |
| Conflicting identities | -0.07^{***} | -0.08^{***} | -0.07^{***} | -0.07^{***} | -0.07^{***} |
| National and religious identities are important | (0.01) | (0.01) | (0.01) | (0.01) 0.06^{***} (0.01) | (0.01) 0.08^{***} (0.01) |
| National identity only important | | | | (0.01) | 0.02^{*} (0.01) |
| Religion only important | | | | | (0.03^{*}) (0.02) |
| N | 11332 | 8084 | 7282 | 18265 | 18265 |

Table 2: Impact of conflicting identities on reporting very satisfied with life

Notes: See Section 4 for details of the estimation strategy. Standard errors are robust to heteroscedasticity. Significance levels are shown as p<0.1, p<0.05, p<0.01. See Table A1 for full set of results that include marginal effects for control variables.

Table 3: Impact of conflicting identities on reporting very satisfied with life, by religion

| | (1) |
|------------------------|----------|
| Christian | 0.08*** |
| Christian | (0.02) |
| Muslim | -0.07*** |
| Hindu /Silth | (0.02) |
| IIIIuu/ Sikii | (0.03) |
| | |
| Muslim - Christian | 0.01 |
| | (0.02) |
| Hindu/Sikh - Christian | 0.05 |
| | (0.04) |
| Ν | 11332 |

Notes: See notes to Table 2

 Table 4: Impact of conflicting identities on reporting very satisfied with life, by

 education

| | (1) |
|----------------------|-------------|
| T 1 | 0 4 4 4 4 4 |
| Low education | -0.11*** |
| | (0.02) |
| High education | -0.06*** |
| | (0.01) |
| | |
| High - low education | 0.06** |
| 0 | (0.02) |
| Ν | 11332 |
| | |

Notes: See notes to Table 2

| | Main sample (1) | Actively practices (2) | Ethnic minorities (3) | Additional sample (4) | Additional sample (5) |
|--|-----------------------|------------------------------|-----------------------------|-----------------------------|-----------------------------|
| Conflicting identities | -0.07*** | -0.08*** | -0.07*** | -0.07*** | -0.07*** |
| | (0.01) | (0.01) | (0.01) | (0.01) | (0.01) |
| Muslim | -0.02* | -0.02 | -0.01 | -0.02 | -0.02 |
| | (0.01) | (0.02) | (0.01) | (0.01) | (0.01) |
| Hindu/Sikh | -0.04** | -0.06*** | -0.03* | -0.03** | -0.03** |
| | (0.02) | (0.02) | (0.02) | (0.02) | (0.02) |
| Actively practices religion | 0.02* | . , | 0.00 | 0.03*** | 0.02*** |
| | (0.01) | | (0.01) | (0.01) | (0.01) |
| Ethnic minority | -0.01 | -0.02 | | -0.00 | -0.00 |
| | (0.02) | (0.03) | | (0.02) | (0.02) |
| Female | 0.02 | 0.02 | 0.02** | 0.01 | 0.01 |
| | (0.01) | (0.01) | (0.01) | (0.01) | (0.01) |
| Aged 30-39 | 0.00 | -0.00 | -0.00 | -0.01 | -0.01 |
| | (0.01) | (0.02) | (0.02) | (0.01) | (0.01) |
| Aged 40-49 | -0.01 | -0.02 | -0.01 | -0.02 | -0.02 |
| | (0.01) | (0.02) | (0.02) | (0.01) | (0.01) |
| Aged 50-69 | 0.05*** | 0.05** | 0.05** | 0.04*** | 0.04*** |
| | (0.02) | (0.02) | (0.02) | (0.01) | (0.01) |
| Partner | 0.08*** | 0.09*** | 0.06*** | 0.08*** | 0.08*** |
| | (0.01) | (0.02) | (0.02) | (0.01) | (0.01) |
| Two adults | 0.04*** | 0.03* | 0.02 | 0.05*** | 0.05*** |
| 1w0 adults | (0.01) | (0.03) | (0.02) | (0.03) | (0.03) |
| Three or more adults | 0.04*** | 0.02) | 0.02 | 0.01 | 0.01 |
| Thee of more adults | (0.01) | (0.03) | (0.03) | (0.04) | (0.01) |
| Kide | (0.01) | (0.02) | (0.02) | (0.01) | (0.01) |
| Rius | (0.01) | (0.02) | (0.01) | (0.01) | (0.01) |
| Vome mood hoolth | (0.01) | (0.01) 0.05*** | (0.01) | (0.01) | (0.01) |
| very good health | (0.20^{+1}) | (0.01) | (0.23) | (0.24) | (0.24) |
| Cool boolth | (0.01) | (0.01) 0.05*** | (0.02) | (0.01) | (0.01) |
| Good nealth | (0.01) | (0.01) | 0.05 | 0.06 | (0.01) |
| TT-1 1 /· | (0.01) | (0.01) | (0.01) | (0.01) | (0.01) |
| High education | -0.01 | -0.01 | -0.00 | -0.01 | -0.01 |
| | (0.01) | (0.01) | (0.01) | (0.01) | (0.01) |
| Employed | 0.15*** | 0.08 | 0.12** | 0.10*** | 0.10*** |
| | (0.04) | (0.05) | (0.06) | (0.03) | (0.03) |
| ln(hours+1) | -0.05*** | -0.03** | -0.04** | -0.04*** | -0.04*** |
| | (0.01) | (0.02) | (0.02) | (0.01) | (0.01) |
| Unemployed | -0.08*** | -0.08*** | -0.07*** | -0.08*** | -0.08*** |
| | (0.02) | (0.02) | (0.02) | (0.02) | (0.02) |
| $\ln(\text{income}+1)$ | 0.00 | -0.00 | 0.00 | 0.00 | 0.00 |
| | (0.00) | (0.00) | (0.00) | (0.00) | (0.00) |
| Unknown income | 0.01 | 0.02 | 0.02 | 0.01 | 0.01 |
| | (0.01) | (0.01) | (0.02) | (0.01) | (0.01) |
| Financial hardship past year | -0.08*** | -0.08*** | -0.07*** | -0.08*** | -0.08*** |
| | (0.01) | (0.01) | (0.01) | (0.01) | (0.01) |
| Homeowner | 0.03*** | 0.03** | 0.04^{***} | 0.04^{***} | 0.04^{***} |
| | (0.01) | (0.01) | (0.01) | (0.01) | (0.01) |
| Racial/religious discrimination in labour market | -0.06*** | -0.06*** | -0.06*** | -0.06*** | -0.06*** |
| | (0.02) | (0.02) | (0.02) | (0.01) | (0.01) |
| Religious discrimination in public services | -0.00 | -0.00 | 0.00 | -0.00 | -0.00 |
| | (0.02) | (0.02) | (0.02) | (0.02) | (0.02) |
| Racial/religious harassment in local area | -0.04*** | -0.04** | -0.05*** | -0.03** | -0.03** |

Table A1: Table 2 presenting full set of control variables

Continued on next page

| | Provide and | - FJ- | | | |
|--|-------------|------------|----------|--------------|--------------|
| | (0.02) | (0.02) | (0.02) | (0.01) | (0.01) |
| Fears racial/religious attack in local area | -0.02 | -0.02 | -0.01 | -0.01 | -0.01 |
| | (0.01) | (0.01) | (0.01) | (0.01) | (0.01) |
| No respect for ethnic differences in local area | -0.06*** | -0.05*** | -0.04** | -0.05*** | -0.05*** |
| | (0.01) | (0.02) | (0.02) | (0.01) | (0.01) |
| Believes people cannot maintain separate cultural/religious identities | -0.04*** | -0.04*** | -0.05*** | -0.04*** | -0.04*** |
| | (0.01) | (0.01) | (0.02) | (0.01) | (0.01) |
| All friends of same race | 0.03** | 0.04** | 0.04* | 0.03*** | 0.03*** |
| | (0.01) | (0.02) | (0.02) | (0.01) | (0.01) |
| All friends of same faith | 0.04*** | 0.04** | 0.06*** | 0.02** | 0.02** |
| | (0.01) | (0.02) | (0.02) | (0.01) | (0.01) |
| Born abroad | 0.03*** | 0.05*** | 0.04*** | 0.03*** | 0.03*** |
| | (0.01) | (0.01) | (0.01) | (0.01) | (0.01) |
| Arrived in UK within past 5 years | 0.03 | 0.03 | 0.03 | 0.02 | 0.02 |
| | (0.03) | (0.03) | (0.03) | (0.03) | (0.03) |
| Interview translation help required | 0.02 | 0.01 | 0.02 | 0.01 | 0.01 |
| interview translation help required | (0.02) | (0.02) | (0.02) | (0.02) | (0.02) |
| North East | 0.03 | 0.02 | 0.07 | 0.04** | 0.04** |
| | (0.03) | (0.02) | (0.07) | (0.02) | (0.02) |
| North West | 0.00 | 0.04) | (0.07) | (0.02) | (0.02) |
| NOITH West | (0.00) | (0.02) | (0.02) | (0.01) | (0.02) |
| Varlahing fo Hunghan | (0.02) | (0.02) | (0.02) | (0.01) | (0.01) |
| forksnire & Humber | (0.03) | (0.02) | (0.03) | (0.03^{+}) | (0.03^{+}) |
| Fast Midlanda | (0.02) | (0.02) | (0.02) | (0.01) | (0.01) |
| Last midiands | (0.02) | (0.00) | (0.03) | (0.02) | (0.02) |
| W Millende | (0.02) | (0.02) | (0.03) | (0.02) | (0.02) |
| West Midlands | -0.02 | -0.02 | -0.02 | -0.02* | -0.02* |
| | (0.01) | (0.02) | (0.02) | (0.01) | (0.01) |
| East of England | -0.01 | -0.02 | 0.02 | -0.02 | -0.02 |
| | (0.02) | (0.03) | (0.03) | (0.02) | (0.02) |
| South East | 0.01 | 0.02 | 0.04 | 0.01 | 0.01 |
| | (0.02) | (0.02) | (0.03) | (0.01) | (0.01) |
| South West | -0.01 | -0.00 | -0.07 | 0.02 | 0.02 |
| | (0.02) | (0.03) | (0.06) | (0.02) | (0.02) |
| Wales | 0.02 | 0.03 | -0.04 | 0.01 | 0.01 |
| | (0.03) | (0.04) | (0.06) | (0.02) | (0.02) |
| Deprived area | -0.02* | -0.01 | -0.02 | -0.02** | -0.02** |
| | (0.01) | (0.01) | (0.01) | (0.01) | (0.01) |
| Interviewed in Winter | -0.02* | -0.02* | -0.02** | -0.02** | -0.02** |
| | (0.01) | (0.01) | (0.01) | (0.01) | (0.01) |
| Interviewed in 2010/11 wave | -0.01* | -0.01 | -0.02** | -0.02** | -0.02** |
| | (0.01) | (0.01) | (0.01) | (0.01) | (0.01) |
| Interviewed as core sample member | 0.04^{**} | 0.03^{*} | 0.04** | 0.04^{***} | 0.04*** |
| | (0.02) | (0.02) | (0.02) | (0.01) | (0.01) |
| National and religious identities are important | | | | 0.06*** | 0.08*** |
| | | | | (0.01) | (0.01) |
| National identity only important | | | | | 0.02^{*} |
| | | | | | (0.01) |
| Religion only important | | | | | 0.03^{*} |
| | | | | | (0.02) |
| N | 11332 | 8084 | 7282 | 18265 | 18265 |
| | 11004 | 5001 | 1202 | 10100 | 10100 |

Table A1 – Continued from previous page

Notes: See notes to Table 2.