

# **Culture and Place-Based Development: A Socio-Economic Analysis**

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## **ABSTRACT**

The greater focus on the growth and development of regions and localities is impacting upon the way that culture is conceptualised at the place-based level. However, cultural factors are often absent from analyses of economic development. As a means of addressing this missing link, the paper conceptualises and operationalises a framework of place-based community culture and business culture to analyse the extent to which they differ across places, as well the extent to which the community cultures of places is associated with the underlying business culture of such places. The study develops a series of place-based cultural indices and undertakes econometric analysis, taking Wales in the UK as a reference region. The analysis finds considerable variability in cultural characteristics across both regions and localities, with the type of community culture embedded within places often strongly associated with place-based business culture. It is concluded that economic development prospects are related to both the business and community culture of places.

## **1. INTRODUCTION**

The greater focus on growth and development at the regional level is impacting on the way that factors such as 'culture' and 'identity' are conceptualised within the political economy of places (Thrift, 2000; Biscoe, 2001; Keating et al., 2003; Sysner, 2009). This has led to calls for further analyses of regional culture, identity and mentality that capture the 'regional self' (Sysner, 2009). Although some research suggests that culture does have a causal effect on economic development (Kockel, 2002; Keating et al., 2003; Farole et al, 2010; Tabellini, 2010), most of the extant literature seeking to make the link between the cultural traits and economic performance of places has drawn on the concept of social capital as means of making such connections (Putnam, 1993; 2000; Fukuyama, 1995; Schneider et al., 2000; Beugelsdijk and Van Schaik, 2005).

Most discussions of social capital proclaim it an unqualified 'good', i.e. something to be maximised. However, as Olson (1965) has argued, and as Portes and Landolt (1996) point out, social capital also has a 'downside' in that strong, long-standing civic groups may stifle development by securing a disproportionate share of resources or inhibiting individual economic advancement by placing heavy personal obligations on members that prevent them from participating in broader social networks (Woolcock, 1998). As Woolcock (1998) states, the challenge for development theorists and policy-makers alike is to identify the mechanisms that will create, nurture, and sustain the types and combinations of social relationships conducive to building dynamic participatory societies, sustainable equitable economies, and accountable states.

In essence, Woolcock appears to be calling for the better identification of the means by which culture mediates the relationship between society and the economy, and for a number of years there have been calls for a more detailed understanding of the nature of

culture, and cultural change at the local and regional level, especially its significance for economic development (Jackson, 1991; Biscoe, 2001; Kockel, 2002). Due to their relative intangibility, cultural factors are often absent from analyses of economic change and development, divorcing the nature of social places from the economic spaces within which they are situated. As Watson (1991) indicates, apparent dominant Western cultural discourses concerning masculinity may well vary considerably across places, and have strong links to processes of economic change.

The concept of culture generally refers to the way in which people behave, often as a result of their background and group affiliation, and rather than concerning individual behaviour it relates to shared systems of meaning within and across ascribed and acquired social groups (Hofstede, 1980). Van Maanen and Schein (1979) suggest that culture can be defined by the values, beliefs and expectations that members of specific social groups come to share, while Hofstede (1980) famously refers to it as the collective programming of the mind, which distinguishes one group or category of people from another. Such collective programming may include various facets and traits, such as language, social organisation and social stratification, education and training, the law, political economy, material culture, values and attitudes, and religion (Tönnies, 1957; Peet, 2000).

As with the economic arguments concerning the continuing and reinforced importance of places as economic 'actors' within a globalising environment, similar arguments can also be applied to the cultural sphere. As Hall (1993: 354) suggests, 'paradoxically, globalization seems also to have led to a strengthening of 'local' allegiances and identities within nation-states; though this may be deceptive, since the strengthening of 'the local' is probably less the revival of the stable identities of 'locally settled communities' of the past, and more that tricky version of 'the local' which operates within, and has been thoroughly reshaped by 'the global' and operates largely within its logic'. In speculating on the role of culture in promoting regional economic growth, Syssner (2009) views it as a concept that is continually evolving, as well as something rooted, fixed and place-bound. There is, however, little underlying research that seeks to integrate both community and business/economic perspectives in order to provide a cohesive framework for understanding how the social condition of particular communities relates to the economic development trajectories of the places within which communities are situated.

New concepts and measures of this social condition – for instance, 'happiness' – are emerging as useful constructs to better understand not only the social condition of communities, but also the social welfare aspects of policy intervention, and in this study we

seek to draw on these developments. We aim to encompass the key features of the social condition of communities within the rubric of what we define as ‘community culture’. In essence, community culture refers to the overarching or dominant mindsets that underlie the way in which localities function, i.e. the ways and means by which individuals and groups within communities interact and shape their environment.

A number of studies have previously investigated certain aspects of community culture, in particular social capital, and its influence on economic development (Putnam et al., 1993), and associated processes such as innovation (Shane, 1993; Hauser et al., 2007), but few have examined the broader influence of community culture or how this influences business culture, particularly as manifested by engagement with entrepreneurship. In this paper we both conceptualise and operationalise a framework of place-based community culture and business culture in order to empirically analyse the extent to which community culture differs across differences place, principally regions and localities, and the extent to which the community cultures of places is associated with the underlying business culture of these places. Taking the region of Wales in the UK as a reference region, the study is undertaken within the context of three related hypotheses. First, community culture will differ across localities and regions. This does not infer that one culture is necessarily ‘better’ or ‘superior’ to another – in the sense that Bourdieu (1986) views some communities as having greater endowments of ‘cultural capital’ – but that they may be differently configured. For example, a key area of contention, especially in policies aimed at creating ‘sustainable communities’, is the need for either social diversity or cohesion, with diversity considered almost simultaneously a positive and negative factor in ensuring safety within particular communities (Raco, 2007; Robinson, 2007).

Second, community cultures have a strong symbiotic association with the prevailing socio-economic business culture both of a particular locality and the wider regional/national context within which the community is set (Biscoe, 2001; Storper, 2005; Storper, 2008). This socio-economic business culture is defined as encompassing traits related to entrepreneurship, innovation, risk-taking, and more generally collective aspirations, motivations, and opportunity-development (Fayolle et al., 2010). Third, local and regional economic development prospects are directly related to the prevailing socio-economic business culture, and therefore indirectly - possibly directly in some cases - to the types of community culture embedded across particular localities. The methodology involves a statistical and econometric analysis of relevant data from localities across Wales, coupled with a comparative analysis of Wales and other regions of the UK.

The remainder of this paper is structured as follows. Section 2 reviews the relevant literature in order to develop a place-based framework to analyse community culture and business culture, as well as the link between the two. Section 3 outlines the methodological approach adopted. Section 4 operationalises the conceptual framework and presents the results of the analysis. Section 5 discusses the implications of the findings, and section 6 provides an overall conclusion.

## **2. CULTURE, COMMUNITY, AND PLACE**

It is important not to conflate the conception of ‘community’ with that of ‘place’, which are analytically distinct – although strong communities are often embedded in specific places (Miller, 1992; Storper, 2008). Places consist of what has been termed ‘the location of culture’ and ‘the space of the people’ (Bhabha, 1994). Massey (2004) refers to a ‘global sense of place’ within which local economies are formed in part as a product of relations which spread out beyond it. Hudson (2001) suggests that space refers to the economic evaluation of a location, principally its capacity for profit, with place referring to the social evaluation of location based on meaning. To this extent, therefore, community culture can be considered a place-bound phenomenon, whereas business culture refers to behaviour and systems within an economic space that may have a mix of both place-bound and more business-bound characteristics. These business-bound characteristics will generally relate to the wider networks within which economic actors operate and function.

Florida (2002) has suggested that particular community culture traits of cities influence their performance economic space. However, the casual nature of this relationship remains keenly debated. Nevertheless, it does suggest a synergistic relationship between space and place (Johnstone and Lionais, 2004). Whilst deprived communities may have lost much of their economic rationale as space, they may retain the social relations of place (Fischer, 1977; Johnstone and Lionais, 2004).

Moulaert and Nussbaumer (2005) refer to the term ‘community’ to define the nature of human interactions within groups that can be defined according to geographic, sociological, political or economic considerations, whereby ‘local communities’ are considered as an appropriate level for practices related to improvement through social innovation. In this sense, cultural concepts such as collective action can be conceptualised as a continuum of forms of action coordination, with specific actions deriving much of their impetus from the characteristics of community and place (Habermas, 1989; Miller, 1992).

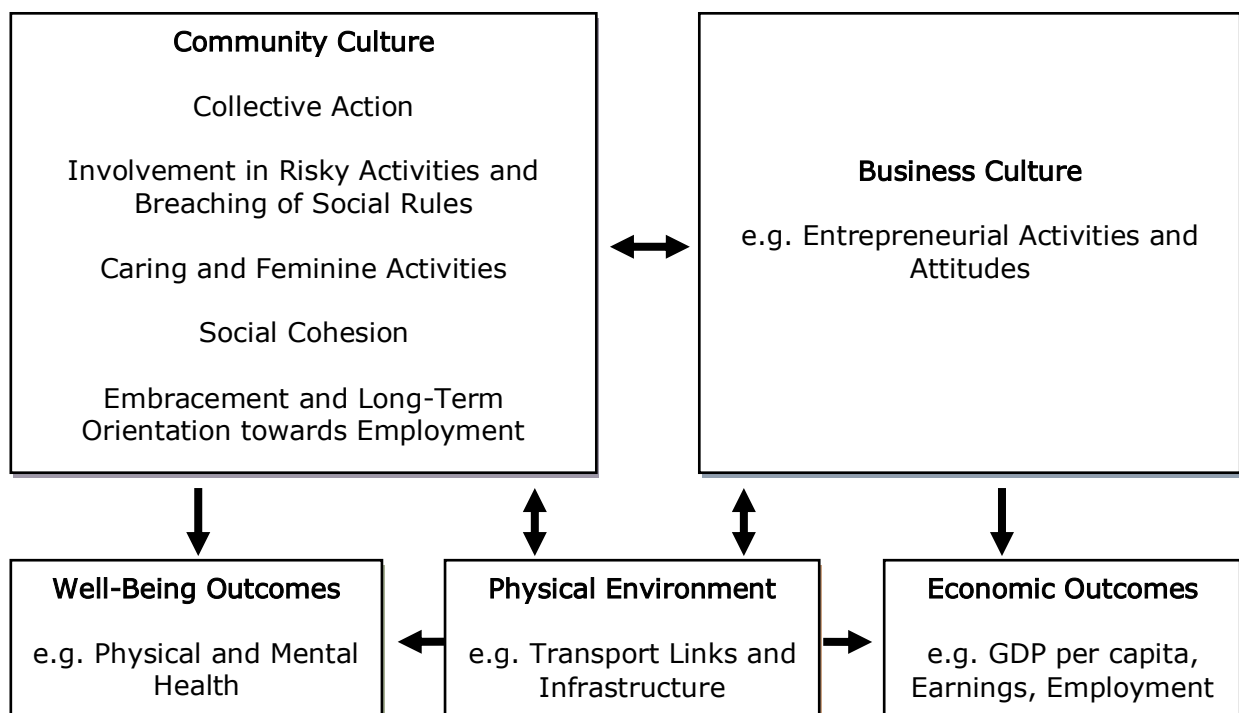
The notion of community is associated with the nature of social ties and interaction, as well as the nature of the morality and behavioural norms present and practiced within localities (Gerson et al., 1977; Smith, 1999). In theorising the concept of community culture, it is useful to consider that key concepts, such as the ‘structure of feeling’ and knowable communities’, have stemmed from the groundbreaking work of the Welsh cultural scholar Raymond Williams who famously stated that ‘culture is ordinary’ (Williams, 1958; Longhurst, 1991). Adding culture to the attributes of places has the impact of making rather commonsensical notions of locality and community quite complex concepts (Gupta and Ferguson, 1997). Interestingly, Williams (1989) argued that the culture he encountered during his time at Cambridge University was sadly wanting compared to that of the Welsh ‘Border Country’ in which he was brought up (Hall, 1993).

The cultural traits of places, especially in terms of social capital, may also influence business culture, especially entrepreneurial capacity, with policymakers seeking to develop such traits in order to improve entrepreneurial potential (Mueller and Thomas, 2001; Fayolle et al., 2010; Huggins and Williams, forthcoming). Flora and Flora (1993) suggest that with local economies facing increasing responsibilities to provide for their own well-being and development, 'entrepreneurial social infrastructure' is a necessary ingredient for successfully linking local business communities, particularly as people often appear to learn more from like-minded individuals. Culture shapes what individuals perceive as opportunities, and therefore entrepreneurial alertness is linked to judgment, creativity and interpretation (Hofstede, 1991; Lavoie, 1991; Hampden-Turner and Trompenaars, 1994; Sautet and Kirzner, 2006; Hechaverria and Reynolds, 2009). Effective institutions and a culture supportive of entrepreneurship make it possible for economic actors to take advantage of perceived opportunities (Carree et al., 2002; Sautet and Kirzner, 2006; Farole et al, 2010; Huggins and Williams, forthcoming). Places with an entrepreneurially-conducive culture may increase their competitive advantage by attracting investment, skills and talent (Turok, 2004). Places with strong entrepreneurial traditions have a competitive advantage if they are able to perpetuate it over time and generations (Audretsch and Fritsch, 2002; Beugelsdijk and Noorderhaven, 2004; Parker, 2004; Mueller, 2006).

Figure 1 indicates how community and business culture may interact. Communities may also have to fit with the physical environment within which they are based, whilst cultures may also drive the development of the physical and built environment, either positively or negatively. Equally the wider ecosystem may be aided in its recovery or damaged by activities encouraged by the prevailing business and community cultures.

Outcomes for the population can take a number of forms. Much economic analysis has concentrated on pure financial outcomes. Whilst this has value for residents it does not capture all aspects of welfare. Where available, happiness or subjective well-being provides another measure of outcomes, with the non-financial aspects of well-being being associated with greater physical and mental health (Huggins and Thompson, 2012). Both business and community culture may directly impact upon both groups of outcomes (Beugelsdijk and Noorderhaven, 2004). Well-being, for example, may be positively associated with the business community where satisfaction is obtained directly from work-related activities, as opposed to the payment received for these activities. Community culture may improve economic outcomes whereby collective action helps overcome coordination failures. However, business culture is traditionally more strongly associated with economic outcomes, and community culture more with non-financial measures related to well-being.

**Figure 1: Culture and Place-Based Development**



Communities are often seen as being able to complement, and in some situations substitute, for formal institutions in the process of economic development (North, 1990; Rodríguez-Pose and Storper, 2006; Farole et al, 2010). They allow the generation of trust (Fukuyama, 2001; Putnam, 2000; Bowles and Gintis, 2002), reduce transaction costs (Storper, 1997), alleviate the dangers of opportunistic behaviour and moral hazard (Streeck, 1992; Putnam, 2000), help overcome informational asymmetries (Granovetter, 1985; Wade, 1987), and match individual and aggregate interests (Rodríguez-Pose, 2001).

There has been considerable work examining different types of economic systems, but less that specifically examines the impact of community culture on the business culture of places. This is not to say that business has been seen as completely divorced from the cultural environment, with Hofstede's (1980) seminal work developing the dimensions of culture, which has led to the development of a stream of literature examining this issue in considerable depth. Whilst Hofstede's work was based around a specific survey of individuals within one large international organisation, IBM, the findings from his work have been adapted and applied to a variety of settings, especially at the national level. Although, not always keeping to the principles set out by Hofstede, these studies have frequently looked for evidence of the principle constructs of culture he identifies, in particular: (1) power distance – indicates the extent to which a society expects and accepts inequalities between its people, and an unequal distribution of power and responsibility within its institutions and organizations; (2) uncertainty avoidance – related to the extent to which countries and their institutions establish formal rules and fixed patterns of operation as a means of enhancing security and of avoiding ambiguity and doubt; (3) individualism-collectivism – related to the degree to which people in a country prefer to act as individuals rather than members of groups; (4) masculinity-femininity – the more 'masculine' a society the more it values assertiveness and materialism (promoting competition, meritocracy, decisiveness and strong leadership. 'Feminine' societies promote harmonious relations in the workplace; (5) long-term-short-term orientation - with long-term relating to factors such as thrift and perseverance, and short-term values to respect for personal tradition and social obligations.

The difficulty with transferring Hofstede's findings from an organisational to a place-based setting is that there is often greater within group (community, country) variation than between group variation, and outside the like-for-like comparison of individuals undertaking the same roles within the same organisation in different nations, contextual elements are likely to have a substantial effect. This is likely to be further influenced by any self-selecting



elements of the occupational and non-occupational roles that individuals choose. Nevertheless, the cultural dimensions identified by studies such as Hofstede are important starting points for studying differences in community culture.

Another area of research that is of pertinence to those studying community culture is the growing work on social capital (Adler and Kwon, 2002; Putnam, 1995; Durlauf and Fafchamps, 2003; Kearns and Forrest, 2000). As the measurement of social capital is particularly difficult to determine, in this paper we look for the mechanisms that might help create social capital, as well as those measures that reflect activities that represent conditions and actions more or less suited to the development of trust. The cultural dimensions developed to Hofstede (1980) can be utilised to analyse whether or not a particular community is more or less suited to the development of social capital. However, a ‘stronger’ community culture may in itself not always lead to a stronger economy.

It is also true that an over reliance on community, rather than formal institutions, can open a community up to the dangers of rent seeking by individuals at the expense of the group as a whole, as well as insider-outside problems whereby the existing community benefits at the expense as those who are not members (Trigilia, 1992; Farole et al, 2010). Whilst trust may be developed, it may not be the generalised trust required for economic development (Rodríguez-Pose and Storper, 2006). As such, not all close-knit communities will have positive effects on economic development (Rodríguez-Pose, 2001; Martin and Sunley, 2003; Storper, 2005). Therefore, it is the nature and interaction between formal institutions and community which is likely to be of greatest importance, with both sources of interaction able to offset the weaknesses of the other (North, 1990; Rodríguez-Pose and Storper, 2006; Farole et al, 2010).

The measures we develop are guided by the existing literature exploring culture, and are intended to capture a range of different aspects of the prevailing culture that are likely to be relevant when considering the impact on attitudes towards a function of the history of these communities (Fletcher, 1983). Overall, our framework consists of five measures of community culture (attitudes to work and education; social cohesion; work life balance, feminine and caring activities; risk taking and social rules; collective action and equality) and overarching measure of business culture, each of which is discussed below:

*Attitudes to work and education* – attitudes toward work and education are in many ways related to the extent to which individuals place a strong emphasis on self-sufficiency and making a contribution to society (Gregson et al., 1999; Brennan et al., 2000). However, in order to accomplish this, the correct investments in human capital must be made and this

requires a long-term orientation. This means that much of this measure is closely associated with Hofstede's (1980) long-term/short-term orientation measure. This measure is captured by measures of economic activity and educational attainment and participation.

*Social cohesion* – the social capital formed within a community may be strongly influenced by the extent to which there is a cohesive and uniform group that makes up the majority of the community population. Evidence has suggested that group membership symbolising this is correlated with stronger economic growth (Knack and Keefer, 1997; Zak and Knack, 2001; Beugelsdijk et al., 2004; Guiso et al., 2004). Equally, if groups within a community are deeply divided this can hold back economic growth, as generalised trust will be reduced (Easterly and Levine, 1997; Aghion et al., 2004). To capture the extent to which there is a homogeneous community, measures of ethnic and religious similarity for places are created, along with measures based on gross migration. Existing studies have used variables as diverse as: the presence of sports and cultural associations, newspaper readership, voting behaviour, and the presence of non-governmental organisations to capture participation in community activities and decision making (Helliwell and Putnam, 2000; Paxton, 2002; Durlauf and Fafchamps, 2003). Following this approach, the proportion of the population stating they belong to any religion and voting in general elections are also utilised to capture participation.

*Work life balance, femininity, and caring activities* – although individualist and competitive societies may achieve greater economic success, this is not necessarily the case if competition is too great. Conflict and violence can result, with fractures appearing within the community. The market offers an opportunity for this competition to be used in a less destructive manner than could be the case. However, there is still potential for resources to be wasted; for example, the desire to possess certain goods without regard for the generation of negative externalities on others (Hirsch, 1977), or where higher income levels do not necessarily lead to greater well-being (Easterlin, 1974). This means that although many of the traits associated with business activities are often thought to be masculine in nature (Bennett and Dann, 2000; Bruni et al., 2004), in order to achieve higher levels of well-being and greater work life balance, lower working hours and greater flexibility can also be beneficial (Hundley, 2001). Social norms and expectations may result in contrasting effects on male and female welfare as differing domains take precedence for each gender (Parasuraman et al., 1996).

*Risk taking and social rules* – most of the measures relating to risk taking activities available at the place-based level generally relate to subversive activities, which may lower

the opportunity for mutually beneficial collaboration within a business community, since social conventions reinforced by reputational effects are required as coordination tools through information gathering activities (Lorenzen, 2007). There is even a danger that if unchecked such subversive activities could become the social norm and seen as being acceptable (Kearns and Forrest, 2000). Where this is the case, the level of trust within the community is likely to fall, plus it will be harder to form bridging ties to other communities, as individuals from within those communities are likely to suffer from a stigma effect (Atkinson and Kintrea, 2001).

*Collective action and equality* – it is unclear whether a more individualistic or collective cultural approach is more conducive to economic development, with there being potentially benefits from both cultural systems. With more individualistic systems although less trust may be built up within the community, the community may possess a greater propensity toward market activities. More collective systems can create greater trust within groups, but any ‘aggressive’ tendencies must usually be directed outwards at other groups (Greif, 1994; Casson, 1995; Ettliger, 2003). Closely associated with collective action is a desire for equality or greater equity, and where this is the case the rewards achieved by successful business men and women, or other successful agents, may be viewed less positively by the remainder of the community. Community enterprises may be viewed as one way of boosting all community members’ welfare, providing an equity driven collective approach can be twinned with incentives for greater enterprise (Casson, 1995).

*Business Culture* - business culture can be measured in a number of different ways. Some of these are more objective, but may not necessarily identify the key mechanisms determining the nature of business within a locality. Others are more subjective, and provide a better indication of the intentions of both individuals and firms with regard to business activity. Drawing on models of entrepreneurial intentions such as Ajzen’s (1991) theory of planned behaviour and Shapero’s (1982) model of the entrepreneurial event, four potential components of entrepreneurial culture are: the nature of existing businesses; entrepreneurial activities and institutions; the attitude of the population in terms of becoming involved in the business community, and the perceived desirability and feasibility of entrepreneurial activities. The key components of business culture are likely to be inter-related with causality often running in both directions (Begley and Tan, 2001). For example, the existing business structure will play an important part in creating the attitudes of the general population as a whole toward the feasibility and desirability of entrepreneurial activity, with existing

entrepreneurs acting as role models influencing entrepreneurial perceptions (Scherer et al., 1989; Krueger, 1993).

### **3. DATA AND METHOD**

In order to examine the impact of the prevailing community culture and business culture in particular places, this study examines the community culture measures outlined in the preceding section. Within this study, analysis is conducted at three different levels: regional, local, and micro (individual attitudes and actions). First, we analyse the relationship between in community and business culture across the twelve standard UK government office regions, taking the region of Wales as our reference point. Second, we analyse the relationship between community culture and business culture at the local level within a particular region, again using Wales as the reference region, utilising data from across 22 local authority district areas. Third, a regression analysis examines the association between the entrepreneurial orientation of individuals and the local place-based community cultures in which they live.

The choice of Wales as a reference region represents an opportunity to explore how the culture of one of the UK's least economically developed regions compares with its UK counterparts, as well as to examine how local cultures differ across such a region. Located on the western edge of the UK, Wales is a region with a population of some 2.9 million people (5% of UK citizens). The economy has traditionally depended upon industries such as farming, mining and quarrying and steel making, which have declined in significance in the past few decades. This decline has given rise to a more diverse economy, although the region is still emerging from a fundamental restructuring of its economic base. Of the twelve regions in the UK, Wales is the least competitive (Huggins and Thompson, 2010). It has the lowest level of GVA per capita of all UK regions (see Table 2 in Section 4), coupled with levels of pay, productivity, employment and economic activity that are all significantly below the UK average, and is generally regarded as more peripheral and lagging than the core regions of London, the South East of England and East of England. A lack of entrepreneurship is identified as a barrier restricting the growth of the regional economy (Huggins and Thompson, 2010).

Within Wales there is also significant variation in economic performance and development (Table 3 Section 4), which can be categorised with three broad types: (1) areas with significant urban and city development, which along with the capital city Cardiff includes Newport, Swansea, and Wrexham; (2) the wider south Wales Valleys sub-region,

which was previously the coal mining and industrial heartland of the Wales, but for many years has been engaged in a process of economic restructuring (with the localities consisting of Blaenau Gwent; Bridgend; Caerphilly; Merthyr Tydfil; Neath Port Talbot; Rhondda, Cynon, Taff; and Torfaen); (3) localities with significant levels of rurality, and agricultural dependence, consisting of Anglesey, Carmarthenshire, Ceredigion, Conwy, Denbighshire, Flintshire, Gwynedd, Monmouthshire, Pembrokeshire, Powys, and the Vale of Glamorgan.

The measures for each of the cultural components are formed using the logged terms to reduce the influence of outliers and skewed distributions. Indices of each measure are formed on the basis of the UK average value. The combined cultural indices are then formed with weights included to ensure the main constructs within each are given an equal weighting, as shown in Table 1. Some of the items were only available at either the local authority or regional level, and therefore the individual item weightings used in the two indices were slightly different. However, the weightings for the overall constructs is the same. For example, at the local authority level missing data for some female suicide rates mean only the male suicide rate is included, while at regional level rates for both males and females are included.

At the micro level, the impact of the prevailing community culture on attitudes towards entrepreneurship is examined using data drawn from the Global Entrepreneurship Monitor (GEM) survey. Running since 1999, the GEM study is the largest internationally comparable study of entrepreneurship in the world with 59 economies involved in the 2010 survey, representative of 52 per cent of the world's population and 84 per cent of GDP (Kelley et al., 2011). The objective is to develop a number of internationally comparable measures of not only entrepreneurial activities, but also attitudes towards entrepreneurship. For an exhaustive explanation of the data formatting and processing procedures please see Reynolds et al. (2005) and Bygrave et al. (2003). The UK data collection process takes the form of a stratified random sample of the UK population conducted across all UK regions via telephone interviews undertaken through a randomised direct dial technique undertaken by a professional research organisation. For an extensive explanation of the data collection process in the UK see Levie (2007).

**Table 1: Community Culture Measures**

<b>Embracement of Work and Employment</b>	<b>Measure</b>	<b>Source</b>	<b>Local Index Weighting</b>	<b>Regional Index Weighting</b>
Embracement of Work	Male economic activity rates	Annual Population Survey (APS)	0.25	0.25
Embracement of Work	Proportion of economically inactive men who wish to work	Annual Population Survey (APS)	0.25	0.25
Education and Long-Term Orientation	Proportion of population with NVQ4	Annual Population Survey (APS)	0.125	0.125
Education and Long-Term Orientation	Proportion of population with no formal education	Annual Population Survey (APS)	0.125	0.125
Education and Long-Term Orientation	Primary school absenteeism, proportion of half day sessions	Schools Statistics	0.125	0.125
Education and Long-Term Orientation	Secondary school absenteeism, proportion of half day sessions	Schools Statistics	0.125	0.125
<b>Social Cohesion</b>	<b>Measure</b>	<b>Source</b>	<b>Local Index Weighting</b>	<b>Regional Index Weighting</b>
Community Homogeneity	Ethnic similarity	Census	0.1	0.1
Community Homogeneity	Religious similarity	Census	0.1	0.1
Engagement with Community Institutions	Proportion of the population identifying with a religion	Census	0.2	0.2
Embeddedness in Local Area	Gross migration as a proportion of the population	National Health Service Central Register	0.1	0.1
Embeddedness in Local Area	Proportion of the population which is UK born	Annual Population Survey	0.1	0.1

Local Identity	Proportion of the population perceiving themselves to be English/Irish/Scottish/Welsh	Annual Population Survey	0.1	0.2
Local Identity	Proportion of the population able to speak Welsh fluently	Annual Population Survey	0.1	n/a
Engagement with Political Process	Proportion of the electorate voting in the general election	Electoral Commission	0.2	0.2
<b>Work life balance, femininity, and caring attitudes</b>				
	<b>Measure</b>	<b>Source</b>	<b>Local Index Weighting</b>	<b>Regional Index Weighting</b>
Femininity	Female economic activity	Annual Population Survey	0.333	0.333
Work-life Balance	Female part-time employment	Annual Population Survey	0.333	0.333
Caring Activities	Unpaid care provision 1 to 19 hours a week	Census	0.111	0.111
Caring Activities	Unpaid care provision 20 to 49 hours a week	Census	0.111	0.111
Caring Activities	Unpaid care provision of 50 hours a week or more	Census	0.1111	0.1111
<b>Risk taking and social rules related behaviours</b>				
	<b>Measure</b>	<b>Source</b>	<b>Local Index Weighting</b>	<b>Regional Index Weighting</b>
Financial Risk Taking	Personal insolvencies per 10,000 population	Insolvency Service	0.333	0.333
Personal Risk	Male age standardised alcohol related deaths per 100,000 population	Health Statistics Quarterly	0.167	0.083
Personal Risk	Female age standardised alcohol related deaths per 100,000 population	Health Statistics Quarterly	n/a	0.083

Personal Risk	Underage conceptions per 1000 women	Health Statistics Quarterly	0.167	0.167
Social Rule Breaking	Violent crimes per 1000 population	Notifiable Crimes Recorded by the Police	0.056	0.056
Social Rule Breaking	Burglaries residential and non-residential per 1000 population	Notifiable Crimes Recorded by the Police	0.056	0.056
Social Rule Breaking	Vehicle crimes per 1000 population	Notifiable Crimes Recorded by the Police	0.056	0.056
Social Rule Breaking	Fire and rescue fire incidents per 10,000 population	Fire and Rescue Service	0.083	0.083
Social Rule Breaking	Proportion of fires that are deliberate	Fire and Rescue Service	0.083	0.083
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<b>Collective Action and Equality</b>	<b>Measure</b>	<b>Source</b>	<b>Local Index Weighting</b>	<b>Regional Index Weighting</b>
Collective Activities	Trade union membership	Annual Population Survey	0.317	0.317
Collective Activities	Credit union membership	Annual Population Survey	0.017	n/a
Collective Activities	Credit unions per 1 million population	Financial Services Authority	n/a	0.017
Collective and Equality Politics	Proportion of the population voting for left of centre parties	Electoral Commission	0.333	0.333
Preference for Equality	Proportion of the population who feeling a majority prefer equal living standards	Global Entrepreneurship Monitor (GEM)	0.333	0.333



Between 2005 and 2007 the GEM study was given additional funding from the European Social Fund and Welsh Government, which expanded the survey to approximately 8000 respondents annually. Pooling the data for the three years ensures that a relatively large number of observations are available in each of the 22 local authority areas in Wales. In total this provides a sample of 22,203 respondents in Wales aged between 18 and 64 years. There is variation in the actual number of respondents in individual local authorities ranging from 414 in Merthyr Tydfil to 2105 in Cardiff. Unfortunately as a cost saving procedure those items relating to entrepreneurial attitudes are only utilised in surveys with half the sample. In order to provide a more robust examination of how community culture influences the decisions of the individual members of the population a multivariate analysis approach is adopted to control for other personal and environmental influences on attitudes towards entrepreneurship and involvement in entrepreneurial activities. The entrepreneurial activity and attitude measures take the form of binary items where the activity or attitude is either present or not. This means when used as the dependent variable ordinary least squares (OLS) estimation is inappropriate, and instead a binary logistic regression approach is adopted.

In terms of entrepreneurial activities four measures representing different levels of involvement and stage of development are included: entrepreneurial intentions – those expecting to be involved in a business start within the next three years; nascent entrepreneurship – those that have actively undertaken efforts to start a business, which they will own or part own and manage (the venture must not have paid profits or wages for three or more months to qualify); new business ownership – those that own or part own ventures that they manage and which have been paying profits or wages for between three and 42 months; and established business ownership – those that own or part own ventures that they manage and which have been paying profits or wages for over 42 months. Within the GEM data entrepreneurship is restricted from the perspective that measures concentrate on new firm formation and ownership, but is unrestricted in terms of industry sector and growth ambitions. The expanded GEM surveys in Wales provide over 15,500 observations for the entrepreneurial activity regressions where all controls for personal characteristics described below are available.

Only a minority of the Welsh population is likely to engage in entrepreneurial and business ownership activities at any given point in time. This is consistent with models such as Shapero's (1982) model of the entrepreneurial event, where intentions are only likely to become actions where a triggering event, such as, unemployment or where the individual becomes aware serendipitously business opportunity. However, such a trigger event will have

no influence on entrepreneurial activity where the population does not possess any entrepreneurial intentions. Studies such as Krueger et al. (2000) have highlighted the importance of perceived feasibility and the closely associated concept of perceived behavioural control in creating these intentions. The items outlined below are included within the GEM survey and allow the impact of community culture on the perceived feasibility of entrepreneurship to also be explored: Entrepreneurial Social Capital - Do you know someone personally who started a business in the past 2 years? Opportunity Perception - In the next six months will there be good opportunities for starting a business in the area where you live? Entrepreneurial Self-Efficacy - Do you have the knowledge, skill and experience required to start a new business? Fear of Failure - Would fear of failure prevent you from starting a business?

Even though only half the sample are asked to provide responses to those items investigating attitudes towards entrepreneurship, this still provides 7909 observations where all controls are available. The personal characteristics controlled for are those found in previous studies to be associated with greater entrepreneurial orientation and involvement. For example, men have consistently been found to be more likely to be entrepreneurs than women due to factors such as greater risk aversion (Brush, 1992; Galloway and Levie, 2001). As a measure of human capital, age is included in the regressions representing accumulated experience. This is likely to particularly influence the extent to which entrepreneurship is seen as feasible, as experience obtained in the workforce is highly influential for the success of entrepreneurial ventures (Siegel et al., 1993; Kim, 2006). However, the ability to make a return from entrepreneurship may recede as age increases, with the time to recoup any investments declining (Lévesque and Minniti, 2006). To allow for a non-linear relationship, a squared age term is also included. Both age terms are centred around the mean age of the population to reduce problems with collinearity and make a zero value more meaningful (Cohen et al. 2003).

A second measure of human capital included in the analysis is educational qualifications. Studies suggest a positive relationship exists between formal schooling and training and entrepreneurial success, in particular opportunity perception (Robinson and Sexton, 1994; Arenius and De Clercq, 2005; van der Sluis et al., 2006). Dummies representing the relative extremes of the educational spectrum are included: those with university degree level qualifications; and those holding no formal qualifications. In addition, a dummy is included for those holding vocational qualifications, which are often associated with those occupations that are over-represented in self employment. Employment status is

also considered, as this is likely to have a substantial impact on the differing networks that individuals have access to. For example, lower levels of human, financial and social capital may be constraints for the unemployed (Nahapiet and Ghoshal, 1998; Arenius and De Clerq, 2005). As a more direct measure of the availability of financial capital available, household income is included. For logits of new business ownership and established business ownership, employment status is excluded as the entrepreneur would be expected to be employed by their business. Household income is excluded from the established business ownership regression as causality may run in the opposite direction.

Migration status - life-long resident of the region; in-migrant from elsewhere in the UK; and immigrant to the UK - is used to control for the lower risk aversion associated with the more geographically mobile. Those moving into a new area may also view local conditions differently and perceive different opportunities to those more strongly embedded in the community (Min and Bozorgmehr, 2003; Levie, 2007). In particular, those willing to take on the challenge of moving to another nation are likely to reflect a self-selecting sample of those with lower risk aversion (Parker, 2004). Where communities have a more recent shared history of immigration this may influence the views taken toward new firm formation, in general, as well as the form taken of such new ventures. As previously noted, both community culture and attitudes towards entrepreneurship are likely to be influenced by the physical characteristics of localities such as their rural or urban nature and/or infrastructure present. In order to control for such influences, the rural or urban nature of the locality is included based on the Countryside Agency and Office for National Statistics classification of settlements into: urban, town or fringe; village, hamlet and isolated dwelling (Countryside Agency, 2004).

#### **4. RESULTS**

In this section the results and findings of the analysis, at both the regional and local indices are presented for: attitudes to work and education; social cohesion; femininity; risk and social rules; collective action and equality; and business culture. These indices facilitate an understanding of differences and similarities in cultural attributes across places. The regional cultural indices are summarised in Table 2, and the local level indices in Table 3. Through both correlation and regression analysis the association between the different forms of culture are analysed.

**Table 2: Community Culture Indices by UK Region (UK = 100)**

	<b>Embracement</b>	<b>Rank</b>	<b>Social Cohesion</b>	<b>Rank</b>	<b>Femininity</b>	<b>Rank</b>	<b>Risk and Social Rules</b>	<b>Rank</b>	<b>Collective Action</b>	<b>Rank</b>	<b>Business Culture</b>	<b>Rank</b>	<b>GVA per Capita(£)</b>	<b>Rank</b>
East Midlands	98.4	7	103.1	8	101.3	6	101.5	5	83.9	9	96.1	5	18,041	6
East of England	103.7	4	104.7	7	96.1	9	130.8	1	100.4	7	98.7	3	19,473	4
London	105.4	3	80.3	11	90.1	11	119.0	3	97.3	8	127.2	1	34,786	1
North East	97.3	9	115.8	2	107.2	2	90.8	10	123.7	3	87.0	10	15,887	10
North West	97.5	8	116.2	1	103.7	4	93.4	9	116.1	4	90.4	9	17,555	7
Scotland	101.8	5	99.1	10	99.7	8	84.7	11	132.1	1	82.5	11	20,086	3
South East	111.2	1	101.8	9	94.0	10	124.7	2	77.4	11	104.8	2	21,688	2
South West	106.1	2	105.0	6	100.3	7	116.2	4	83.1	10	91.8	8	18,782	5
Wales	89.7	11	111.5	3	110.4	1	99.1	6	125.6	2	92.6	7	15,237	11
West Midlands	91.9	10	106.8	5	103.7	3	97.8	7	103.0	6	93.2	6	17,463	8
Yorkshire and Humber	100.5	6	108.1	4	103.5	5	94.8	8	107.8	5	98.4	4	17,096	9

**Table 3: Community Culture Indices by Locality in Wales (UK = 100)**

	<b>Embracement</b>	<b>Rank</b>	<b>Social Cohesion</b>	<b>Rank</b>	<b>Femininity</b>	<b>Rank</b>	<b>Risk/Social Rules</b>	<b>Rank</b>	<b>Collective Action and Equality</b>	<b>Rank</b>	<b>Business Culture</b>	<b>Rank</b>	<b>GVA per Capita</b>	<b>Rank</b>
Anglesey	87.2	15	113.4	1	106.8	15	173.6	4	129.0	3	96.4	10	10,998	19
Blaenau Gwent	83.3	20	98.6	18	115.8	5	88.7	19	123.5	9	73.0	22	10,050	22
Bridgend	95.7	6	100.0	14	112.6	8	96.2	15	123.4	10	84.1	17	15,564	6
Caerphilly	82.8	21	99.4	15	111.9	10	91.7	16	128.4	5	83.2	19	10,603	21
Cardiff	90.4	9	96.0	22	104.1	19	100.1	13	118.4	12	86.7	14	24,862	1
Carmarthenshire	89.5	13	106.1	5	112.5	9	174.8	3	130.7	2	87.3	12	12,290	14
Ceredigion	90.1	10	105.5	6	106.5	16	285.2	1	110.6	20	88.4	11	11,886	15
Conwy	89.8	11	101.8	10	108.3	13	102.9	11	117.3	15	106.3	1	10,776	20
Denbighshire	91.8	7	103.3	9	108.0	14	100.0	14	121.1	11	102.4	4	13,220	11
Flintshire	88.0	14	105.1	7	101.6	21	110.5	9	116.1	16	101.7	6	17,821	3
Gwynedd	86.4	16	112.8	2	101.4	22	162.2	5	127.0	6	104.2	3	13,388	10
Merthyr Tydfil	82.3	22	100.7	12	118.9	3	81.3	22	123.5	8	83.8	18	13,817	9
Monmouthshire	109.8	1	101.2	11	102.9	20	146.8	7	101.2	21	105.4	2	15,144	7
Neath Port Talbot	85.0	17	96.4	21	121.8	1	102.8	12	128.9	4	84.2	16	11,630	17
Newport	98.1	2	97.6	20	109.3	11	86.8	21	115.9	18	96.8	9	21,443	2
Pembrokeshire	83.8	18	103.5	8	114.0	7	156.3	6	116.1	17	101.8	5	12,751	13
Powys	96.3	4	107.2	4	108.5	12	190.1	2	87.2	22	97.4	8	13,179	12
Rhondda, Cynon, Taff	83.7	19	100.3	13	118.1	4	89.0	18	131.6	1	74.1	21	11,082	18
Swansea	89.5	12	99.1	17	119.8	2	107.2	10	117.9	14	86.9	13	15,717	5
The Vale of Glamorgan	96.7	3	98.0	19	105.5	17	116.4	8	114.2	19	99.3	7	11,703	16
Torfaen	91.3	8	99.1	16	114.6	6	87.7	20	124.8	7	79.0	20	13,919	8
Wrexham	95.9	5	110.8	3	105.3	18	89.4	17	118.0	13	86.1	15	16,642	4

*Attitudes to work and education* - engagement with the labour market, and related investments in human capital, reflect social norms towards production and self-sufficiency. Investments in education are also driven in part by the long-term orientation of the community. However, given that when an economy is weak the decision to participate or not to participate in the economy is not entirely voluntary, low economic activity rates may reflect a lack of employment rather than a lack of desire for employment. The regions achieving the highest levels of embracement of work and education are those with the strongest economies. In some respects, this is no surprise as more entrepreneurial migrants might be expected to move to such regions, leaving the less entrepreneurial in those regions with weaker resource allocations (Casson, 1995; Min and Bozorgmehr, 2003; Levie, 2007). Unfortunately Wales with its concentrations of social and economic deprivation displays the lowest score of the regions. However, there is in fact more variation between Welsh localities than across the regions of the UK as a whole.

The localities displaying the greatest embracement of education and employment are more frequently found in the more prosperous areas of Wales, but also to a lesser extent the larger urban agglomerations in Wales. The more rural areas of West Wales, on the other hand, are often towards the bottom of the rankings, but generally above the South Wales Valleys communities. Cardiff is ranked around the middle of the table. There is considerable variation across time, which is likely to reflect differing influences on localities of the recession. In some localities economic activity may fall sharply with job losses, but it is unclear whether having left the workforce these workers wish to return. For example, whilst Denbighshire and Rhondda Cynon Taf both see falls in economic activity, the proportion of the economically inactive men in Denbighshire who want to work rises, with the opposite occurring in Rhondda Cynon Taf.

*Social cohesion* - at a regional level, it comes as no surprise to find that those regions attracting higher levels of migration from both within and outside the UK are generally towards the bottom of the table. London, in particular, with its high levels of inward migration from other parts of the UK and the rest of the world, displays a low level of social cohesion. There is less homogeneity of the population, and understandably a lower proportion of the capital's population identify themselves as English. Regional election turnout displays less variation than was found in within Wales, although London was found to also lag behind the UK average on this measure. There is much less variation between the remaining regions and devolved territories. The north of England and Wales, with their shared industrial heritage, appear to display characteristics that would be associated with greater social

cohesion. It should be noted that there could be high levels of social cohesion within individual localities or even smaller community groups, but this high level of group bonding may be in the presence of strong intergroup tensions (Casson, 1995). This means social cohesion may not universally be positive, particularly if it isolates a strongly bound community from the wider local or regional community.

At the local level, it is the larger cities in South Wales that appear to have the lower levels of social cohesion. Interestingly the Valleys localities all rank above the larger cities. This perhaps indicates the stronger community links within localities dominated by smaller towns with a more homogenous population, even in the presence of high levels of deprivation. The more rural north and west, as expected, display the highest levels of social cohesion. As might be expected for a relatively small nation, there is a stronger national identification than the UK average. Where this is lower it tends to be in those localities near the border with England and the more multicultural Cardiff. As many previous studies have shown, the Welsh speaking population is strongly clustered in the North and West of the country, although the increased education in the Welsh language across Wales is likely to start to influence this pattern over time. Electoral turnout is also found to be greater in the more rural and affluent areas of Wales. The less affluent South Wales Valleys areas appear to be less engaged and perhaps more disaffected with the political system

*Work life balance, femininity, and caring activities* - rather than concentrating purely on the economic outcomes of work, in this part of community culture we consider the advantages of more caring activities. In this regard, economic inactivity is not necessarily seen as a negative, and similarly part-time work allows the balancing of both spheres of life. However, the social norms of men working mean that economic inactivity and part-time work generally have a negative influence on subjective well-being (Clark et al., 2008). Therefore, the index concentrates on female economic inactivity and female part-time employment. A further measure of a more caring feminine culture is the extent to which individuals undertake unpaid care. Although this may be in part be a reflection of demand and supply factors in relation to the provision of private caring facilities, it is likely to have become embedded in the social norms of the community over time. More caring societies might be expected to undertake a higher level of unpaid care.

Wales as a whole displays a high level of feminine or caring characteristics, achieving the highest ranking on this scale. Other regions rating highly under this measure have similar traditions of heavy industry, such as the North East and the West Midlands. Those regions traditionally seen as more dynamic and generally found to have higher levels of

competitiveness (Huggins and Thompson, 2010), such as London and the South East, appear to display lower levels of caring attributes. This greater emphasis on individualistic productive activities might be seen as beneficial, but where competition is excessive this can reduce trust in the community (Miller, 1992; Greif, 1994; Casson, 1995).

Interestingly it is the more industrial South Wales Valleys localities where greater work life balance and caring appears to be present in the community. In the more rural areas of Wales and the capital, Cardiff, femininity is still generally above the UK average, but relatively low in Welsh terms. Generally, Welsh localities have above average provision of unpaid care to that of England and Wales as a whole. This was particularly the case for the higher hourly levels of unpaid care. The localities displaying the highest levels of unpaid care are the old industrial areas of South Wales. Although still above the UK average, Cardiff, and the more rural central and western Welsh localities, display lower levels of unpaid care provision.

*Risk taking and social rules* - measures of risky activities for individuals related more to their current and future health, or future life patterns, are captured by substance misuse and underage conceptions. In the case of the former the most comprehensive and accurate measure is likely to be in the form of alcohol related deaths as a proportion of the population. Whilst this does not capture all potential substance misuse, it is a measure which is captured and comparable across the UK.

Wales risk and social rules regional index score is in line with the UK average. Although more urban in nature, London - along with the other core regions of the East of England and South East - score highly. At the local level, it is the more rural areas of Wales where risk taking activities tend to be less prevalent, a large part of this coming from the strong differences in the subversive anti-social activity rates found across Wales. The absence of such activities will help to build greater trust within the community, which would be expected to spill-over positively into the business community. Although many of the more rural localities in Wales display a low prevalence of risky activities, the South Wales Valleys areas tended to score poorly. This is understandable given the literature associated with place-based affects leading to subversive behaviours being accepted as the norm (Brennan et al., 2000).

Some of the more rural areas of Wales display higher levels of alcohol abuse, as do some of the more urban areas in South Wales. In terms of underage conceptions, the South Wales Valleys display the highest prevalence. The recorded crime rates reflect a disregard for property and social norms. As might be expected, the more rural localities in Wales display a



lower crime rate per head. The larger cities fair less well with Newport displaying relatively high levels of criminal activity as measured by all three variables.

*Collective action and equality* - measures to capture a desire for collective action include trade union and credit union membership. These can be community (where groups of workers can form an overlapping but not identical community to the residential community) driven mechanisms for achieving the aims of their members. Wales as a whole compares favourably with the rest of the UK in terms of collective action and equality. Only Scotland scores higher, and at the other end of the spectrum is the South East, which is perhaps relatively unsurprising. Overall, it is clear that there are more collective and equality driven preferences in Wales compared to the UK average. In particular, estimated trade union membership is found to be higher, especially where there is a greater tradition of manufacturing activity. Credit union membership shows much greater variation, with this partly reflecting the minority of the population involved in such activities.

At the local level, the northern and western localities in more rural areas of Wales rank highly. The only locality not achieving a collective action equality index value representing a level above the UK average is Powys. Monmouthshire displays the next lowest preferences towards collective action. A political reflection of more egalitarian objectives may be support for more left-of-centre parties. Both the South Wales valleys and the more rural areas of Wales generally show greater involvement. This preference for collective action is reflected in support for left-of-centre political parties, with only the more affluent and rural Monmouthshire and Powys localities showing a relatively low level of support for these parties.

*Business culture* - the business culture index is created from the four factors: existing business community; entrepreneurial desirability; entrepreneurial feasibility; and entrepreneurial activities. Overall, Wales ranks mid-table in terms of its business culture, but this is a long way below the performance of the leading regions of London and the South East. Ultimately, it appears that the existing business structure is not enhancing new entrepreneurial activity, with the feasibility of such activities perceived to be relatively low. Desirability of entrepreneurship is around the UK average, but this perhaps reflects the relatively low opportunity costs for much of the Welsh population. At the local level, the measure shows a relatively predictable pattern, with those localities in Wales with stronger traditions of entrepreneurial activity being above the UK average, which are often more rural areas. The industrial South Wales Valleys localities are a long way below the UK average.

In terms of the interactions between the business culture and community culture variables, at the regional level, greater social cohesion is negatively related to the perceived entrepreneurial feasibility and activity (Table 4). This may reflect the need for new ideas to enter a region to encourage greater entrepreneurial activity (Levie, 2007). It is also true that in order for a region to attract and retain creative individuals endowed with high levels of human capital, necessitates the need for an open and tolerant society (Florida, 2002). There is some evidence that entrepreneurial activity, perceived feasibility and the existing business community are negatively associated with greater collective action, although risk taking behaviours are not positively associated with entrepreneurial activity or entrepreneurial feasibility. Instead it appears that those engaging with entrepreneurial activities are in many ways risk minimisers, and more optimistic about such ventures, rather than risk seekers (Norton and Moore, 2002). It is the capability to apply good judgement to decisions, which is the important factor in creating a successful business community (Meredith et al., 1992; Casson, 1995).

**Table 4: Regional level Spearman rank correlation coefficients for business and community culture measures**

	Entrepreneurial Desirability	Entrepreneurial Activity	Entrepreneurial Feasibility	Existing Business Community	Collectivity	Risk and Social Rules	Femininity and Caring	Social Cohesion
Entrepreneurial Activity	-0.300 (0.370)							
Entrepreneurial Feasibility	-0.327 (0.326)	<b>0.718</b> (0.013)						
Existing Business Community	-0.427 (0.190)	0.536 (0.089)	<b>0.755</b> (0.007)					
Collectivity	0.564 (0.071)	<b>-0.645</b> (0.032)	<b>-0.845</b> (0.001)	<b>-0.791</b> (0.004)				
Risk and Social Rules	-0.418 (0.201)	<b>0.764</b> (0.006)	<b>0.845</b> (0.001)	0.555 (0.077)	<b>-0.864</b> (0.001)			
Femininity and Caring	0.155 (0.650)	-0.545 (0.083)	<b>-0.745</b> (0.008)	-0.509 (0.110)	<b>0.636</b> (0.035)	-0.591 (0.056)		
Social Cohesion	0.064 (0.853)	-0.427 (0.190)	-0.509 (0.110)	-0.145 (0.670)	0.418 (0.201)	-0.455 (0.160)	<b>0.855</b> (0.001)	
Embracement	-0.364 (0.272)	0.400 (0.223)	<b>0.755</b> (0.007)	<b>0.691</b> (0.019)	<b>-0.727</b> (0.011)	0.573 (0.066)	<b>-0.909</b> (0.000)	<b>-0.682</b> (0.021)

**Table 5: Locality level Spearman rank correlation coefficients for business and community culture measures**

	Entrepreneurial Desirability	Entrepreneurial Activity	Entrepreneurial Feasibility	Existing Business Community	Collectivity	Risk and Social Rules	Femininity and Caring	Social Cohesion
Entrepreneurial Activity	-0.148 (0.511)							
Entrepreneurial Feasibility	0.091 (0.685)	<b>0.606</b> (0.003)						
Existing Business Community	-0.011 (0.960)	<b>0.566</b> (0.006)	<b>0.759</b> (0.000)					
Collectivity	-0.043 (0.850)	-0.374 (0.086)	<b>-0.475</b> (0.026)	<b>-0.613</b> (0.002)				
Risk and Social Rules	-0.229 (0.306)	0.411 (0.058)	<b>0.528</b> (0.012)	<b>0.555</b> (0.007)	-0.289 (0.193)			
Femininity and Caring	0.065 (0.774)	<b>-0.452</b> (0.035)	<b>-0.783</b> (0.000)	<b>-0.637</b> (0.001)	0.399 (0.066)	<b>-0.426</b> (0.048)		
Social Cohesion	0.050 (0.824)	0.417 (0.053)	<b>0.424</b> (0.049)	0.264 (0.236)	0.109 (0.629)	<b>0.640</b> (0.001)	-0.325 (0.140)	
Embracement	0.103 (0.649)	0.133 (0.556)	<b>0.430</b> (0.046)	<b>0.622</b> (0.002)	<b>-0.636</b> (0.001)	0.149 (0.510)	<b>-0.456</b> (0.033)	-0.110 (0.626)

Where caring activities are given greater prominence, there is a weaker existing business community and entrepreneurial feasibility is viewed as being lower. However, entrepreneurial feasibility and activity are both greater where there is greater social cohesion. This could reflect the support that individuals may feel they may be able to access by leveraging their social capital (Sanders and Nee, 1996; Glaeser et al., 2002), and the greater trust that may be present, which reduces the transaction costs of dealing with others in the community (Casson, 1995; Adler and Kwon, 2002; Beugelsdijk et al., 2004). A link between embracement and investments in education, to some extent reflecting the long-term orientation of Hofstede's (1980) measures of culture, with entrepreneurial activity is also present.

The local level correlations largely show the same relationships between the business and community culture variables as the regional level patterns, with a few notable exceptions. In particular, within Wales greater social cohesion appears to produce a high trust society, which then creates a greater perception of entrepreneurial feasibility and actual entrepreneurial activity (Table 5). It is not clear whether this result indicates something

different about Welsh society, or whether it is the different spatial levels being examined; however, a high trust, socially cohesive local community in Wales appears to encourage perceived entrepreneurial feasibility leading to greater entrepreneurial activity.

### *Community Culture and Entrepreneurial Orientation*

This section utilises micro data to investigate further whether there is evidence that the community culture of a particular place influences the attitudes and actions of individuals in the other spheres of life. Data from the Global Entrepreneurship Monitor (GEM) adult population surveys of Wales from 2005 to 2007 are used to examine what influence community culture has on entrepreneurial attitudes and activity. The community culture components for the locality within which each respondent is based enter the logit regressions to determine whether the prevailing community culture influences the probability that these activities are being undertaken (Table 6).

Whilst all four regressions outperform the null of constant probability according to the likelihood ratio tests, the goodness of fit Hosmer-Lemeshow tests reject the null of a good fit for entrepreneurial intentions and established business ownership, so results should be treated with caution. Collectively, the community culture variables are found to be significant at the 10 percent level or better for all, but the new business ownership regression. In the case of entrepreneurial intentions, greater collectivity is found to reduce the probability that individuals will expect to be involved in future entrepreneurial activities. It is understandable that individualistic and more materialistic activities, such as new venture creation, might be less positively viewed in such communities. Although only significant at the 10 percent level, it is interesting to note that embracement of work and the long-term perspective has a negative influence on entrepreneurial intentions. These entrepreneurial intentions may in many cases never come to pass, and perhaps are influenced by an underlying culture of looking for an 'easy' alternative, although in reality this likely to be far from the truth.

**Table 6: Logit regression of entrepreneurial activities and community culture**

	Entrepreneurial Intentions	Nascent Entrepreneurship	New Business Ownership	Established Business Ownership
<b>Male</b>	0.7035 (0.000)	0.6530 (0.000)	0.5892 (0.000)	1.1549 (0.000)
<b>Experiential Human Capital</b>				
Age (centred)	-0.0313 (0.000)	-0.0246 (0.000)	-0.0239 (0.000)	0.0391 (0.000)
Age <sup>2</sup> (centred)	-0.0007 (0.003)	-0.0012 (0.003)	-0.0017 (0.000)	-0.0025 (0.000)
<b>Educational Qualifications (base category secondary)</b>				
Graduate	0.1299 (0.091)	0.3021 (0.011)	-0.0916 (0.437)	0.0215 (0.816)
Vocational	0.0875 (0.407)	0.1837 (0.256)	0.2069 (0.175)	0.0722 (0.550)
No Formal	-0.5626 (0.000)	-0.7876 (0.001)	-0.1517 (0.443)	-0.0602 (0.604)
<b>Household Income (base category less than £11,500)</b>				
£11,500 to £17,499	-0.0049 (0.969)	-0.0991 (0.614)	0.6259 (0.010)	
£17,500 to £29,999	-0.0726 (0.534)	-0.2248 (0.221)	0.8722 (0.000)	
£30,000 to £49,999	0.0101 (0.933)	-0.1540 (0.413)	1.0520 (0.000)	
£50,000 or more	0.3042 (0.018)	0.1127 (0.572)	1.4536 (0.000)	
<b>Employment Status (base category employed)</b>				
Homemaker	-0.0873 (0.488)	-0.2616 (0.208)		
Student	0.2738 (0.178)	-0.3463 (0.422)		
Disabled	0.0057 (0.977)	-0.8115 (0.057)		
Unemployed	0.5969 (0.000)	0.6307 (0.002)		
<b>Migration Status (base category life-long resident)</b>				
In-Migrants	0.4249 (0.000)	0.3909 (0.000)	0.3322 (0.002)	-0.0492 (0.550)
Immigrants	1.0160 (0.000)	0.5111 (0.017)	0.6326 (0.002)	0.0939 (0.621)
<b>Rural/Urban (base category urban)</b>				
Small Town or Fringe	0.1081 (0.235)	0.3033 (0.029)	0.2058 (0.130)	0.2914 (0.007)
Village	0.2562 (0.021)	0.3676 (0.035)	0.4970 (0.002)	0.9366 (0.000)
Hamlet or Isolated Dwelling	0.1736 (0.656)	-0.8703 (0.395)	1.3765 (0.001)	0.7480 (0.022)

Notes: p-values in parenthesis; Data source – Global Entrepreneurship Monitor (GEM) adult population survey.

Table 6 - continued

	Entrepreneurial Intentions	Nascent Entrepreneurship	New Business Ownership	Established Business Ownership
<b>Community Culture</b>				
Femininity Index	-0.0061 (0.345)	-0.0006 (0.954)	0.0019 (0.852)	-0.0011 (0.893)
Risky Actions Index	-0.0014 (0.264)	-0.0015 (0.449)	-0.0006 (0.732)	0.0012 (0.328)
Collective Action Index	-0.0138 (0.005)	-0.0182 (0.016)	0.0026 (0.730)	-0.0177 (0.000)
Embracement of Work Index	-0.0139 (0.064)	-0.0375 (0.002)	0.0039 (0.730)	0.0047 (0.584)
Social Cohesion Index	0.0158 (0.160)	0.0010 (0.955)	0.0301 (0.081)	0.0339 (0.010)
Constant	-1.2825 (0.465)	1.6113 (0.564)	-8.6350 (0.001)	-5.4890 (0.011)
<i>N</i>	15524	15592	15592	15592
Hosmer-Lemeshow	15.72 (0.047)	10.63 (0.224)	5.85 (0.664)	21.68 (0.006)
<i>R</i> <sup>2</sup>	0.060	0.049	0.054	0.108
LR-test v constant probability	467.5 [26] (0.000)	187.5 [26] (0.000)	219.6 [22] (0.000)	679.7 [18] (0.000)
LR-test joint significance of community culture	10.76 [5] (0.056)	11.68 [5] (0.040)	6.77 [5] (0.238)	43.89 [5] (0.000)

Notes: p-values in parenthesis; Data source – Global Entrepreneurship Monitor (GEM) adult population survey.

In the case of nascent entrepreneurship, individualistic activity again appears to be negatively influenced where collective action is stronger. Embracement of work is a negative influence on this early stage of business development, with nascent entrepreneurs potentially being ‘refugees’ from the mainstream workforce. For the business ownership measures, collective action continues to be negatively associated with involvement, although social cohesion plays a positive role in encouraging and potentially propagating business activity. Whereas such a cultural characteristic played an insignificant role in those measures which encapsulated lower levels of commitment to the activity of entrepreneurship, there does seem to be a significant link between those measures where intentions have been acted upon and have been realised. The negative influence of embracement of work and long-term orientation are no longer present. This is understandable given that these measures incorporate a degree of survival, which is likely to require hard work and forward planning.

As noted above, only a relatively small proportion of the population are likely to actively investigate a new venture business start at any given point in time, as a trigger event may be required to instigate the active pursuit of these opportunities. However, community

culture may play an important role in creating an environment where entrepreneurial activity is perceived to be feasible, and therefore the probability of undertaking the activity is increased when such a trigger event occurs. The regressions of attitudes towards entrepreneurship are presented in Table 7 below. All regressions outperform the null of constant probability. The null of a good fit with the data cannot be rejected by the Hosmer-Lemeshow tests for any of the regressions. The community culture variables are found to be jointly significant in the opportunity perception and entrepreneurial self-efficacy regressions. Opportunity perception appears to be lower where more caring and feminine attitudes are present in the community. This type of individualistic activity may not be examined where it is less in line with the prevailing culture, so opportunities may be overlooked.

Although the item relating to entrepreneurial skills is worded in a personal manner, this is positively associated with social cohesion. It is unclear whether the trust and support of the community lowers the perceived hurdles, or whether the expectation of support in the future means that potential entrepreneurs feel more confident given the emotional support they have access to. The significance of these results along with the entrepreneurial activity measures that incorporate a degree of survival suggest that not only does social cohesion increase confidence in the ability to succeed in new venture creation this ultimately increases actual entrepreneurial involvement. Therefore, the results do appear to suggest that in Wales, at least, more socially cohesive communities are better placed to create stronger business cultures.

**Table 7: Logit regression of entrepreneurial attitudes and community culture**

	<b>Entrepreneurial Social Capital</b>	<b>Opportunity Perception</b>	<b>Possess Start-up Skills</b>	<b>Fear of Failure</b>
<b>Male</b>	0.4721 (0.000)	0.3775 (0.000)	0.8297 (0.000)	-0.2959 (0.000)
<b>Experiential Human Capital</b>				
Age (centred)	-0.0219 (0.000)	-0.0072 (0.002)	0.0110 (0.000)	-0.0149 (0.000)
Age <sup>2</sup> (centred)	-0.0005 (0.012)	-0.0002 (0.179)	-0.0005 (0.004)	-0.0008 (0.000)
<b>Educational Qualifications (base category secondary)</b>				
Graduate	0.3041 (0.000)	0.3650 (0.000)	0.1834 (0.002)	0.1838 (0.003)
Vocational	0.1077 (0.198)	0.1591 (0.042)	0.2770 (0.000)	-0.1136 (0.167)
No Formal	-0.5772 (0.000)	-0.4696 (0.000)	-0.6855 (0.000)	0.1595 (0.048)
<b>Household Income (base category less than £11,500)</b>				
£11,500 to £17,499	0.2458 (0.020)	0.1415 (0.131)	0.1667 (0.054)	-0.0761 (0.387)
£17,500 to £29,999	0.3076 (0.002)	0.3501 (0.000)	0.2109 (0.009)	0.0187 (0.820)
£30,000 to £49,999	0.5513 (0.000)	0.5199 (0.000)	0.4455 (0.000)	-0.0669 (0.440)
£50,000 or more	0.9358 (0.000)	0.7788 (0.000)	0.6653 (0.000)	-0.3220 (0.001)
<b>Employment Status (base category employed)</b>				
Homemaker	-0.1883 (0.051)	0.0777 (0.355)	-0.4509 (0.000)	-0.1057 (0.207)
Student	-0.0433 (0.829)	0.2587 (0.167)	-0.1725 (0.360)	0.2933 (0.111)
Disabled	-0.2788 (0.103)	-0.1779 (0.229)	-0.4551 (0.001)	0.0595 (0.657)
Unemployed	-0.2430 (0.084)	-0.0785 (0.531)	-0.2808 (0.018)	-0.0057 (0.962)
<b>Migration Status (base category life-long resident)</b>				
In-Migrants	0.1380 (0.014)	0.3039 (0.000)	0.2746 (0.000)	-0.0321 (0.545)
Immigrants	0.0882 (0.471)	0.0577 (0.621)	0.1492 (0.202)	-0.2481 (0.042)
<b>Rural/Urban (base category urban)</b>				
Small Town or Fringe	0.1380 (0.014)	0.3039 (0.000)	0.2746 (0.000)	-0.0321 (0.545)
Village	0.0882 (0.471)	0.0577 (0.621)	0.1492 (0.202)	-0.2481 (0.042)
Hamlet or Isolated Dwelling	0.0869 (0.230)	-0.0603 (0.375)	0.0627 (0.351)	-0.0318 (0.642)

Notes: p-values in parenthesis; Data source – Global Entrepreneurship Monitor (GEM) adult population survey.



Table 7 - continued

	<b>Entrepreneurial Social Capital</b>	<b>Opportunity Perception</b>	<b>Possess Start-up Skills</b>	<b>Fear of Failure</b>
<b>Community Culture</b>				
Femininity Index	-0.0057 (0.282)	-0.0200 (0.000)	-0.0044 (0.376)	0.0048 (0.332)
Risky Actions Index	0.0007 (0.501)	0.0001 (0.939)	-0.0001 (0.917)	0.0010 (0.279)
Collective Action Index	-0.0016 (0.686)	-0.0012 (0.759)	0.0051 (0.179)	-0.0045 (0.241)
Embracement of Work Index	-0.0027 (0.658)	0.0011 (0.840)	0.0091 (0.106)	-0.0079 (0.172)
Social Cohesion Index	0.0063 (0.485)	0.0024 (0.779)	0.0284 (0.001)	-0.0069 (0.428)
Constant	-1.3017 (0.359)	0.7207 (0.587)	-4.3936 (0.001)	0.8185 (0.543)
<i>N</i>	7909	7909	7909	7909
Hosmer-Lemeshow	12.22 (0.142)	11.26 (0.188)	9.94 (0.269)	7.33 (0.502)
<i>R</i> <sup>2</sup>	0.064	0.050	0.085	0.015
LR-test v constant probability	611.4 [26] (0.000)	525.7 [26] (0.000)	922.8 [26] (0.000)	152.6 [26] (0.000)
LR-test joint significance of community culture	5.63 [5] (0.344)	27.56 [5] (0.000)	32.49 [5] (0.000)	7.9 [5] (0.162)

Notes: p-values in parenthesis; Data source – Global Entrepreneurship Monitor (GEM) adult population survey.

## 5. DISCUSSION

Based on the preceding findings it can be suggested that culture – be it community or business – forms part of the place-based systems linking economic performance with societal well-being (Tönnies, 1957; Easterlin, 1974; Beugelsdijk et al., 2004; Johnstone and Lionais, 2004). It is the cultural attributes of places that act as the glue forming the interdependency between the economic logic and societal logic of places (Knack and Keefer, 1997; Keating et al., 2003; Moulaert and Nussbaumer, 2005; Storper, 2005). In some regions and localities this cultural glue is a facilitating force enabling economic development and relatively enhanced levels of well-being, while in others it is a factor impeding the development of places in an economic sense, as well as pushing down relative levels of well-being. As mentioned at the outset of this paper, adding culture – and its forms – to the mix of place-based analysis results in further complexity to understanding the nature of places and spaces, particularly why some ‘succeed’ and others do not.

Due in part to its industrial heritage, Wales displays characteristics associated with greater social cohesion compared with many UK regions and nations. The Valleys localities

rank particularly highly for social cohesion even in the presence of high levels of deprivation. Wales displays the highest regional level of feminine or caring characteristics. Regions traditionally seen as more dynamic tend to display lower levels of caring attributes. Femininity and mutual caring appears to be traded-off where there is a greater embracement of work and education, perhaps reflecting a more atomistic society. Wales is generally more collective and equality-driven compared to the UK average. Only Scotland 'performs' higher, and at the other end of the spectrum is South East England. Furthermore, those regions achieving the highest levels of embracement of work and education are those with the strongest economies.

Some of the values by which the community culture can be characterised have clearly emerged as a result of the hardship its citizens have faced, and in many cases are still facing. For example, it is no accident that collective action, femininity and caring behaviours are negatively associated with physical health, since the development of such a culture is clearly a reaction to embedded issues of low levels of well-being, as well as the lack of more formal institutions to tackle these problems (Streeck, 1992; Rodriguez-Pose and Storper, 2006; Farole et al., 2010; Tabellini, 2010). More generally, our regional analysis suggests that Wales' community culture traits are negatively associated with a business culture promoting regional economic development and competitiveness; for instance: (1) collective action, social cohesion and more feminine or caring actions are negatively associated with economic performance - in essence, a more individualistic culture appears to have positive effects on competitiveness; (2) more entrepreneurial regional business cultures are negatively associated with greater collective action; (3) social cohesion and caring is negatively associated with perceived entrepreneurial feasibility and activity; (4) more feminine attitudes and collectivity reduce the probability that individuals will expect to be involved in current or future entrepreneurial activities; and (5) opportunity perception appears to be lower where more caring and feminine attitudes are present.

In essence, Wales as a whole can be characterised by a community culture based on social cohesion, caring, femininity, collective action and a general desire for fairness and equality. Such traits clearly represent a Welsh community culture and society rooted in values which are to be cherished, rather than discarded (Bhabha, 1994; Hofstede, 1980; 1991; Docherty et al., 2001; Kockel, 2002). In many ways, however, they are values contrary to those of more economically successful regions, which have advanced through more entrepreneurial business cultures, and supports the view that social capital has both 'benefits' and 'costs', with groups potentially possessing 'too much' or 'too little' (Portes, and

Landholt, 1996; Woolcock, 1998). Raymond Williams has highlighted the complexities in attempting to base a reviving notion of Welsh identity around the notion of Wales as a single national community, with the Welsh always asking what Wales actually was? (Williams, 1989; Hall, 1993). Casson (1995) suggests that the traditional ‘positive points’ of Welsh culture include a Protestant-type work ethic (often regarded as a legacy of the chapels), a desire for education, and a facility for social networking. However, the dynamic nature of place-based culture is also particularly evident in parts of Wales. For instance, in the South Wales Valleys immigrants initially acquired Welsh accents but did not assimilate the language; instead they developed a distinctive culture whose hero, according to Casson (1995: 243), ‘was the skilled self-educated and politically active working man. This culture of the valleys, symbolized by chapel, temperance movement, trade union and Labour party, now verges on collapse’.

Nevertheless, it should remain strongly borne in mind that no particular prevailing community culture across places should necessarily be seen as superior (Miller, 1992; Sysner, 2009). The development of each element of place-based culture is likely to be interdependent, in the same manner that other studies have found community potentially accommodating weaknesses in formal institutions (Durlauf and Fafchamps, 2003). Equally, it is not necessarily clear that the success of a locality or region should be entirely based upon economic measures of success, and whilst some place-based cultures may not encourage the development of a complementary thriving business and enterprise culture, they may provide life-style benefits captured only in broader well-being measures (Layard, 2005). Similarly when considering the economic outcomes of a place’s combined culture, only a snap shot is being considered. Although a cohesive community may encourage the development of positive attitudes towards entrepreneurship, for instance, a too strongly bonded community may lack an openness to new ideas (Granovetter, 1972), stifling innovation and preventing long-term success. In fact studies have suggested that places may only prosper by attracting creative individuals with high levels of human capital (Florida, 2002).

From a policy perspective, Putnam (1995) has shown that intervention may actually impinge on social capital formation, and he highlights the example of the American slum-clearance policy of the 1950s and 1960s which renovated physical capital, but at a very high cost to existing social capital. Similarly, the findings stemming from this study represent a particular conundrum from the policymaking perspective, i.e. would a region such as Wales benefit from a shaking off and changing of its cherished community cultural values to become a more atomistic, individualistic, and ‘less caring’ society, as perhaps typified by

more competitive regions. We ask this question regardless of whether or not such change is possible, and suggest that policymakers pay heed to two key issues. First, is the issue of cultural evolution and the reasoning why community culture has developed its current traits. Although our analysis does not lend itself to long-term casual reasoning, it does logically suggest that the type of community culture existing in a lagging and uncompetitive region such as Wales may be a response to the long-term erosion of what was once clearly a ‘work-oriented’ business culture. This suggests the focus of policy should be the enhancement of Wales’ business culture.

Second, it is important to look beyond the regional and more toward the local to assess how policy intervention may be best utilised. Despite, the regional analysis suggesting a community culture poorly suited to entrepreneurship, innovation, and competitiveness, the analysis of Welsh localities finds that those with more socially cohesive communities are better placed to create stronger business cultures. In these localities greater social cohesion appears to produce a high trust society, which then creates an improved perception of entrepreneurial feasibility and actual entrepreneurial activity – at least relative to less cohesive localities. This suggests that social cohesion represents a potential strength, rather than a weakness, which policymakers can potentially enhance as an economic development tool. It further suggests that not only are uncompetitive regions extremely unlikely to imitate the cultural traits of their more competitive neighbours, but that they should not actually actively seek to do so. The link between community and economic development has been increasingly recognised by both policymakers, and numerous policies have sought to relate the need to improve social inclusion as a lever for facilitating wider economic development (Peet, 2000; Kockel, 2002; Keating et al., 2003; Storper, 2005; Tabellini, 2010). In reality, a mix of policies seeking to influence both community and business cultures will be required to facilitate economic development, although intervention aimed at addressing the business culture should be compatible with the underlying community culture, or their success is likely to be limited. Finally, although changing prevailing community cultures is not theoretically impossible, it is unlikely to be a rapid process and any community leader attempting such a process must look at all outcomes of such a change, as captured by both economic and broader measures of well-being.

## **6. CONCLUSION**

This study has responded to the call for analyses facilitating a more in-depth understanding of the nature of culture and cultural change at the local and regional levels, and the relationship

and significance of place-based culture for economic development. Focusing on an analysis of UK regions and the localities within one particular region, the study has sought to define and measure two forms of place-based culture – community culture and business culture – as a means of developing a broader understanding of the notion of culture than is usually considered by the extant literature.

Overall, considerable variability has been found in the cultural characteristics across regions and within localities in a region, confirming our hypothesis that community culture will differ across localities and regions. It has also been found that the type of community culture embedded across regions and localities is often strongly associated with the prevailing business culture in these places, and to an extent – although with certain exceptions – this also confirms our hypothesis that community cultures have a strong symbiotic association with the prevailing socio-economic business culture across places, be they localities or regions. Our third hypothesis is that economic development prospects are directly related to the prevailing socio-economic business culture, and therefore indirectly to the types of community culture embedded across particular localities. As a whole, the evidence presented in this paper tends to confirm this hypothesis.

Emerging literature at the national level suggests that there is a considerable influence from culture upon economic development (Casson, 1995; Knack and Keefer, 1997; Zak and Knack, 2001; Beugelsdijk et al., 2004; Guiso et al., 2004). However, to a large extent culture has been ignored in standard economic analysis, although there is no reason for the basic building blocks of economic theory to be altered greatly to incorporate it. Decision-makers can still be assumed to be maximising their utility; however, the input of culture assumes that their utility also takes account of the actions and reactions of others.

Although place-based measurements of culture – such as those we develop in this study - are to some extent bound to reflect a stereotype, they should not be rejected out of hand as stereotypes are likely to contain useful information about typical attitudes of members of a group, although there may be considerable diversity within the group (Casson, 1995). For instance, culturally ‘poor’ communities may consist of those with ‘dysfunctional’ norms, values and behaviours, triggering a cycle of social pathology (Bauder, 2002). More positively, the role of informal institutions and arrangements forming part of the cultural fabric of places – such as citizen participation - may offset the lack of more formal ‘economic’ resources promoting both economic development and societal well-being (Docherty et al., 2001).

The reference point for this study has been a relatively peripheral and uncompetitive region, which may limit the extent to which the findings can be generalised. Comparative studies of other regions, both similarly lagging in economic terms and more successful regions, would provide a more complete picture. It may also be of interest to examine the extent to which the impact of community culture varies across those born into the culture, those moving into a locality and partly assimilating the culture, and those who have only recently arrived.

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