Commentary: Financial crisis, austerity policies and geographical inequalities in health

Jamie R Pearce*

*Corresponding Author

Prof. Jamie Pearce
School of Geosciences
University of Edinburgh
Drummond Street
Edinburgh, UK
EH8 9XP

Tel: 0131 650 2294
Email: Jamie.Pearce@ed.ac.uk
Commentary: Financial crisis, austerity policies and geographical inequalities in health

Introduction

The recent crisis in the financial sector and the subsequent austerity measures adopted by many national governments are likely to have significant and lasting implications for a number of social outcomes, not least population-level health and well-being. For instance, a preliminary assessment of the effect of the financial crisis on mortality rates across Europe demonstrates that after a decade of decline, suicide trends reversed sharply immediately following the financial crash in 2007 (McKee et al., 2012). Of course the material impacts of the financial crisis will not be evenly shared and some places will be affected more than others. This commentary uses population health as an exemplar to consider some of the ways in which concepts from geography, public health, sociology and allied disciplines can be utilised to begin to make sense of the human costs of the financial crisis and associated austerity measures.

The financial crisis and population health

Earlier work on economic downturns and health suggest that the current economic situation may result on a multitude of public health challenges. The UK is experiencing the most prolonged economic downturn since the 1920s with the change in gross domestic product (GDP) from the start of the recession having remained
below zero percent for over five years (for instance at the start of 2013 GDP remained 3% lower than it was five years earlier) (Rogers, 2013). This economic trajectory is consistent with most other European countries where GDP levels as a proportion of 2008 levels remain below 100%. The notable exception to this trend is Germany which, similar to the United States, has maintained GDP values above 2008 levels since the middle of 2010. During 2009, GDP fell in real terms in all EU countries (with the exception of Poland); the mean reduction was 4.3% but this figure ranged from 1.9% in Cyprus to 17.7% in Latvia (European Commission, 2013). Unlike previous downturns, countries including the UK with economies that are highly dependent upon financial services have been obliged to inject large sums of money into the retailing banking sector which, at the same time as a large falls in the tax revenues from the financial sector, has resulted in large public debts. Large public debts exasperated by the ongoing economic difficulties, has compelled the governments of many countries to consider measures to reduce government borrowing, and the responses have been diverse. The ‘Keynesians’ (including the United States) responded with fiscal stimulus packages designed to avoid mass unemployment and ensure consumption and demand in the economy. On the other hand, the ‘austerions’ identified a cutback in state spending as the key to deficit reduction. Supported, and at times prompted, by institutions such as the tripartite committee (or ‘troika’) of the European Commission, European Central Bank and International Monetary Fund, the austerity strategy has been pursued by European countries including the UK, Ireland, Greece and Spain. Some national governments, including the UK, have presented the crisis in the financial sector as a crisis of ‘big government’ and exploited the circumstances as a rationale for extending neoliberal ideologies that have been implemented with such enthusiasm across many nation
states over the past three decades. By maintaining that ‘there is no alternative’, national governments have used the financial crisis to pursue political objectives that may not have otherwise been feasible. In UK, the result has been the deepest retrenchment in government spending in the past 60 years and deficit reduction plans are predicted to reduce general government expenditure (as a proportion of GDP) to below that of most high income countries, including the USA (Rogers, 2012).

Whilst the economic and political dimensions of the crisis have been the focus of considerable academic and media coverage, the human costs of the austerity measures have received less attention. As a recent collection of papers demonstrate (Desai et al., 2012) the likely repercussions of the economic crisis for population health are complex. Work on the health implications of earlier economic downturns across Europe suggest that rises in unemployment are associated with the anticipated increases in premature deaths attributed to suicides and homicides (Stuckler et al., 2009a). Yet this effect was strongly mediated by the scope and scale of social protection programs (including youth training, labour market initiatives, support for disabled people in the workforce, and other related measures) designed to offset exogenous shocks such as economic downturns. Worsening unemployment and other related economic indicators have been shown to detrimentally affect cause-specific mortality including murders and alcohol-related deaths (Stuckler et al., 2009a). These findings are broadly supported by work on the health of Americans during the Great Depression (Fishback et al., 2007; Stuckler et al., 2012) and the population health consequences of the break-up of the Soviet Union (Stuckler et al., 2009b). Many of the early European studies of the current economic crisis and the subsequent implications for public health indicate a rise in mental health disorders and a
worsening in self-reported general health (Kentikelenis et al., 2011). On the other hand, other work has suggested that in high-income countries a slowdown in the economy may not be associated with adverse health outcomes, or even that mortality rates might fall (Gerdtham and Ruhm, 2006; Ruhm, 2000). These seemingly counterintuitive findings might be explained by improvements in health-related behaviours by providing increased leisure time that can be used for health-enhancing activities such as physical activity, and result in less use of private cases (and hence fewer traffic accidents) and a reduction in the consumption of unhealthy foods and alcohol (due to financial constraints) (Karanikolos et al., 2013). Therefore, the health benefits of the economic downturn might include a reduction in unhealthy ‘affluent behaviours’ such as the over consumption of food and alcohol (Suhrcke and Stuckler, 2012). Early work of the current economic downturn has noted some health gains with for example road traffic deaths decreasing in the immediate period after the financial crash (Stuckler et al., 2009a). This discussion emphasise the nuanced relationship between economic downturns and public health; it is feasible therefore that there is no overall population health effect of economic recessions.

**Geography, austerity and health**

Although the preliminary work on the implications of economic recessions and austerity for health has been instructive, three critiques can be made which point to some important lines of enquiry for researchers interested in the social production of health. First, consideration of the financial crisis to date has largely been reliant on analyses (and extrapolation) of previous economic recessions, particularly in the 1980s and 1990s. Due to the long delay in collating and releasing health data, and
that many of the consequences for health may not be apparent for many years, it has not been possible to comprehensively assess the more recent trends in population health. The early studies are almost certain to understimate the scale and multitude of the health consequences. Many countries are experiencing what is largely recognized as the deepest economic downturns since the Great Depression and it is questionable whether the earlier assessments are analogous to the current economic downturn where some governments have selected to implement radical spending cuts. On the other hand, given the significant drop in GDP in many countries it is perhaps surprising that unemployment rates have not reached levels predicted by some economic forecasts, due in part to the subsidised employment initiatives in countries including Germany and the growth of part-time employment in other countries including the UK. Nonetheless, unemployment rates in the eurozone have reached record levels (11.8% in November 2012; in Greece and Spain rates were around 26%) (Eurostat, 2012). Amongst younger populations (aged under 25) unemployment rates reached the highest levels in a generation or more; in November 2012, across the EU youth unemployment rates were 23.7% but this figure ranged from over 50% in Spain and Greece to less than 10% in Germany and Austria (Eurostat, 2012). It is important therefore to chart the health implications of the current situation.

Second, whilst there is emerging interest in considering the repercussions of austerity policies for overall population health there has been little work examining the repercussions for social and geographical health inequalities. This omission seems surprising given the considerable attention provided to documenting, explaining and addressing health inequalities by academics (including geographers, sociologists, epidemiologists and others) and policymakers over the past three decades. Finally, to
date, consideration of the links between austerity-related policies and health has remained principally within the realm of researchers in the fields of medicine and public health, with little engagement amongst geographers. This is despite a substantial body of geographical scholarship emphasising a multitude of geographical constructs that are implicit in understanding population health, wellbeing and related inequalities.

This commentary offers some thoughts on how geographical scholarship can engage with and inform the public health, sociology and other literatures to reveal the human costs of the current austerity agenda. The exemplars are drawn from the austerity-related policies introduced by the current UK Coalition Government although the themes have salience beyond this national context, particularly for other ‘austerion’ countries. In the UK, the austerity agenda has been enthusiastically embraced since 2010 by the Coalition Government as a strategy for economic growth and deficit reduction. Large-scale pruning of the budgets of most government departments are resulting in reduced infrastructural investment by the state, and cuts to the delivery of key services including welfare, education and many other aspects of social policy. Whilst there have been substantial differences in the specific austerity measures implemented by each nation state, among many European countries there are a number of elements that are consistent with the UK’s approach. For instance, whilst the specific details of each country’s austerity plans are still emerging, many countries have signalled their intent at reducing size of the public sector workforce (e.g. Bulgaria, Germany, Latvia, Romania and Spain) as well as decreasing in real terms the salaries of public sector workers (e.g. Bulgaria, Greece, Hungary, Lithuania, Romania, Slovenia and Spain). Other countries have also signalled intentions to raise
the age of retirement (e.g. France, Greece, Hungary and the Netherlands), reduce central funding for city and local authorities (e.g. Italy), raise a variety of taxes including VAT (e.g. Austria, Belgium, Cyprus, Czech Republic, Finland, France, Greece, Ireland, Latvia, Lithuania, Poland and Portugal), Increased user charges for health care (e.g. Czech Republic, Denmark, Estonia, Finland, France, Greece, Ireland, Italy, Latvia, the Netherlands, Portugal, Romania, and Slovenia), and reduce social welfare payments (e.g. Czech Republic, Denmark, Germany and Ireland) (Laven and Santi, 2012).

The concern in this paper is population health in the UK where, over the past 30 years, socio-spatial health inequalities have increased year-on-year. By 2007 (the most recent estimate) inequalities were higher than during the 1930s (Figure 1) and had reached levels not seen since the Victorian period. Earlier work by health geographers and others with an interest in health and place indicates that spatial inequalities may widen further in response to the financial crisis and accompanying austerity measures.

[Figure 1 about here]

**New directions: financial crisis and geographical inequalities in health**

This commentary presents some thematic areas of geographical scholarship that are likely to be instructive in helping to understand the relationships between austerity and population health. These themes are not intended as a comprehensive account, nor are they mutually exclusive; there are clear interdependencies. Rather, what
follows is an overview of four non-exhaustive and inter-related arguments that draw from the work in health geography and allied areas in order to begin to make sense of the geographical implications of austerity.

Changing social geographies

In recent years, an accumulating body of evidence has demonstrated that population health and its inequitable distribution are strongly linked to the unequal distribution of social antecedents or the social determinants of health (SDOH). The SDOH are the conditions of daily life (in which people are born, grow, live and work including factors such as income, housing, education, and aspects of the physical environment such as air pollution and green space) and the macro-level drivers of these circumstances (the unequal distribution of resources, power and wealth) (Marmot et al., 2012). There is ample evidence in the medical and social science literature stretching back to the work of Friedrich Engels in the mid nineteenth century (Engels, 1845) to suggest that factors such as unemployment, job security, housing and income are causally related to health. For instance, childhood poverty and social disadvantage are not only linked to childhood health (e.g. infant mortality) but also associated with lifelong physical, social, emotional and cognitive development affecting life chances and subsequent health (Marmot et al., 2012). Similarly, working conditions in mid-life are related to mental health during retirement (Wahrendorfa et al., 2013). Most social characteristics also demonstrate a highly unequal geographical distribution at a range of spatial scales, geographical patterns that have been documented since at least Victorian times (Pearce and Dorling, 2009). The unequal distribution of social factors including employment, education and housing have been underpinned in many countries including the UK by the rapid implementation of market-oriented economic
and social policies over the past three decades which have been designed to deregulate the labour market and constrain social security.

Many of the austerity measures that have been, or shortly will be, introduced by the UK and other European governments risk directly or indirectly undermining a number of the SDOH. Health inequalities are affected by complex and long term processes that reflect the socially patterned exposures in early life and the cumulative effect of experiences in later life. Population health will be sensitive to the multitude of state-driven austerity initiatives designed to reduce government spending. These measures include, but are not limited to, reductions in welfare payments (e.g. the Educational Maintenance Allowance and Disability Living Allowance as well as additional conditions for receipt of Employment and Support Allowance) and tax credits, the loss of public sector jobs, rising tuition fees in higher education, and higher unemployment rates as many parts of the private sector contract. These and other factors will have a disproportionate impact on the health of those at the lower end of the income spectrum. For instance un/underemployment and low job security are likely to undermine long-term physical and mental health (WHO Commission on Social Determinants of Health, 2008) as well as afford the conditions that encourage ‘problem’ health behaviours such as smoking (Pearce et al., 2012).

It is also apparent that the effects of austerity measures are not going to be shared equally across all parts of the country; some places are bound to be affected more than others. The local economies of socially and economically disadvantaged areas which typically have significantly poorer health outcomes will be particularly susceptible to structural upheaval. For example, as the size of the UK public sector is reduced,
regions of the country with a larger proportion of workers employed in the public sector will be vulnerable to unemployment and job insecurity. In 2012, across regions of the UK, public sector employment as a proportion of total employment was highest in Northern Ireland (28.3%) and Wales (25.6%), and lowest in South East England (16.5%) and East England (17.0%) (Figure 2). Further, between 2008 and 2012 all regions of the UK (with the exception of Scotland) experienced a reduction in the proportion of the workforce in public sector employment (Figure 2). Over the same time period, with the exception of London, all regions have also seen a reduction in the numbers of people employed in the public sector workforce (Table 1). The reduction is highest (12%) in the North East England region compared to a small (0.3%) increase in London. As well as effecting regional unemployment levels and job security, income disparities between regions are highly likely to grow.

[Table 1 about here]

[Figure 2 about here]

The process of geographical unevenness is also likely to be affected by the UK Coalition Government’s alteration to the funding provided to local authorities that is resulting in unequal changes in the alterations to the ‘spending power’ of each local authority. Between 2012/13 and 2013/14 the mean reduction in spending power (£UK per dwelling) across England is predicted to be 1.7% (GOV.UK, 2013b). However, this figure ranges from a 6.9% increase (Uttlesford District in Essex) to an 8.8% reduction (for seven local authorities: the districts of Burnley, Hynburn, Pendle, Hastings, Bolsover, Great Yarmouth, and Barrow-on-Furness). Uttlesford is amongst
the tenth least socially disadvantaged local authorities in England whereas the seven authorities facing the largest reductions in spending power are all among the fifth most deprived authorities (Table 2). Figure 3 shows the mean reduction in spending power between 2012/13 and 2013/14 for all English local authorities stratified into deprivation quintiles (using the English Indices of Deprivation 2010). A linear trend is apparent: as deprivation levels decrease across the quintiles the reduction in spending power also drops. In other words reductions in spending are consistently higher amongst the most socially disadvantaged (and usually Labour controlled) English Local Authorities. These changes are important because they disproportionately compromise the availability and quality of a multitude of key services in some of the most socially disadvantaged areas of the country. Unemployment, job insecurity, local services and infrastructure as well as income inequality are all causally related to health. One response to the socio-spatial widening in these and other social markers across the UK is therefore likely to be heightened regional health discrepancies. Historical work in the UK on the immediate aftermath of the financial crash and depression in the late 1920s and early 1930s demonstrated a rapid rise in health inequalities across areas (Dorling and Thomas, 2009). Yet more encouragingly, prolonged state investment from the 1930s through to the late 1970s in welfare, housing, healthcare and other areas that augmented the SDOH and dampened income inequalities led to a steady drop in health inequalities over this period. Reducing income and health disparities is not only advantageous for lower income groups but is beneficial to all sectors of society.

[Table 2 about here]
Migration, mobility and health

The selective movement of people into and out of areas has long been recognised as pertinent in understanding geographical inequalities in health (Anderson et al., 1964). Typically researchers have examined the propensity of ‘healthy’ or ‘unhealthy’ populations to move residence, and whether these discriminatory processes alter patterns in area-level health inequalities. It has been argued that migration streams that are selective according to social position and health can offer a partial account for the changing health trajectories of places. Areas with a disproportionate influx of low income groups or which are losing population as a result of, for example, deindustrialisation often have poor(er) average health. On the other hand, areas with a stream of migrants from higher socioeconomic groups (e.g. from the north to south of England, or resulting from gentrification) accumulate health advantages.

Selective migration has often been treated as a technical nuisance that confounds place-health relationships rather than a substantive area of academic enquiry. Migration is of course a socially embedded process with a multitude of geographical and sociological antecedents as well as material effects. Hence there are compelling arguments for considering health as a trigger, enabler, constrainer as well as being produced by the selective movement (and non-movement) of people affecting and affected by health experiences, behaviours and outcomes. It has been argued that selective migration and health could productively be reconsidered as a substantive research concern in its own right (Pearce and Dorling, 2010), an assertion that is consistent with the recent scholarly interest in the ‘new mobilities’ and health (Gatrell,
In the UK, selective migration has been shown to strengthen the relationship between area-level deprivation and various health outcomes including mortality. For example, a study of 10,264 individuals in the British Household Panel Survey in 1991 local-level (district) inequalities in mortality rates could be attributed to selective migration (Brimblecombe et al., 1999). This finding is supported by empirical work demonstrating the distinctive health profiles of the significantly healthier individuals moving from more to less deprived areas (the largest absolute flow) compared to migrants from less to more deprived areas (Norman et al., 2005). However, this work whilst instructive in identifying migrant flows with distinct health profiles has not tended to consider the extent to which personal health trajectories account for these flows, nor how health status is a discriminator in an individual’s position in society and space (Smith and Easterlow, 2005).

Work in the UK on the processes related to health selective migration and the significant changes in migration flows over time suggest that selective migration is likely to be sensitive to changes in economic and social policies. Many aspects of the UK government’s current austerity policies have the potential to affect selective migration flows and lead to further rises in geographical inequalities in health. Job insecurity, unemployment, and changes to welfare including a cap on housing benefits are likely to disrupt patterns of mobility resulting in new forms of migration and mobility streams that are selective according to class and health. As job markets stagnate or contract, it is reasonable to assume that migration from north to south may lessen and/or become increasingly socially selective. There is also the prospect (and some preliminary evidence) of low income (and often less ‘healthy’) individuals and households being displaced from their homes due to the cap on housing benefits and
the so-called ‘bedroom tax’ (see below). These policy changes are likely to see a movement of low income (and less ‘healthy’) individuals away from more prosperous suburbs into more ‘affordable’ neighbourhoods, as well as the entrapment of others in less healthy places. As Smith and Easterlow (2005) suggest, greater attention to the selective placement, entrapment and displacement of people will offer an enhanced view of the role of geography in explaining spatial inequalities in health, particularly during a period of fiscal retrenchment.

Environmental justice, health and inequalities

Much academic research and related policy initiatives have been concerned with understanding how place is pertinent in understanding health. The premise is that factors relating to geographical (often local) context are fundamental to understanding social and geographical differences in health outcomes and behaviours. Place-based constructs including neighbourhood social capital, local norms, access to shops and services, social networks, concentration of poverty, quality of the physical environment and a whole host of other factors have been implicated in understanding and mediating health behaviours, practices and outcomes (Pearce et al., 2012). Yet of courses places are fluid, non-bounded and their makeup reflects broad macro-level social, economic and political processes that accumulate over many years. These factors affect the unequal distribution and availability of such resources and disamenities which in turn are likely to be pertinent in explaining geographical inequalities in health. Geographers and others have long considered these concerns using the framework of ‘environmental justice’ to scrutinise the unequal distribution of environmental ‘goods’ and ‘bads’, the material implications of ‘unjust’
arrangements, as well as the social and political processes leading to these geographical divisions.

Austerity measures are already leading to a reprioritisation of public services provided by local authorities and other organisations including those in the third sector. The reduction in spending power for most local authorities in England (average reduction is 1.7% for the period 2012/13 to 2013/14) has prompted most authorities to develop strategies for prioritising service need. Which services will continue to receive resources and where there will be disinvestment is starting to become clear. A recent survey of 81 councils in England and Wales (Taylor et al., 2013) suggested that planning as well as culture and leisure services are particularly vulnerable to budget reductions. Half of councils surveyed indicated that they anticipated reducing spending on care services for adults with learning difficulties or disabilities, 50% identified children’s services for reducing expenditure, and two thirds of authorities plan to cut spending on culture and sports (which is likely to affect services such as local libraries). As some non-statutory services are withdrawn and other provision reduced, there is an obvious risk that the availability and quality of services across local authorities and neighbourhoods can become increasingly divergent. Reductions to the budgets of planning departments are coinciding with a number of changes to the planning system in England designed to streamline the planning decision process. The National Planning Policy Framework is being introduced along with measures for speeding up planning decisions and giving central oversight to ‘nationally significant infrastructure projects’ enabling government to bypass local authorities. Whilst it is argued that these changes may support greater investment in the infrastructure of local
The recent health geography literature on health and local context suggests that policy changes which undermine efforts to enhance the local infrastructure are likely to detrimentally influence health through the non-availability of health-promoting resources, disruptions to local community networks, and a multitude of other pathways. Similarly, ‘problem’ health behaviours such as smoking, drinking and gambling may be reinforced in disadvantaged settings during tightened financial times (Thompson et al., 2007). These assertions potentially have additional implications for health inequalities as middle class residents are skilled in resisting cuts in services and new (unwanted) developments, an advantage that may lead to further disinvestment in disadvantaged communities during periods of fiscal tightening. As more powerful and skilled interest groups work to shield themselves from the material implications of fiscal tightening, residents of low income communities are therefore likely to be disproportionately affected by the reduced investment in neighbourhood infrastructure.

At the same time, under the auspices of the ‘Red Tape Challenge’ the Westminster government is looking to deregulate an assortment of environmental directives that were often implemented initially to protect vulnerable communities from the health effects of various disamenities, including for example the ‘deliberate strategic intent’ in the siting of noxious facilities (Walker, 2009). The rationale for ‘cutting red tape’ is to reduce the bureaucratic burden placed on businesses and to assist in the UK’s
economic recovery. On its website, the UK Cabinet Office offers eight categories of regulation where it wishes to ensure that “our environmental policies are being implemented in the most effective way possible, and that our environmental regulations are not strangling businesses and individuals with red tape” (Cabinet Office, 2012). These areas include air quality, industrial emissions, noise and nuisance, waste, chemicals, as well as environmental permits, information and damage, each of which have salience for population health. Any changes to the regulations, particularly alterations that undermine progress in environmental health, is significant for understanding spatial inequalities in health because low income populations in the UK tend to experience the double jeopardy of residing in areas with high levels of environmental deprivation (Pearce et al., 2010). The reprioritisation of investment in public services and changes to environmental legislation as part of a deficit reduction strategy are likely to lead to greater environmental disparities across regions in the UK. Environments that support health and well-being may well become just as disparate, raising environmental injustice concerns and negatively affecting area-level health inequalities.

*Blemish of place*

It is increasingly apparent that many aspects of the UK government’s program of austerity policies are disproportionately damaging for residents of low income and highly stigmatised areas. Spatial stigma arises in places with notoriety in the public discourse, and that are constructed as ‘no-go zones’ or ‘sink estates’ that require constant policing (Wacquant, 2007). ‘Blemished’ neighbourhoods such as Toxteth in Liverpool, South Central in Los Angeles or the French banlieues have for instance been prejudiced by deep-rooted geographical discrimination. Hastings (2004)
identifies ‘pathological’ discourses as dominant amongst the explanations that have been provided for the production and reproduction of place-based stigma. Pathological explanations ascribe reputational troubles to blemished neighbourhoods due to the characteristics and perceived ‘failings’ of ‘irresponsible’ local residents. Internal or external actors construct place-based stigma with reference for example to the propensity of local residents to abuse alcohol or drugs. Whilst these perspectives have been instructive in understanding the processes leading to the formation of stigma, and the commonly used language amongst observers of stigmatised areas, pathological characteristics do not provide a fully nuanced account for the causal drivers of place-based stigma. The underlying processes leading to area stigmatisation are a range of global economic factors, and national fiscal, housing, employment and other features which operate to intensify socio-spatial inequalities. High unemployment levels for example are largely a product of the regional employment market, lack of investment, and the discriminating views of local employers. The emphasis here therefore is the lack of investment in neighbourhoods rather than a lack of responsibility amongst the local residents. Place-based stigma associated with such communities is therefore a direct product of entrenched poverty and societal inequality which can result in context-specific socio-cultural responses.

Recent and forthcoming retrenchment in various aspects of social policy are likely to be significant in affecting and mediating the causes of place-based stigmatisation. In the UK, the Conservative-Liberal Democrat Coalition Government’s ‘Broken Society’ narrative which focuses on perceived social and moral decay, and are revealed in anti-social behaviour, crime and a variety of ‘problem’ behaviours and social practices, is specifically concerned with socially disadvantaged (and highly stigmatised)
neighbourhoods. The Government’s rhetoric is that this erosion of moral standards is caused directly by the dependency on the ‘broken’ welfare state amongst some groups of people (Hancock and Mooney, 2013). Further legitimised by the Government’s ongoing austerity strategy, and a determination to reduce the State’s spending on benefits, reforms to welfare (many initiated by the previous Labour government) include greater conditionality on payments (e.g. payments for those living with a disability) and heightened responsibility on individuals to take up any available work. Various changes in welfare payments and tax credits will affect the income of millions of households, particularly those on a low income. The changes include:

- From April 2013 onwards, a cap on the total amount of benefit that working aged people are entitled to (approximately £350 per week for a single adult, and £500 per week for a couple or lone parent regardless of the number of children they have) which will reduce the income of approximately 56,000 households by an average of £93 per week (BBC News, 2013).

- Households residing in council or housing association accommodation deemed to be larger than required will receive less housing benefit (the so called ‘bedroom tax’) which will affect approximately 660,000 claimants by an average of £14 per week. The impact of the introduction of the bedroom tax varies substantially across regions of the UK with the proportion of affected working age claimants particularly high (over 40%) in Wales, Yorkshire/Humberside, and North-west England (Table 3).

- The replacement of the disability living allowance (DLA) with the personal independence payment (PIP) from April 2013 will result in an expected 170,000 people becoming ineligible, although 150,000 will get a higher award.
By 2018, 500,000 individuals will be ineligible, and 780,000 are expected to receive the same as, or more than at, present (BBC News, 2013).

- From 2013-14, for the subsequent three years, most working-age benefits and tax credits will be uprated by just 1% which represents a below-inflation cap. This effective reduction in payments will affect 4.1 million households by an average of 93 pence per week (BBC News, 2013).

- Abolishing the Council Tax Benefit from April 2013 and replacing it with an alternative fund at 90% of the previous budget is likely to affect 3.1 million English households with an average loss of £138 per year (GOV.UK, 2013a).

- On the other hand, from the end of April 2013 the introduction of a new benefit – universal credit - will gradually replace the present system of working-age benefits and Tax Credits affecting 5.9 million households. It is estimated that there will be an average gain of £16 per month (Department of Work and Pensions, 2013).

[Table 3 about here]

Most of these changes to the benefit system will result in a reduction in payments that will disproportionately affect low income households leading to greater personal precarity. Along with other measures such as the increase in Value Added Tax (a form of consumption tax) for example, these changes will not only add further financial pressures for individuals and households but are also likely to compound the marginalisation and stigmatisation of already socially and economically disadvantaged communities. Wacquant’s (2008) concept of ‘advanced marginality’ is useful in identifying some of the likely pathways leading to the further area marginalisation due to the austerity-related welfare reforms. Advanced marginality is
characterised for example by unstable and insecure employment, the undermining of community ties as residents are forced to move, and the associated loss of formal and informal social support that facilitates routes into education and employment. The riots in the summer of 2011 in parts of some English cities are one possible expression of this coincidence of circumstances. As places become further stigmatised due to even more challenging material circumstances they may, due to the negative views held by key external actors (e.g. local authority workers), be viewed as increasingly less deserving of the diminishing public resources.

Residing in a highly stigmatised community has a number of potential implications for population health. Yet, with some notable exceptions (Popay et al., 2003; Stead et al., 2001), few studies have tested this assertion. Population-level health and health inequalities might be compromised by spatial stigma through four individualised and institutional pathways (Pearce, 2012). First, residents of stigmatised communities often draw attention to a sense of feeling ‘looked down on’ because of external perceptions of where they live. This public gaze can detrimentally affect opportunities for education and training, employment and developing interpersonal relationships and other concerns that are implicated in studies of health inequalities. Second, and not unrelated, place-based stigma can act as ‘badge of dishonour’. Those branded through residing in a stigmatised community develop personal strategies to circumvent this discomfort such as avoiding receiving visitors, obscuring from others where they come from, and offer excuses for why they live where they do. There is a well-established literature which emphasises that such sentiments can operate to spoil, manipulate and mediate individual identities and social relations which in turn can affect physical and mental health and related behaviours.
Third, it has been argued that highly stigmatised communities are further jeopardised by the levels of investment and disinvestment of public and private resources in the local community. Importantly, progressive social policy is undermined by the lack of investment in the local infrastructure, housing and other services that provide the opportunities for healthy living. Fourth, there is evidence suggesting that residents withdraw from the public realm in response to the perceived threats associated with spatial stigma (e.g. local crime). This departure can affect local social networks, community social bonds and collective efficacy and is likely to be detrimental to physical and mental health.

In sum, the urban sociology and urban geography literature suggests that through a variety of intersecting pathways, place-based stigmatisation is harmful to the life chances of local residents. The population health consequences of place-based stigma are however less well established; understanding these pathways is an important challenge for researchers with an interest in understanding relationships between health and place. This concern is particularly important during a period of austerity with major reductions in state investment in a range of health-related infrastructure. A likely consequence of this retrenchment is the heightened stigmatisation of many socially disadvantaged communities with potentially undesirable implications for public health and health inequalities.
Conclusion

At the behest of financial institutions, or of their own volition, many governments across Europe are adopting stringent austerity measures that are resulting in severe cuts to expenditure across most aspects of state spending. Whilst the assortment of austerity-related measures adopted in each European country is distinct, a number of themes are common to many countries including shrinking the public sector workforce, raising the retirement age, and reducing welfare expenditure. The potential repercussions of such drastic reductions in government spending for many areas of social policy including population health are profound. The links between population health and macro-level economic performance are likely to be nuanced yet remain poorly understood. For instance, the available evidence indicates that economic downturns have been associated with detrimental effects on mental health, suicides and self-reported health but may be beneficial for health-related behaviours (e.g. alcohol consumption, diet and physical activity) and traffic-related accidents. Whilst it is likely (but as yet untested) that the implementation of austerity measures will be detrimental to inequalities in health, it is also feasible that the financial crisis offers an opportunity to address some of the underlying drivers and mediators of health inequalities such as income inequality and progressive taxation and policies relating to tobacco, alcohol and food. Yet to date, with some notable exceptions, geographers and others have been reluctant to attend to the multitude of material effects that might be anticipated to arise from the largest financial crisis since the 1930s.¹
This piece has considered work in the fields of health geography, sociology and public health as exemplars to examine some of the ways in which geographers can contribute to revealing the human impact of the largest economic crisis in 80 years. It has been argued that the current austerity strategies are likely to have socially and geographically unequal effects at various scales and exasperate health disparities. The paper has posited four non-exhaustive and interrelated themes of geographical scholarship which are likely to be productive in explicating the implications of austerity for geographical inequalities in health. These themes relate to the affects of austerity-related policies on: the geography of the social determinants of health; disruptions to patterns of mobility and migration; health-related environmental injustices; and place-based stigmatisation.

It is widely acknowledged that the policy responses to widening social and spatial inequalities in health over the past three decades have been inadequate. Governments have been unwilling to address the fundamental conditions that lead to increasing health differentials. Yet as Navarro argues, public health researchers have been reluctant to examine the political context and the associated public and private interventions which produce and reproduce inequalities (Navarro, 2011). The current financial crisis and associated austerity measures provide the conditions that may well lead to further increases in health inequalities. Recent calls from health geographers, public health researchers and other social scientists have urged for greater attention to be given to experimental study designs, including evaluations of natural experiments, in order to better specify causal pathways linking social factors to health. The current implementation of austerity-related policies provides an opportunity to examine the effects of large-scale alterations to many areas of policy decisions that are likely to
impinge of social, economic and physical environments and potentially influence health inequalities. Other opportunities for further work include identifying explanations for why some populations and communities respond better than others to exogenous shocks such as economic downturns and austerity measures. Geographical work on place-based resilience and population health offers one explanatory framework (Pearson et al., 2013) that could be usefully extended to help understand the economic, physical and psychosocial processes, as well as policy responses, that enable some populations to partially resist public health challenges such as the ongoing financial crisis (Karanikolos et al., 2013). More importantly, attention to these concerns will provide critical insights into the material impacts of austerity, particularly for low income populations. It is important that geographers and others are alert to revealing the extent of the material implications of austerity policies – detrimental or beneficial - and identify cogent accounts of these consequences that can be used to help hold powerful elites to account. Such interpretations of austerity can support strategically the shaping and resisting of economic and fiscal policies that dismantle support for the most vulnerable groups. Without such interventions, the social and material effects of rising economic, social and health inequalities are likely to continue unchecked.

Footnotes
1. Although far from a perfect indicator, a useful clue is the profile of papers at the recent Annual Meeting of the Association of American Geographers conference in New York in February 2012. Among the 6000 or so papers presented only eight included ‘austerity’ in the title or as a keyword.
<table>
<thead>
<tr>
<th>Year</th>
<th>North East</th>
<th>North West</th>
<th>Yorkshire and The Humber</th>
<th>East Midlands</th>
<th>West Midlands</th>
<th>East of England</th>
<th>London</th>
<th>South East</th>
<th>South West</th>
<th>Wales</th>
<th>Scotland</th>
<th>Northern Ireland</th>
<th>United Kingdom</th>
</tr>
</thead>
<tbody>
<tr>
<td>2008</td>
<td>293</td>
<td>700</td>
<td>532</td>
<td>386</td>
<td>514</td>
<td>459</td>
<td>742</td>
<td>685</td>
<td>519</td>
<td>342</td>
<td>597</td>
<td>223</td>
<td>6,027</td>
</tr>
<tr>
<td>2009</td>
<td>298</td>
<td>729</td>
<td>566</td>
<td>403</td>
<td>533</td>
<td>478</td>
<td>794</td>
<td>720</td>
<td>549</td>
<td>353</td>
<td>636</td>
<td>230</td>
<td>6,321</td>
</tr>
<tr>
<td>2010</td>
<td>294</td>
<td>723</td>
<td>565</td>
<td>403</td>
<td>531</td>
<td>478</td>
<td>814</td>
<td>717</td>
<td>548</td>
<td>349</td>
<td>628</td>
<td>227</td>
<td>6,309</td>
</tr>
<tr>
<td>2011</td>
<td>277</td>
<td>693</td>
<td>549</td>
<td>396</td>
<td>514</td>
<td>469</td>
<td>783</td>
<td>704</td>
<td>525</td>
<td>338</td>
<td>602</td>
<td>222</td>
<td>6,101</td>
</tr>
<tr>
<td>2012</td>
<td>258</td>
<td>647</td>
<td>510</td>
<td>368</td>
<td>482</td>
<td>443</td>
<td>744</td>
<td>662</td>
<td>487</td>
<td>334</td>
<td>585</td>
<td>218</td>
<td>5,768</td>
</tr>
</tbody>
</table>

% change 2008-12  -11.9   -7.6   -4.1  -4.7  -6.2  -3.5   0.3   -3.4  -6.2  -2.3  -2.0  -2.2  -4.3

Table 1. Regional public sector employment (headcount (1,000s), not seasonally adjusted (source: Office for National Statistics (2013)))
<table>
<thead>
<tr>
<th>Deprivation Decile (English Indices of Deprivation 2010)</th>
<th>Average %</th>
<th>Minimum %</th>
<th>Maximum %</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 (High Deprivation)</td>
<td>-1.36</td>
<td>-8.80</td>
<td>0.42</td>
</tr>
<tr>
<td>2</td>
<td>-2.47</td>
<td>-8.80</td>
<td>4.44</td>
</tr>
<tr>
<td>3</td>
<td>-2.02</td>
<td>-8.70</td>
<td>1.90</td>
</tr>
<tr>
<td>4</td>
<td>-1.29</td>
<td>-3.20</td>
<td>1.71</td>
</tr>
<tr>
<td>5</td>
<td>-0.55</td>
<td>-2.53</td>
<td>4.31</td>
</tr>
<tr>
<td>6</td>
<td>-0.89</td>
<td>-3.47</td>
<td>4.33</td>
</tr>
<tr>
<td>7</td>
<td>-0.65</td>
<td>-3.43</td>
<td>3.80</td>
</tr>
<tr>
<td>8</td>
<td>-0.32</td>
<td>-2.59</td>
<td>2.83</td>
</tr>
<tr>
<td>9</td>
<td>-0.19</td>
<td>-3.35</td>
<td>3.75</td>
</tr>
<tr>
<td>10 (Low Deprivation)</td>
<td>-0.36</td>
<td>-2.48</td>
<td>6.88</td>
</tr>
</tbody>
</table>

**Table 2.** Mean, minimum and maximum reduction in ‘spending power’ between 2012/13 and 2013/14 for local authorities (n=326) across England stratified into deciles by an area-level measure of multiple deprivation (English Indices of Deprivation 2010) (Source: GOV.UK (2013b)).
<table>
<thead>
<tr>
<th>Region</th>
<th>Number of Claimants Affected</th>
<th>% of Working-Age Claimants Affected</th>
<th>Average Weekly Loss 2013/14</th>
</tr>
</thead>
<tbody>
<tr>
<td>North-east England</td>
<td>50,000</td>
<td>37%</td>
<td>£13</td>
</tr>
<tr>
<td>North-west England</td>
<td>110,000</td>
<td>43%</td>
<td>£14</td>
</tr>
<tr>
<td>Yorkshire/Humberside</td>
<td>80,000</td>
<td>43%</td>
<td>£13</td>
</tr>
<tr>
<td>East Midlands</td>
<td>40,000</td>
<td>27%</td>
<td>£12</td>
</tr>
<tr>
<td>Eastern England</td>
<td>60,000</td>
<td>31%</td>
<td>£13</td>
</tr>
<tr>
<td>South-east England</td>
<td>40,000</td>
<td>22%</td>
<td>£15</td>
</tr>
<tr>
<td>South-west England</td>
<td>30,000</td>
<td>20%</td>
<td>£15</td>
</tr>
<tr>
<td>London</td>
<td>80,000</td>
<td>22%</td>
<td>£21</td>
</tr>
<tr>
<td>Wales</td>
<td>40,000</td>
<td>46%</td>
<td>£12</td>
</tr>
<tr>
<td>Scotland</td>
<td>80,000</td>
<td>33%</td>
<td>£12</td>
</tr>
<tr>
<td>Great Britain</td>
<td>660,000</td>
<td>31%</td>
<td>£14</td>
</tr>
</tbody>
</table>

**Table 3.** Regional Impacts of Housing Benefit Changes (source: Department of Work and Pensions (2012))
Figure 1. Relative Index of Inequality (RII) according to deciles of Standardised Mortality Ratios, 1921-2007 (data source: Thomas et al (2010)).
Figure 2. UK regional public sector employment as a proportion of total employment (data source: Carless (2013)).
Figure 3. Mean reduction (percent) in ‘spending power’ (£ per dwelling) between 2012/13 and 2013/14 for local authorities (n=326) across England stratified into quintiles by an area-level measure of multiple deprivation (English Indices of Deprivation 2010).
References

Anderson D O, Ferris B G, Jr., Zickmantel R, 1964, "Levels of Air Pollution and Respiratory Disease in Berlin, New Hampshire" *American Review of Respiratory Disease* *90* 877-887

BBC News, 2013, "Benefit changes: Who will be affected? "

Brimblecombe N, Dorling D, Shaw M, 1999, "Mortality and migration in Britain, first results from the British Household Panel Survey" *Social Science and Medicine* *49* 981-988


Carless E, 2013, "Regional analysis of public sector employment 2012", in


Department of Work and Pensions, 2013, "Universal Credit"

Dorling D, Thomas B, 2009, "Geographical inequalities in health over the last century", in Understanding health inequalities Ed H Graham (OUP, Maidenhead)
Engels F, 1845 The Condition of the Working Class in England in 1844 (Otto Wigand, Leipzig)
European Commission, 2013, "Eurostat statistics database 2012"
Eurostat, 2012, "Euro area unemployment rate at 11.8%"
Gatrell A C, 2011 Mobilities and health (Ashgate, Farnham, Surrey ; Burlington, VT)
GOV.UK, 2012, "Making the planning system work more efficiently and effectively"
GOV.UK, 2013b, "Spending power by local authority for 2013 to 2014"
Hancock I, Mooney G, 2013, ""Welfare Ghettos"" and the “Broken Society”:
Territorial Stigmatization in the Contemporary UK" Housing, Theory and Society 30 46-64


Pearce J, 2012, "The 'blemish of place': stigma, geography and health inequalities" Social Science and Medicine 75 1921-1924


Smith S J, Easterlow D, 2005, "The strange geography of health inequalities"
*Transactions of the Institute of British Geographers* **30** 173-190

Stead M, MacAskill S, MacKintosh A M, Reece J, Eadie D, 2001, ""It's as if you're locked in": qualitative explanations for area effects on smoking in disadvantaged communities" *Health and Place* **7** 333-343

*Lancet* **374** 315-323


Suhrcke M, Stuckler D, 2012, "Will the recession be bad for our health? It depends"
*Social Science and Medicine* **74** 647-653


Thomas B, Dorling D, Smith G D, 2010, "Inequalities in premature mortality in Britain: observational study from 1921 to 2007" *BMJ* **341** c3639


Wacquant L J D, 2007, "Territorial stigmatization in the age of advanced marginality"
*Thesis Eleven* **91** 66-77

