Foundational Economy Collective

Working Paper No.5

Foundational Liveability: rethinking territorial inequalities

https://foundationaleconomy.com/

Published: **October 2018**

The authors are part of the Foundational Economy Collective. Its membership comprises of academics and practitioners from many countries.

The Foundational Economy Collective website is https://foundationaleconomy.com/ and our email address is foundationaleconomy@gmail.com

Foundational Liveability: rethinking territorial inequalities[1]

Julie Froud, Colin Haslam, Sukhdev Johal, Nick Tsitsianis and Karel Williams

(for the foundational economy collective)

"The paradise of the rich is made out of the wealth of the poor"

Victor Hugo, *The Man who Laughs*, 1869, book II, chap X1

"The village of Hollywood was planned according to the notion
people in these parts have of heaven. In these parts
they have come to the conclusion that God
requiring a heaven and a hell, didn't need to
plan two establishments but
just the one: heaven. It
serves the unprosperous, unsuccessful
as hell"

Bertolt Brecht, *Hollywood Elegies*, 1942

Gross Value Added per capita is the standard economic metric used for comparing regions and places within the UK and the EU; just as the related measure of per capita GDP is used to compare national economies. Within the standard framework, successful regions have high GVA per capita and laggard regions should attempt to emulate them because this will produce increases in welfare. The argument of this paper is that the GVA per capita figures are an uninformative and often misleading way of ranking regions which misdirect public policy.

Instead this paper proposes an alternative concept of foundational liveability for household units. This is explored empirically in a preliminary way by considering gross, disposable and residual income obtained by subtracting housing and transport costs from the disposable income of owner occupier households. The empirics reveal a complex pattern of variation by regional housing cost, form of tenure and type of household. This highlights the importance of intra-regional differences between households which are generational as much as income

[1] This paper is an output from a larger ongoing project in partnership with Coastal Housing where the initial research is financially supported by the Manchester Statistical Society. We learnt much from Coastal staff, especially Jodie Fear and Ross Williams, who helped us with a pilot study of Morriston that led directly to this statistical work.

related; not least because housing accelerates wealth inequalities within and between regions when owner occupiers make large untaxed capital gains.

The message of our 21st century empirics fits with the opening nineteenth century quote from Victor Hugo who, like Bertolt Brecht in his mid-twentieth century *Hollywood Elegy* understood how one "successful" place by the GVA criterion can have a different character for rich and poor households whose fortunes are necessarily inter-related. And we would add that modest, un-successful places by the GDP criterion can be very liveable for many types of households, especially middle- income households who are everywhere in the majority.

This working paper is a first instalment in a larger project of re-thinking urban and regional space in a three-dimensional way as a matter of liveability, sociability and political agency in a frame of environmental responsibility. From this point of view, rethinking the economic metrics of well-being is only part of a larger revisionist enterprise where "the economic" is properly situated not as an end in itself but an intermediate output for citizens with social and political goals. There is after all no point in public policy which ensures citizens have liveability courtesy of affordable housing and public services, if they do not have the sociability manifest in a dense network of social relations or the political agency to influence things locally in communities behaving in an ecologically responsible way.

We are publishing this working paper as a basis for discussion because the issue of new metrics has become practically important with the growing interest in Wales and elsewhere in developing innovative policy for the foundational economy. As the Welsh 2018 *Economic Action Plan*[2] shows, without new metrics for foundational success, there is an ever-present danger that the foundational economy is seen as new sectors like care and retail which will deliver the old objectives of (GVA) growth and high value-added jobs to deliver "inclusive growth" in a laggard region. For these reasons, Wales figures prominently throughout the argument as the exemplar of laggard region with low per capita GVA; those with English regional interests could focus instead on the North East which measures up in much the same way as Wales.

(1) Innovation and observed anomalies in spatial inequality

Schumpeter in his 1934 *Theory of Economic Development* defined innovation as the bringing together of knowledge and resources in "new combinations". Re--combination of knowledge could mean the bringing together of things previously disassociated and we might add the breaking of established patterns of association. In both cases, the process of reconfiguring knowledge often begins with the observation of anomaly either in the laboratory or the field.

[2] Welsh Government (2018) *Prosperity for all: Economic Action Plan* https://gov.wales/docs/det/publications/171213-economic-action-plan-en.pdf

The anomaly which does not fit is classically the stimulus to re thinking. In the laboratory, we have the unexpected presence or absence in the Petri dish. In statistical work, we have the relation that is unexplained given expectations about magnitudes, rank order and distribution. In field work, we have behaviours, attitudes or outcomes that do not fit preconceptions.

So, it is with GVA framework: as soon as we bring housing costs into the equation, the anomalies multiply:

(a) In 2018 the ONS[3] produced an experimental series on spending per person living in each of the UK regions. Spending per person was £10k higher in London than in Wales at £24,545 vs £15,965 but most of that was accounted for by spending on housing which was £7k per person higher in London than in Wales. As the FT commented, this calculation raised questions about the priorities of politicians in the main parties "who have put huge regional disparities in living standards at the centre of their policies" [4]

(b) Fieldwork in "unsuccessful" places turns up more anomalies. In 2018 we were carrying out a community study in Morriston. This is an unfashionable, satellite town of some 30,000 with a struggling local high street on the edge of the Swansea urban area which has a GVA per capita of around 70% of the UK average. But in a Centre for Economic and Business Research ranking of places by postcode in 2015, Morriston was judged "the most attractive place to live and work in Wales" ahead of desirable middle-class suburbs like Penarth outside Cardiff[5]. Low GVA Morriston ranked high because in the original CEBR metric, affordable housing accounted for half the weighting and "employment opportunities" (not wage levels) were considered[6].

These anomalies are nothing new. Historically, there always have been substantial differences in housing costs between UK regions. In preparation for his 1942 report, *Social Insurance and the Allied Services*, William Beveridge had to calculate subsistence minima as a basis for setting allowance levels to eliminate "primary poverty". As working-class rents varied substantially by region, the only sensible solution was to calculate decent national minima for items like food using dietaries and then include housing at actual cost, with rents as incurred by the household[7].

The observation of anomaly is only a beginning, because anomalies arise within one framework but they only become innovation after a recombination of knowledges when the anomalies have been empirically explored, conceptually understood and then fitted into

---

[3] ONS (2018) *Development of Regional Household Expenditure figures*, section 6, tables 2 and 3a https://www.Sons.gov.uk/economy/regionalaccounts/grossdisposablehouseholdincome/articles/developmentofregionalhouseholdexpendituremeasures/2018-09-26#provisional-results

[4] Giles, C. "High Prices Put London Living Standards below National Level", *Financial Times*, 26 September 2018, https://www.ft.com/content/d44b6384-c18d-11e8-8d55-54197280d3f7

[5] Dewey, P. " Morriston…in New Post Code Survey", *Wales On Line*, 23 March 2015 https://www.walesonline.co.uk/news/wales-news/morriston-swansea-been-named-most-8905273

[6] CEBR (2014) "Which Postcode is Best?" https://cebr.com/reports/which-postcode-is-best/

[7] Wiiliams, K. and Williams, J. (1987) A Beveridge Reader, London: Allen and Unwin pp.58-62

another new framework. So, let us begin by explaining the standard framework behind the GVA/GDP metric and examining the underlying assumptions of national income accounting.

(2) The GVA/GDP framework: the additive method and the assumption of commensurability

The GVA/GDP metric of territorial success rests on the assumptions of national income accounting which construct something unitary called "the economy" by adding everything up. Practically, the method is to add up everything with market value as output/income; and the bottom line is then conventionally read and reported on the basis of the bigger the better. The more successful territory has a higher GDP/GVA per capita, national/regional policy should be directed to improving per capita income and faster growth is reported in celebratory ministerial speeches.

GDP = private consumption + gross investment + government investment + government spending + (exports - imports)

This formula presents GDP as a financial measure on the basis of expenditure; but income and output measures of GDP should all give the same result because income is spent on output

GVA = GDP + subsidies - taxes

The close financial relative of GDP is GVA which is routinely used in regional comparisons. Practically, the value added in GVA is most easily and intuitively understood as the net (output) value of goods and services produced (less purchased inputs). Again, the equivalence between different methods of financially calculating value added is relevant because net output can be calculated by subtracting purchases from sales or by adding incomes distributed. For example, when UK company accounts do not reliably report purchases but do report labour costs, value added in PLCs is usually calculated by adding incomes. When used as a macro level income indicator, the plus subsidies minus taxes adjustment means that GVA per capita corresponds most clearly with disposable not gross income.

High per capita net output is likely to be correlated with high incomes for labour. But this relation is manifestly not perfect or predictable because it depends on the (changing) shares which labour and capital claim from output and the distribution to different kinds of labour. It is perfectly possible for output in a region to grow without increased income for labour if capital's share increases because labour generally has a weak bargaining position; equally it is entirely possible for sections of labour to fare differently, as when the weekly wages of manual workers and high pay professionals move in different ways.

Official thinking increasingly recognises such ambiguities and the tendency is to retain but qualify the core growth objective of by distinguishing good growth from bad growth. Hence, international agencies after the 2008 crisis insist on "inclusive growth" which benefits a large part of the workforce[8]. Thus, a recent World Bank report on cohesion in the EU regions recommends “a region-centred cohesion policy that adopts a dual objective of: (i) *maximising regional potential*, measured not simply by output per capita but also by the capacity to generate quality (productive) jobs; and (ii) *ensuring equality of opportunity* for individuals to achieve their potential”[9].

This kind of qualification is important because it goes hand in hand with a retreat from the policy aim of raising output per capita in laggard regions. Regional/spatial inequalities of GVA have stubbornly persisted in the UK and across the EU for the past thirty years. These GVA gaps cannot apparently be closed using the restricted range of place- based policies that mainstream thinking countenances. The orthodox fixes for regional inequality are improving transport infrastructure and labour force skills. funding early stage innovation and making business friendly concessions to attract inward investment. The Welsh Government has tried all these policies over the past twenty years without closing the gap because Welsh GVA is now around 73% of English and Welsh average GVA as it was 20 years ago.

If this awkward fact cannot be denied, there is at the same time very little serious questioning of the underlying assumptions of national income accounting which underpin the GDP and GVA arithmetic. The arithmetic method is to add everything up according to market values, the assumption is that outputs are commensurable via price and the primary emphasis is on reporting income from activity (not rentier wealth).

There is of course a huge literature questioning national income accounting from various radical and reformist points of view. Much of it gets diverted onto technical and political questions about the valuation of items and which items should be included (and are excluded) before the bottom line is arrived at by addition. Items like domestic labour or environmental costs have to be omitted insofar as they do not have market price tags; quality improvements are difficult to measure, items like arms production are included though they contribute little to welfare; measures of finance sector output are contestable, public sector non- market output is entered at cost etc.

All this is important but it encourages neglect of two more fundamental issues:

- The privileging of the GDP and GVA number encourages a view of “the economy” as a productionist machine where activity generates earned incomes from making physical outputs or delivering useful services. As Fioramenti[10] or Coyle[11] argue in very different ways (from the political left and the technocratic right) this measure has its origins in the context of 1930s depression, war time economic management and the cold war But, in our view, it is increasingly irrelevant and only part of the story in present day

[8] World Bank (2009) *What is Inclusive Growth.*
http://siteresources.worldbank.org/INTDEBTDEPT/Resources/468980-1218567884549/WhatIsInclusiveGrowth20081230.pdf

[9] World Bank (2018) *Rethinking Lagging Regions: Using Cohesion Policy to deliver on the potential of Europe’s regions*, p. 11. http://pubdocs.worldbank.org/en/739811525697535701/RLR-FULL-online-2018-05-01.pdf

[10] Fioramonti. L. (2013) *Gross Domestic Problem,* London: Zed books

[11] Coyle, D. (2014) *GDP: A Brief but Affectionate History*, Princeton: Princeton University Press

financialised capitalism where what might be called the rentier circuits of wealth accumulation and household balance sheets are important and need to be integrated into any account of regional income differences.

- The method of adding everything up and the assumption of commensurability according to price is contestable and can be challenged in a radical way. The problems are not simply about valuation of items included or what's excluded. The economic outputs and objects of consumption are irreducibly heterogenous and incommensurable so that the fundamental problem of the national income accounting method is that it is, as the English say, "adding apples and pears". Affordable housing or health services accessible according to need make a different kind of contribution to well-being from the fast fashion of another £13 dress from Primark which makes a Saturday night out.

What happens if we reject these assumptions and recognise the rentier circuits of unearned income and the heterogeneity of outputs. The result would be a different calculation and a changed basis of comparison, which would give a different view of inter-regional and intra-regional inequalities by changing the field of the visible.

(3) The zonal framework and a subtractive method for exploring liveability

Foundational thinking[12] gives us a different starting point with a zonal schema of economies (in the plural). The different zones are discriminated because they represent different forms of consumption (private and collective) of outputs which make diverse contributions to well-being. The foundational zone includes (often collectively provided) daily essentials like housing, health and care or utilities; these fit in above the core economy and below the overlooked mundane economy in the diagram below. The foundational is, by any measure of output or employment, always the largest part; currently accounting for 43% of UK employment and 49% of Welsh employment. But it is only part, and we would not repeat the mistake of those who talk about the tradeable and competitive part as though it was the whole economy or all that mattered.

[12] Froud, J., Johal, S., Salento, A. and Williams, K. (2018) Foundational Economy, Manchester: Manchester University Press.

Exhibit 1: A zonal schema of the economy

Tradeable economy

Overlooked economy
(e.g. haircuts, sofa production, holidays)

The foundational economy of
material and providential essentials

Core economy of family

Exhibit 2: A schema of the zonal economy

	Form of consumption	Examples	Provider business model	Source of revenue	Organisational mobility and mortality	Post 1980s public policy
Core Economy	Non-economic because "we must love one another and die"	Parenting, voluntary action etc.	Gifting: no charging or recovery of cost	Goodwill	Re-invented forms e.g. divorce and marriage in our generation	When the state retreats, try volunteers
Foundational Economy	Daily essentials via infrastructure of networks and branches	Material e.g. food, and utilities; Providential, health and care, social housing	WAS low risk, low return, long time horizon for public and private providers	Tax revenue for free at point of use or subsidised; or regulated private purchase	Low mobility and mortality as networks and branches 'ground' firms, stable demand	Privatisation, outsourcing and shareholder value = new business model
Overlooked Economy	Occasional purchases of mundane, cultural necessities		Financialized corporates vs SME and micro pro lifestyle and getting by	Discretionary from market income	High mortality in small firms and structural shifts e.g. streaming not DVD	Below the policy radar if firms too small to take outside capital
Tradeable, competitive Economy	(aspirational) private purchase	Cars, electronics, new kitchens and bathrooms, private housing	IS high risk, high return, short time horizon	Market income from wages (state subsidy for R & D, training etc.)	High mobility as footloose under free trade; cyclical demand	Business friendly, structural reform

The heterogeneity is reinforced because provider business models have historically been systematically different in various zones, as are the sources of revenue and the relation to public policy. For this reason, the divisions between the zones are then as much matters of political decision and social contest as of scientific discrimination. The line between housing as social good or private asset is redrawn in each new generation; while politics in the last generation determined the privatisation and outsourcing that opened up new areas of the UK foundational for financialised business models.

The big questions about *what is the good we aim for* and *what does a properly working economy deliver* are greatly simplified by the additive approach of GVA and GDP. Apart from the explicit "growth is good" presumption, the GVA and GDP approach smuggles in an implicit simplifying assumption in favour of private consumption from household income. Because the main driver of GDP growth is private consumption which accounts for more than 60% of UK GDP and the UK economy could more accurately be described as consumptive rather than productive. Politicians tend to gloss over this by claiming or assuming that growth of market incomes will generate the tax receipts that pay for public services, though there is clearly no automatic mechanism which ensures that this is so in societies like the UK with an ill designed tax system.

The zonal approach greatly complicates matters because the desideratum now is not a larger quantum of output but some kind of balance between different kinds of output. This does not come semi automatically out of higher market incomes because balance depends on the mix of private consumption, collective investment (private and public) in networks and branches and public subvention of free and subsidised services. Hence the classic problem diagnosed in 1950s America by J K Galbraith[13] High income, market-based capitalisms often or usually generate imbalance in the form of private affluence and public squalor; and this is aggravated in our own time by the way financialization releases corporate citizens from social duties like paying taxes and enriches a minority of citizens.

This observation reinforces one basic point: the primary concern of economic policy in every region and national economy should always be with the adequacy, affordability and continuous supply of foundational daily services because housing, health care and utility supply are prerequisite for the well-being of every citizen in every household in the polity. Foundational liveability is then a matter of ensuring the supply of universal basic services (while maintaining respect for the associational and affective life which is probably primary for most citizens most of the time; and suitably weighting environmental issues which are often not registered by citizens).

Empirically, this can be very partially tracked and explored by working down subtractively from gross income and observing how tranches of income in different types of households are spent on various objects necessary and discretionary, foundational, overlooked and competitive. In good economies, all households (in and out of employment and regardless of income, generation or other distinguishing characteristic) would have adequate basics

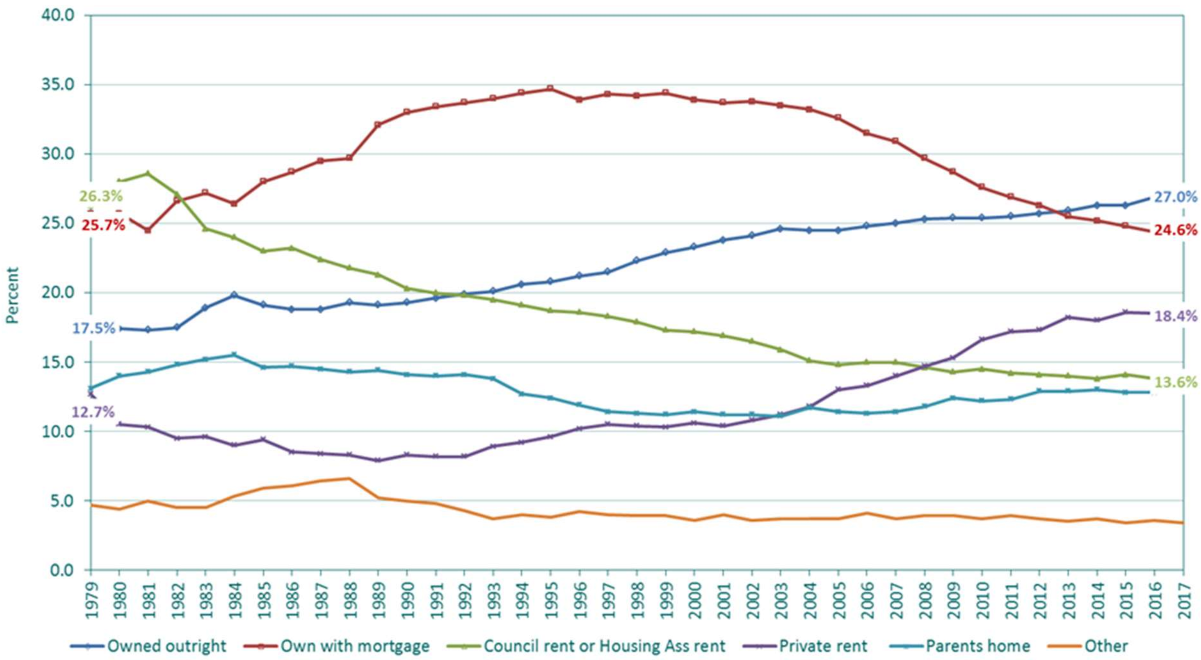
[13] Galbraith, J K (1958) *The Affluent Society*. Boston: Houghton Mifflin

affordably supplied. Some of these basics would be individually bought out of household income and others would be collectively supplied, free or subsidised to all citizens.

In consequence, gross (or disposable) income measures cannot be the main or only measure of inter - regional comparisons. Higher gross or disposable household income is no benefit if deductions for basics like housing are much higher and there is less left over at the supermarket check-out or for the next holiday; from this point of view, the "just about managing" could then be re- defined as those whose residual is slender after paying taxes, housing and transport. And from this point of view the units of analysis would be really existing households of different types not an imaginary average individual.

This perspective also brings out the importance of intra- regional differences by household type where housing tenure is a key differentiator. This is relevant because the benefits as well as the costs of housing now vary radically within and between regions in a country like the UK with a patch work of tenures. For private and social renters, housing is a charge against income; for owner occupiers and landlords with mortgages the repayment is a way of buying an asset; for those who own outright in the UK, the house has been not a charge on income but a wealth generating appreciating asset over the past 25 years.

Exhibit 3: Housing by tenure 1979-2017[14]



The relevant figures for 2017 and trends for the past 30 years are summarised above in exhibit 3. In 2017, 27% of households own outright and 25% are buying with mortgage; in the rented sector 14% rent from social landlords and 18% rent privately. A further 13% of households

[14] Source: Home ownership in the UK, Resolution Foundation, 22nd September 2017. https://www.resolutionfoundation.org/data/housing/

are classified as living with parents because, in official statistics, a child aged over 18 living at home is counted as a second, separate household.

And this opens up alternative empirics to regional comparison using GVA. It is uninformative to add together heterogenous items for an average individual, but it is informative to subtract essential expenditures for different types of households:

Gross income – taxes and social charges = disposable income

Disposable income – housing and transport = residual income

The size of the deductions from disposable income highlights whether housing is affordable for a specific type of household so that it retains a decent residual income. Or it is possible to work interactively backwards from house price transactions and the costs of mortgage to see what gross income buyers require and what kinds of market rents are implied by house prices. All these magnitudes give measures which we can use to explore foundational liveability.

To compare liveability within and between UK regions we can use the method of income tranching using family expenditure survey data on different objects of expenditure for households of different types with various kinds of housing tenure. This quickly becomes complicated because we do not have statistics in the form we require for many different types of household and it is therefore beyond the scope of this report to consider more than a few types of household.

Hence we decided to demonstrate the potential of income tranching and the subtractive method in this paper by concentrating on the empirics about owner occupiers and showing how this view of liveability changes the GVA story; an analysis of private and social renters is possible but we are reserving that for a second, forthcoming paper. As a preliminary and to avoid confusion, in the next section, we first distinguish our measure of foundational liveability from the different exercises in place- ranking liveability recently popularised by consultants.

(4) Place ranking liveability: a consulting and place marketing concept

We are proposing a new concept of foundational liveability. In this section we situate it in relation to long established existing usages of the word and the recently introduced competing concept of place ranking liveability.

The word liveability (or livability in American spelling) has been in use for more than 100 years; the OED gives 1872 as first usage of liveability in the sense of a room, house or city's "capacity to offer comfortable living"; it gives 1922 as first usage of the more ecological definition of a region, environment, or planet's liveability as the "capacity to sustain life". But in the 2010s a new concept of liveability has been popularised. Consultants now produce, and place marketeers consume, index rankings of cities for liveability. Thus, we have the EIU

Global Liveability Index of 140 world cities[15] or the Demos-PwC *Good Growth for Cities*[16] ranking of UK cities.

Demos argues that its ranking reflects "the growing sense that people needed more from their leaders than an improvement in GDP" Against this back ground it is worth highlighting the differences between foundational liveability and place ranking liveability whose working method and object is different. Place ranking works by attaching weights to a series of economic and social indicators which define the economic and social liveability of a whole city; foundational liveability works by tranching income and objects of expenditure for different types of household. Place ranking works by assigning a unitary character to a place like city or region; foundational liveability explores how one place can be comfortable for some types of households and hostile for others.

Place rankings get attention and are good at generating media headlines because placings change each year: thus, in 2018 Vienna is globally number one for the EIU and Preston is UK "most improved" for Demos-PWC. But such claims cannot be justified as precisely accurate or "scientific" by any ordinary standard because liveability is constructed by attaching unjustified weightings to an arbitrary list of measurable social and economic indicators which proxy for liveability. The EIU works with over 30 qualitative and quantitative factors across 5 categories: stability, health care and environment, education and infrastructure[17]. Demos-PWC weights 10 factors with a more social and egalitarian bias because the factors include work-life balance, affordable housing and fair distribution of income and wealth[18].

The ranking of cities by liveability index is then rather like the ranking of universities by league table: positions vary according to which index you consult because the different league tables attach variable weightings to different lists of variables. At the same time, the results broadly line up with the kind of status hierarchy that people already have in their heads (no doubt because weightings are initially tweaked before year one publication to remove gross anomalies). When it comes to global cities, the top 10 places in the EIU index are dominated by medium sized, low density cities in Canada and Australia plus some European cities like Vienna. *Quelle surprise*!

It should also be noted that city liveability indexes are often less about an ideal place than about an implicit model subject who will often account for a small fraction of households in any actual city. Thus, the EIU index is designed for the expat corporate manager or international agency employee contemplating a posting in a strange city or faced with a choice of postings in different cities Hence, quality private education and healthcare along with personal insecurity through kidnap or such like is taken into account by the EIU which

[15] EIU (2018) *Global Liveability Index*
https://pages.eiu.com/rs/753-RIQ-438/images/The_Global_Liveability_Index_2018.pdf
[16] Demos-PwC (2018)
[17] EIU (2018) p. 8
[18] Demos-PwC (2018) p. 8

usefully presents a scale of salary enhancements that should be claimed by those who move to undesirable cities.

Change the model subject and the criteria of liveability will of course shift radically. This is obvious if we compare the EIU concept of a liveable city with the *American Association of Retired Persons* definition of a liveable community which has an everyday human needs focus on affordable housing and sociability: “a liveable community is one that has affordable and appropriate housing, supportive community features and services, and adequate mobility options which together facilitate personal independence and the engagement of residents in civic and social life”[19].

This kind of definition of liveability for older citizens overlaps with our housing and transport related measure of foundational liveability. The difference is that foundational liveability uses income tranching to look at how housing tenure and affordability influences residual income and wealth generation across a range of different household types. This is practically difficult to do but we can look at some preliminary empirics for income and wealth of owner occupiers.

(5) Foundational liveability (a) housing and income

To explore income effects in this section we tranche expenditures on different objects for various owner occupier households. And here we encounter the usual problems with available official statistics which do not fit foundational categories and purposes, so that we cannot track households of many different types without substantial new research. But we can generate some preliminary result which demonstrate the potential of the tranching method for one kind of really existing household (new entrants) and for another which represents a statistical benchmark (the average existing mortgage payer); and the results here have implications for other kinds of households including private renters and those with paid off mortgages.

- The ONS live tables on housing market and house prices give us a regional break down of the declared income of new entrant house buyers and their transaction house prices. From this we can construct disposable post tax income for single or couple new entrants; and then the cost of a repayment mortgage for the new entrant’s house property; transport spend can be imputed from Family Spending for households in that income bracket. The calculations here are incidentally relevant to private renters because market rents ratchet up with current house prices that new entrants must pay.
- Family Spending gives us data on the mortgage payments of all existing mortgage payers. From this we can construct the average existing mortgage payer which is the mean for all mortgage paying owner occupiers, a benchmark that does not correspond to any actually

[19] Sustainable Cities Initiative (2017) *What is Livability,* p 2.
https://sci.uoregon.edu/sites/sci1.uoregon.edu/files/sub_1_-_what_is_livability_lit_review.pdf

existing household because it mixes mortgages of different vintages and includes many mortgage holders who bought some time ago at lower property prices. Working back from the mortgage payment (assuming it is a repayment mortgage) we can reconstruct the borrowing household's required gross and disposable income and interpolate transport spend for the relevant income group. The calculations here are also incidentally relevant to those with paid off mortgages who are relived of the burden of a mortgage.

Exhibit 4 below presents data on working couple first time buyers who are the typical new entrants. The first most obvious point is that London has an acute crisis of housing unaffordability in relation to earned income: the single or joint income plus substantial deposit required price many households out of owner occupancy. In 2018 London first time buyers had a declared income of £81k which meant that most individuals had to couple up to buy a house or flat. The £81k income threshold means an individual new entrant (without a partner) would have to be in the 9th income decile; and new entrants also need £140k cash deposit for an averagely priced London first time buyer property which cost £435k in 2018. With average individual gross earnings of £35k in London, couples can only become first time buyers if both partners are in the top half of the income distribution (and have the deposit).

This is also spectacularly bad news for the many individuals and couples who do not have incomes which give them entry to owner occupancy. Because they must go into the private rented sector where no tenant has more than 6 months security and rents ratchet up with property values. So, renters are then contributing a substantial part of earnings to pay off somebody else's mortgage or the holding costs on an appreciating flat or house.

By way of contrast, in Wales first time buyer occupancy is much more accessible to ordinary wage earners because earnings are lower but so are property prices and deposit requirements. In 2018 an averagely priced Welsh first time buyer property cost £143k and the average deposit was £27k. Put simply, the first-time buyers' deposit in London roughly equals the value of the first-time buyer's house in Wales. In Wales, the first-time buyer's gross income is just £37k against median individual gross earnings of £26k in Wales; this means that a young professional like a university lecturer or junior hospital doctor could in her 30s afford to mortgage a cheap house without coupling up; and that a couple with both earning below median wages could afford to buy.

The implication is that for households of those under 35 years old London is internally divided in a way that Wales is not. The largest number of younger couples are excluded from owner occupancy and obliged to pay rents which reflect the cost of somebody else's mortgage. The lucky few in London are dual income couples in the upper half of the income distribution with affluent middle-class parents who can subvent the £140k deposit. And the London economy is partitioned off from older Welsh or Northern households (especially those with children) who are likely to find that moving to London involves an unacceptable trading down in what their income can buy as accommodation. This is all the more important because few jobs in the private sector and none in the public sector adequately compensate employees for the extra costs of London housing.

And the entrance fee in terms of income requirements and mortgage costs is set so high for first time buyers that high gross income new entrant Londoners get a diminished benefit in residual income. As exhibit 4 shows, a (quite rightly) progressive income tax system takes just over £19k off the London new entrant couple and their mortgage costs them just under £17k more than in wales.

Exhibit 4: First-time buyers income and spend on mortgage repayments and transport ,2018[20]

	Dual borrowers gross income £	Dual borrowers disposable income (before pension contribution) £	Repayment mortgage (@3% interest) £	Transport spend (household) £	Residual income £	Difference between single and dual income earners disposable income £
North East	36,298	31,444	6,000	3,859	21,585	3,381
North West	39,670	33,737	7,008	4,090	22,640	3,381
Yorks & Humber	38,430	32,894	6,828	3,943	22,123	3,381
East Midlands	41,019	34,655	7,704	4,646	22,306	3,382
West Midlands	41,978	35,307	7,908	4,294	23,104	3,381
East	53,267	42,984	11,232	5,765	25,987	4,073
London	80,954	61,810	16,812	5,632	39,366	6,841
South East	57,295	45,723	12,156	6,313	27,254	4,476
South West	45,355	37,604	9,348	5,027	23,229	3,382
Wales	36,759	31,759	6,612	3,856	21,291	3,382
Scotland	40,039	33,989	6,624	4,195	23,170	3,382

Their only consolation is that cost of transport is only fractionally above that in Wales because many Londoners can do without a car and the huge capital costs of London transport investments in new infrastructure and upgrading have not been fully charged to fare payers. A £44k gap in new entrant couple gross income between London and Wales is reduced to

[20] Source: Live tables on housing market and house prices, ONS. Notes: Average house prices based on simple average and therefore dependent on the composition of sales. Repayment mortgage over 25 years. Transport is from Family Spending and the underlying data is based on disposable income. Transport data is from the closest decile spend on transport. North East, West Midlands, East, South East and South West use spend from decile 8 and the London spend is from decile 9 and the remainder from decile 7. Regional transport spend data is derived from total regional spend and allocating into decile groups from the ONS for all of the UK. It is a derived approximation. Family Spending data is from year end 2017.

£18k residual; which almost certainly has the political effect of increasing resistance to progressive tax amongst the well off in London and the South East.

Exhibit 5: First time buyers percolation of gross income in 2018[21]

	Dual borrowers gross income %	Dual tax and national insurance (before pension contribution) %	Repayment mortgage (@3% interest) %	Transport spend (household) %	Residual income %
North East	100.0	86.6	16.5	10.6	59.5
North West	100.0	85.0	17.7	10.3	57.1
Yorks & Humber	100.0	85.6	17.8	10.3	57.6
East Midlands	100.0	84.5	18.8	11.3	54.4
West Midlands	100.0	84.1	18.8	10.2	55.0
East	100.0	80.7	21.1	10.8	48.8
London	100.0	76.4	20.8	7.0	48.6
South East	100.0	79.8	21.2	11.0	47.6
South West	100.0	82.9	20.6	11.1	51.2
Wales	100.0	86.4	18.0	10.5	57.9
Scotland	100.0	84.9	16.5	10.5	57.9

The data on all borrowers including those with historical mortgages summarised in exhibits 6 and 7 below is broadly coherent. But it does add complications and nuances which are difficult to interpret because the mean of all mortgage borrowers is a statistical construct which turns up some puzzles. The dual gross income of all borrowers is in London £71k which is £9k lower than for London first time buyers; but the dual gross income of all borrowers at £42k in Wales is £6k higher than for Welsh first time buyers. Our tentative explanation is that this reflects the relentless appreciation of London property which slows trading up so that older mortgages are for lesser sums and require less income; whereas in Wales we see the operation of a housing ladder with ordinary citizens trading up from a small, cheap first house

[21] Source: Live tables on housing market and house prices, ONS. See footnote 20 for notes

to something larger and more desirable. That is conjecture and below we draw more reliable inference.

Exhibit 6: All dual borrowers income and spend on mortgage repayments and transport, 2017/18[22] (Current and historic mortgages)

	Dual borrowers gross income £	Dual borrowers disposable income £	Mortgage payments £	Transport spend (household) £	Residual income £
North East	39,921	33,909	5,387	2,709	25,812
North West	44,875	37,277	7,030	3,255	26,992
Yorks & Humber	42,547	35,694	6,136	3,312	26,246
East Midlands	48,237	39,564	6,807	3,791	28,966
West Midlands	42,323	35,542	6,328	3,271	25,943
East	52,829	42,686	8,538	4,467	29,681
London	71,457	55,353	10,223	3,728	41,402
South East	63,045	49,633	9,511	4,779	35,343
South West	52,528	42,481	7,592	3,968	30,921
Wales	42,357	35,565	6,588	3,292	25,685
Scotland	48,448	39,706	7,036	3,848	28,823

What the exhibits do bring out is the considerable importance not of gross income but of retention rates and the very variable taper from gross to residual income. The normal retention rate for dual income mortgage owners is 50% + or - 5%. And Welsh borrowers tend to be above the bar while London borrowers are below because of the combined effects of income tax and bigger mortgages in London.

[22] Source: Live tables on housing market and house prices, ONS and Family Spending, ONS
Notes: Family Spending data is from year end 2017. https://www.thesalarycalculator.co.uk/salary.php is used to calculate gross income.

Exhibit 7: Average of all dual income borrowers percolation of gross income , 2017/18[23]

	Dual borrowers gross income %	Dual borrowers disposable income %	Mortgage payments %	Transport spend (household) %	Residual income %
North East	100.0	15.1	13.5	6.8	64.7
North West	100.0	16.9	15.7	7.3	60.1
Yorks & Humber	100.0	16.1	14.4	7.8	61.7
East Midlands	100.0	18.0	14.1	7.9	60.0
West Midlands	100.0	16.0	15.0	7.7	61.3
East	100.0	19.2	16.2	8.5	56.2
London	100.0	22.5	14.3	5.2	57.9
South East	100.0	21.3	15.1	7.6	56.1
South West	100.0	19.1	14.5	7.6	58.9
Wales	100.0	16.0	15.6	7.8	60.6
Scotland	100.0	18.0	14.5	7.9	59.5

For first time dual income buyers the difference is between residual income of 48.6% in London and 57.9 % in Wales; for all borrowers the comparable ratios are 57.9% and 60.6%. The really big difference is not between regions but inter- generational between those households repaying recent mortgages and those repaying older mortgages and households of over 60s who have paid off their mortgages. Those with paid off mortgages have retention rates of 65% or even higher. If we crudely remove the mortgage payment from the dual income, all borrowers household, then we get a retention rate of 72.2% in London and 76.2% in Wales. If elderly property owners are still in employment or have a DB[24] pension plus state pension that brings in the equivalent of a low wage, they can be comfortably placed on low incomes because such older owner occupiers will routinely take 65-70% of their gross income as residual.

[23] Source: Live tables on housing market and house prices, ONS and Family Spending, ONS. See footnote 22 for notes.
[24] Defined benefit pensions are occupational scheme that guarantee a defined level of benefit at retirement based on employee's length of service and salary.

(6) Foundational liveability (b) housing and wealth effects

Income analysis is insufficient because housing not only directly effects residual income but also indirectly influences wealth which has feedback implications for income. It is easier to say this than to tease out all the complications around the accumulation of wealth by various households in different income positions across the regions. But it is possible to understand the connections and lay out around some of the complications of owner occupancy, so the importance of the wealth feedback effects are highlighted.

As we have already noted, the linkage to wealth accumulation works to the disadvantage of renters and to the advantage of property owners: rent is lost income which is never found again by the tenant; but for the owner occupier or the landlord, a mortgage buys assets which congeal as wealth. And for the whole period since the early 1990s house prices have appreciated (albeit unsteadily) so that house property has become an engine of household wealth accumulation. This is relevant when as we have seen above roughly 25% of households own outright another 25% are buying on mortgage and just under 20% are private renters whose landlords benefit from property appreciation.

Housing ownership matters because in all UK regions, housing and pensions are the two main forms in which households hold their wealth. As the exhibits below show, across the whole UK, housing in 2014-16 accounts for 35.8% of household wealth and private pensions for 41.7% and in every region UK households hold more than 75% of their assets in these two forms. But there are then interesting differences between regions caused by differences in price level in the regional property markets. Households in London hold 48% of their wealth in property, other Southern regions hold more than 35% in property but in Wales it is just 31%. The mean household has £314k of property wealth in London and just £124k in Wales with broadly similar levels of private pension wealth.

Exhibit 8: Regional analysis of total household wealth, 2014-16[25]

	Property Wealth (net) %	Financial Wealth (net) %	Physical Wealth %	Private Pension Wealth %	Total Wealth £m	Average (mean) total wealth per household £	No. of households No.
North East	26.0%	10.0%	12.0%	52.0%	369,182	310,029	1,190,800
North West	29.0%	11.0%	11.0%	49.0%	1,188,269	393,714	3,018,100
Yorks & Humber	31.0%	12.0%	13.0%	44.0%	872,703	374,486	2,330,400
East Midlands	32.0%	12.0%	11.0%	45.0%	796,315	407,281	1,955,200
West Midlands	33.0%	10.0%	11.0%	45.0%	873,797	370,803	2,356,500
East	37.0%	11.0%	10.0%	42.0%	1,254,278	495,586	2,530,900
London	48.0%	16.0%	7.0%	29.0%	2,150,393	656,328	3,276,400
South East	38.0%	16.0%	8.0%	39.0%	2,457,130	673,020	3,650,900
South West	37.0%	11.0%	10.0%	42.0%	1,235,081	533,720	2,314,100
Wales	31.0%	9.0%	11.0%	49.0%	530,963	397,368	1,336,200
Scotland	27.0%	10.0%	12.0%	52.0%	1,050,033	442,977	2,370,400

The mean difference between regions is significant because it indicates how more expensive house property in London and the South has a levered effect on wealth accumulation. But that difference is cross cut by the effect of household position in the income quartiles within each region: the mean household in London holds more property wealth than in other regions but low-income groups in London and all the other regions have few assets in the form of property or anything else. Thus, housing is a massive generator of internal wealth inequalities within all regions when house prices appreciate. In any recent period, higher income households within each region start with more assets in the form of property and pensions and claim the lion's share of any gains.

[25] Source: Wealth and Assets Survey, Office for National Statistics.

Exhibit 9: Average (mean) household wealth by type, 2014-16[26]

	Property Wealth (net) £	Financial Wealth (net) £	Physical Wealth £	Private Pension Wealth £	Total Wealth £	Property Wealth (net) £	Financial Wealth (net) £
North East	81,430	29,733	37,366	161,500	310,029	81,430	29,733
North West	113,895	45,252	41,896	192,671	393,715	113,895	45,252
Yorks & Humber	117,009	46,149	47,542	163,786	374,486	117,009	46,149
East Midlands	129,044	47,563	46,707	183,966	407,281	129,044	47,563
West Midlands	121,691	38,807	42,642	167,663	370,803	121,691	38,807
East	181,493	56,514	49,706	207,872	495,586	181,493	56,514
London	314,227	108,231	45,812	188,058	656,328	314,227	108,231
South East	253,960	106,182	53,632	259,246	673,021	253,960	106,182
South West	194,970	60,206	53,993	224,551	533,720	194,970	60,206
Wales	123,589	35,106	42,057	196,616	397,368	123,589	35,106
Scotland	120,374	42,290	51,343	228,971	442,978	120,374	42,290

Some of these magnitudes and effects are tracked in exhibits 10 and 11 below which summarise the UK regional data and present data on two income quartiles and the median so we can track the effects of household position within the income distribution. We have deliberately excluded the fourth quartile of bankers, accounting partners and such like, so that the exhibit compares ordinary middle-income middle-class households in Q3 with the less fortunate group in Q1 and the median household. For each group, the exhibits show the stock of household wealth by region in 2006 and the change in household net wealth over the period 2006 to 2016. Household net wealth is calculated as house valuation minus outstanding mortgages, net pension fund accumulations and other net financial asset gains.

[26] Source: Wealth and Assets Survey, Office for National Statistics.

Exhibit 10: Distribution of total household wealth by region, 2006-2008[27]

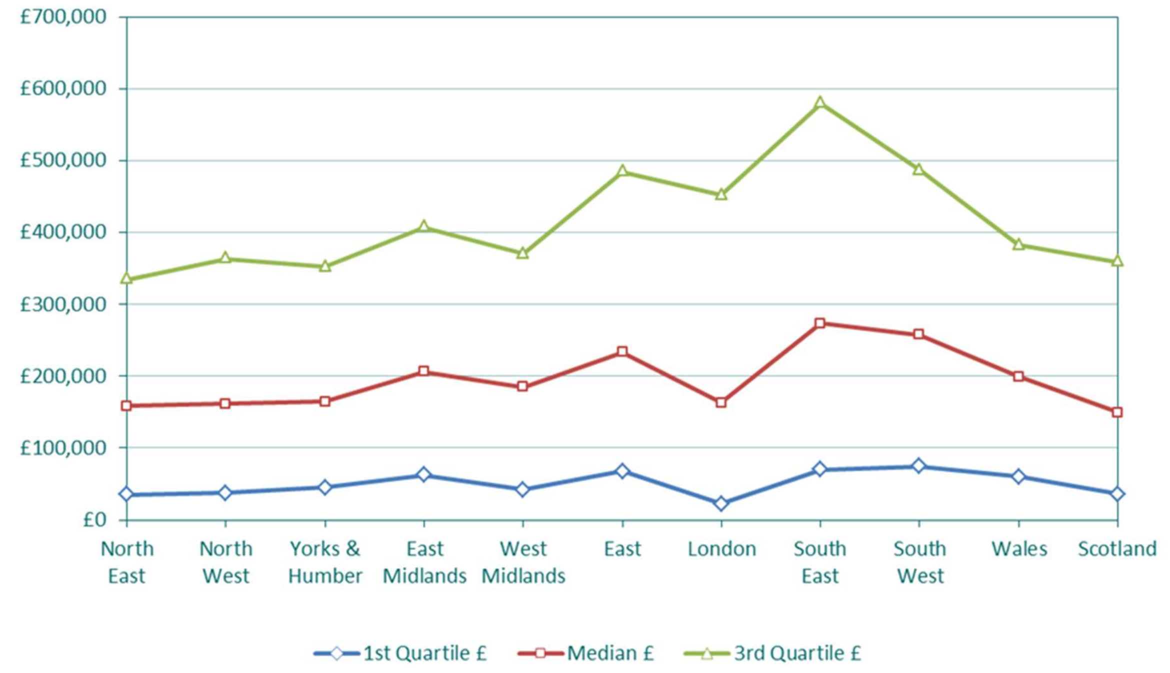
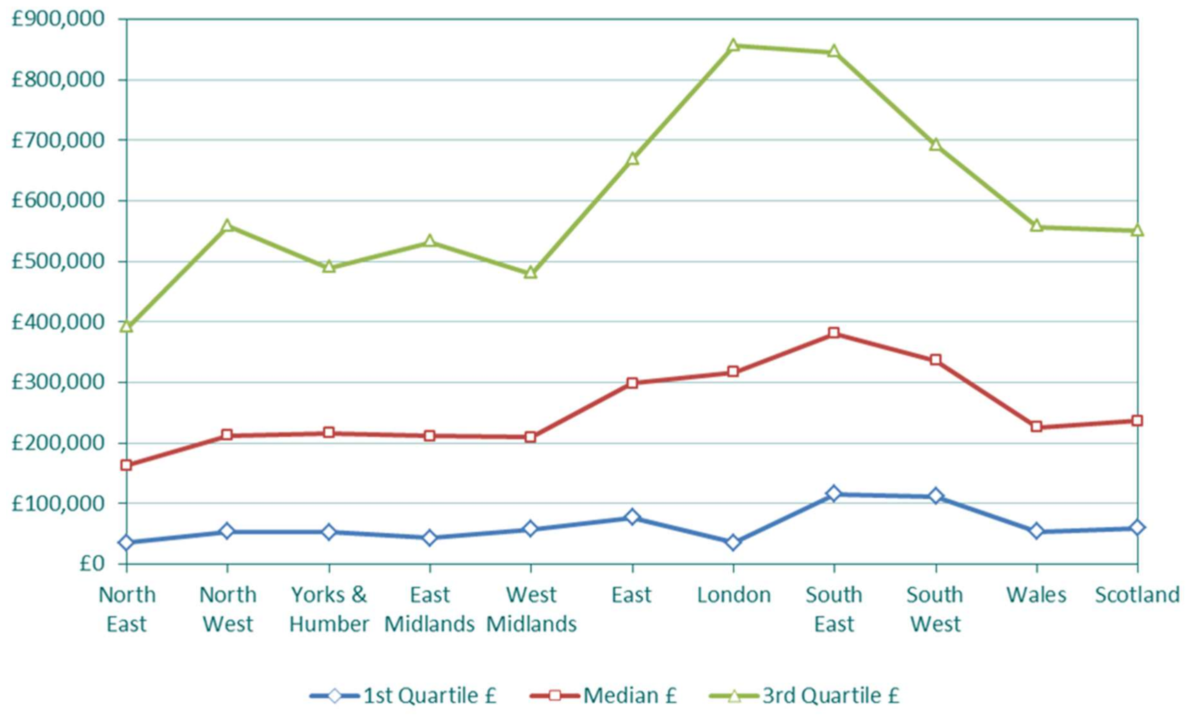


Exhibit 11: Distribution of total household wealth by region, 2014-2016[28]



[27] Source: https://www.ons.gov.uk/peoplepopulationandcommunity/personalandhouseholdfinances/incomeandwealth/datasets/financialwealthwealthingreatbritain Notes: The data is for net wealth (property, pensions and financial assets) after deducting liabilities from these asset classes. The exhibit shows first quartile, median and third quartile households and the change in net wealth between over the period 2006 to 2016.
[28] See footnote 28 for source and notes.

The first point in the exhibits above is that in 2006 household wealth correlates strongly with position in the income distribution; the bottom quartile have less than £100k of wealth in all regions while the upper middle 3rd quartile households in 2006 typically have £300-600k of wealth with the South East actually ahead of London in that first year.

The increase in household wealth 2006-16 again correlates with income position. Q1 households in London and in Wales make no or negligible gains in household wealth. Whereas (outside the north east region) Q3 households gain £100 -400k, All the increases in net wealth are captured by the upper income groups. And the gains of the upper income groups are magnified by the hyperactive property markets of London and the South. Three regions (the East of England and London and South East) are significant beneficiaries because they capture about 50% of total wealth accumulation during this period.

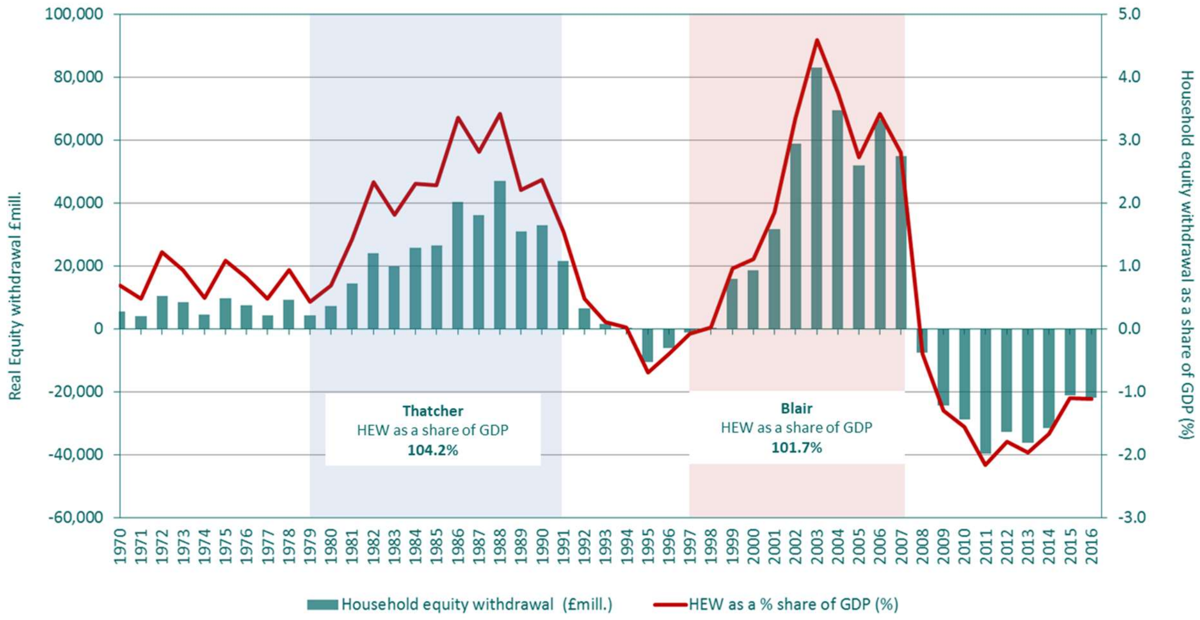
The gains in London are quite spectacular and heavily skewed towards upper income groups. The nominal increase in wealth for the first quartile London household was a negligible £12.5k but for the third quartile it was £404k. For the third quartile household, this is a gain of £40k per annum unearned for a whole decade; the gains on housing are completely untaxed. This is nice non- work if you can get it because this 3rd quartile household capital gain in London each year equals the earned income of many poorer two income households in the provinces.

After outlining these wealth effects, we can finally turn to the interaction between wealth in the household balance sheet and income in the cash account. The London owner occupier household in an upper income group makes balance sheet gains which have a cost in its cash account if they are bought with mortgage payments. But many owner households have older mortgages on cheaper property or paid off mortgages. And capital gains on housing are not simply paper gains which owners cannot realise in their lifetime.

There is a strong feedback effect to income and spending. Gains on housing can be and are realised through remortgage against higher property values which allows cash withdrawal that boosts residual income. The UK market for retirement lifetime equity release has increased to £3bn in 2017[29] and households re-mortgaging can still extract additional funds to buy a new car of do up the kitchen. There is a clear relation between GDP growth rates and housing equity withdrawal summarised in the graph below. This suggests the main driver of GDP growth under Thatcher and Blair was consumption demand leakage from appreciating house prices. And, as interest rates have fallen, households are accelerating their repayments turning equity withdrawal negative but this adds to the squeeze on household residual income available for spending on other goods and services.

[29] https://home.kpmg.com/uk/en/home/insights/2018/05/accelerated-growth-expected-in-the-uk-equity-release-mortgage-market.html

Exhibit 12: UK household equity withdrawal and its share of GDP[30]



(7) Foundational liveability of households and in places

At this point we can refine and focus the concept of foundational liveability which was provisionally defined as residual income after housing costs. The income tranching method gives only a crude first approximate measure because foundational well-being does not simply depend on individual consumption from disposable and residual income; foundational well-being depends also on collective investment in foundational systems of networks and branches and on public funding of free or subsidised services. But the approximation is good enough to bring out some basics because our empirical analysis of owner occupancy in the two preceding sections shows how liveability is defined by the intersection between regional house prices, generational effects and household position in the local hierarchy of income and claims on wealth accumulation.

Liveability is primarily a characteristic of households which varies in places by type of household; and varies in ways which have no direct relation with per capita GVA or disposable or gross income per capita. Most existing places (regardless of per capita GVA) are liveable for some types of household and unliveable for others. The ideal of a region or even a locality which is liveable for all types of household is a fine but remote ideal in a country like the UK. The aim of public policy is to make localities liveable for more households. From this point of view, local and regional public policy is not about "making the economy work" to build competitiveness but about affordable housing and the collective investment and service funding to extend foundational liveability.

[30] Source: Bank of England and ONS.

This problem is not concentrated in laggard regions because our empirics show that liveability is compromised when housing is unaffordable for many households in all regions (and, more clearly in high GVA per capita income regions and cities). Most clearly, the household new entrant to owner occupancy requires a relatively high income of more than £80k in London and £37k-40k in the provinces. Given this discrepancy in income required (and our broader account of the wealth circuits), the idea that public policy should mostly concentrate on upgrading the productive economy in Wales to close a GVA gap seems perversely unrelated to what's been going on since the 1980s.

London has acute liveability problems for new entrants (even for two income households because median London individual earnings are £35k) Decent owner occupied or rented housing is priced so that it is out of reach or encourages crowding or squeezes residual income. And this leaves many households excluded and trapped in unliveability by unaffordable housing.

The London picture is complicated because many households are older, accidental beneficiaries of earlier lower historical prices or paid off mortgages. Others in the rented sectors are exiguously protected by housing benefit or the availability of social housing. But these depend on maintaining a framework of social protection in a world where the political classes can casually create hostile environments, either explicitly through housing benefit caps or half unintentionally through squeezing social landlords so they start to behave like commercial developers

Affordable housing is a key driver of liveability in laggard regions with low earned incomes. The most "unsuccessful" regions by GVA are those where one median earner could hope to buy a house if it had a below average regional price. We call this the Morriston syndrome because this was the place which showed the authors that a low income and unfashionable place could be very liveable.

Foundational liveability changes the public policy criteria for judging the success and failure of places. Success is about whether places work in a liveable way for many types of households. Not whether they are deficient by the GVA measure or lack the accoutrements of stylish middle class living

- we shouldn't judge success of places from GVA or any other proxy for income level; low wage places can be very liveable if we pay attention to things other than wage levels.
- outward appearances can mislead; Woodfield St in Morriston lacks hip coffee bars, artisan bread and craft beer but it does have a Greggs and a Jenkins, a great library and 3 value supermarkets within 1.5 miles

Variable housing costs have some role in equalising residual income for upper income groups in different regions. But housing is also the great accelerator of wealth inequality because of the untaxed gains it delivers to households in the top two quartiles.

A preoccupation with current income earned is increasingly uninformative in a financialized society where every household has a balance sheet. Many of our household balance sheets are wrecked with debt or negligible in terms of assets but some are asset rich and others will be paying off debts to buy assets. Over the past decade since the 2008 financial crisis, the balance sheet is a crucial driver of differences within and between regions which consistently benefit higher income and older households.

The household balance sheets (via the asset purchases of owner occupiers and landlords) are doing a thoroughly unacceptable job of increasing wealth differences. The key economic advantage of London is not high average gross earned income but the ability of groups with high incomes to turn the margin above residual into assets via purchase of property in a high and rising market (which has nothing to do with the productive economy). Older households with paid off mortgages everywhere take more of their gross income as net residual and those with older mortgages can through remortgage or downsizing turn capital gains into current consumption.

This is not an isolated British phenomenon. As Ryan Collins demonstrates, all the other advanced national economies which deregulated credit for house purchase after the 1980s have a problem about the growing unaffordability of owner occupancy[31]; and we would add that always works differentially to reinforce the GVA advantage of growing urban areas, wherever they may be within such countries. At national level, Rognlie's Brookings Paper[32] returns to examine Piketty's r > g explanation of growing wealth inequality and shows that, in the USA, the wealth accumulation comes out of property appreciation. This evidence is important because it brings out an important point about mechanics within an orthodox macro frame: it is not that the macro economy works apart from the (rectifiable) blemish of high property prices, the macro economy works through high property prices.

And this of course has implications for how we see the regional problem. Quite complicated implications. Because liveability as a public policy objective does not correlate neatly with the revealed private locational preferences of individuals. Young, single individuals in all economies go to where the jobs are (and often compromise by sharing poor housing). And in a politically and economically centralised country like the UK, for the past 25 years the jobs are in London whose consumption is in recent decades continuously supercharged by rising property prices. Thus, in the period from 1997-2017, London has a 26% increase in population from 7 million to 8.8 million. Wales, by way of contrast has an 8% increase in population from 2.9 to 3.1 million. This is broadly in line with the 6.8% increase in the North West and the 3.0% increase in the North East.

As a result, through the whole period 1997-2017 London retains a completely different age composition from that of Wales or the North of England. As in the exhibits below. This then produces a completely different set of economic possibilities, trajectory and secondary

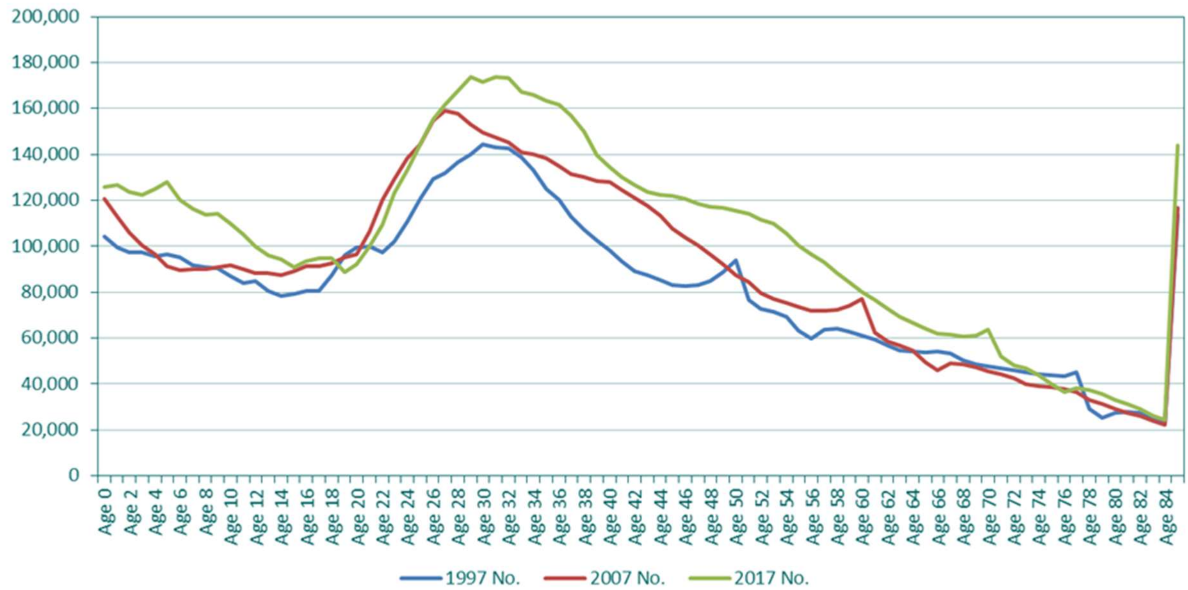
[31] Ryan Collins, J. (2018) *Why Can't You Afford a Home.* Cambridge: Polity

[32] Rognlie, M. (2015) "Deciphering the fall and rise in the net capital share" *Brookings Papers on Economic Activity* https://www.brookings.edu/wp-content/uploads/2016/07/2015a_rognlie.pdf

economic characteristics. London will clearly lead in business start- ups which will be by the young meeting multifarious demand. Whereas Wales will be more interested in the death rate of defined benefit pensioners and its impact on demand; in Swansea, the over 65s account for 18% of the population and the legacy effects of DB pensions and paid off mortgages mean they probably account for 25% of final consumption demand.

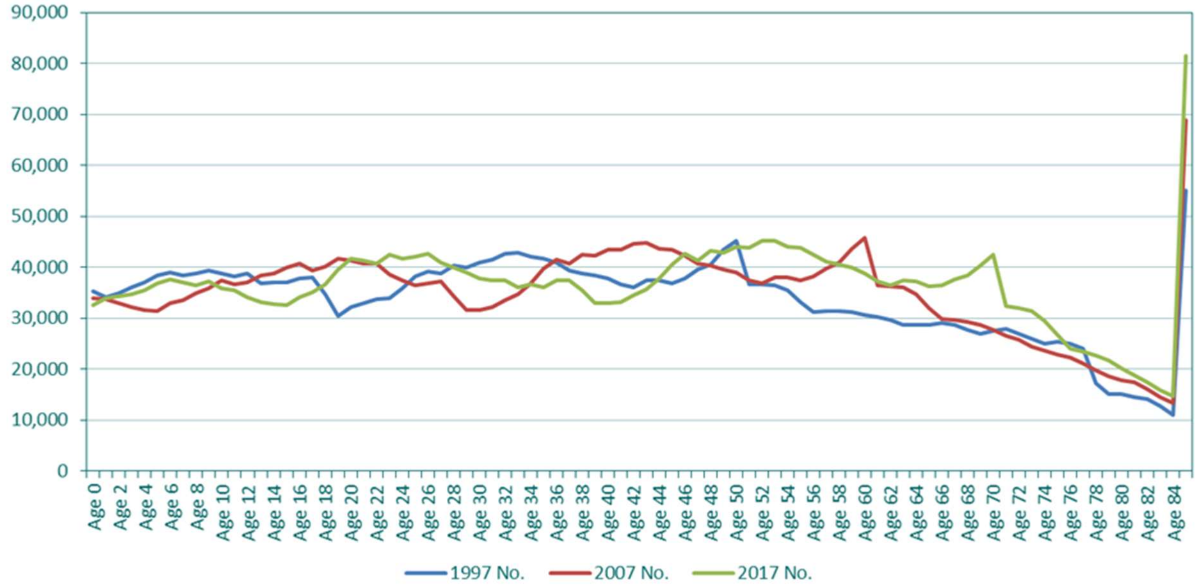
The different trajectory of London should not be mis-recognised as the internally generated and productively virtuous economics of agglomeration. The foundational economy will always remain as a stabiliser in London as elsewhere; but the other London economies would not be dynamic if political and economic centralisation were reversed and the flow of cheap, unregulated credit into property was checked. And there is already a question about the young immigrants who are already in London: will they costlessly disperse to work and bring up families in other regions or countries; or will they require family accommodation in Greater London? If the latter, this has a public cost in terms of building on the green belt and subsidies for large scale movement by upgraded transport infrastructure

Exhibit 13: London population by age in 1997, 2007 and 2017[33]



[33] Source: Nomis, ONS. Note the spike at the end of the graph is due to the amalgamation into an 85+ category.

Exhibit 14: Wales population by age in 1997, 2007 and 2017[34]



(8) How does foundational liveability change the regional problem and policy?

If we have changed the metrics about regional inequalities and begun to recognise the complexities of cause and effect relations, what does this imply for how we see the regional problem and what we do as regional policy? In considering this issue we should recognise that GVA encourages a main stream view about absences and productive deficiencies in lagging regions whose GVA indicates low wages and productivity; and this is already resisted by an alternative radical narrative about the presence of the economic and political power of London in an overly centralised country.

The GVA metric and the broader productivity debate encourage the main stream view, that the regional problem is a matter of productive absences in the laggard regions on the periphery. The laggards do not have enough high earned income generating activity in them and the onus is on laggard regions to raise output/ income per capita GVA from "productive" market activities. In the alternative radical narrative, the regional problem is the political and economic presence of London at the centre which has claimed more than its share of everything including transport infrastructure spending and financial services revenue because it has a basically imperial, extractive relation to the provinces.

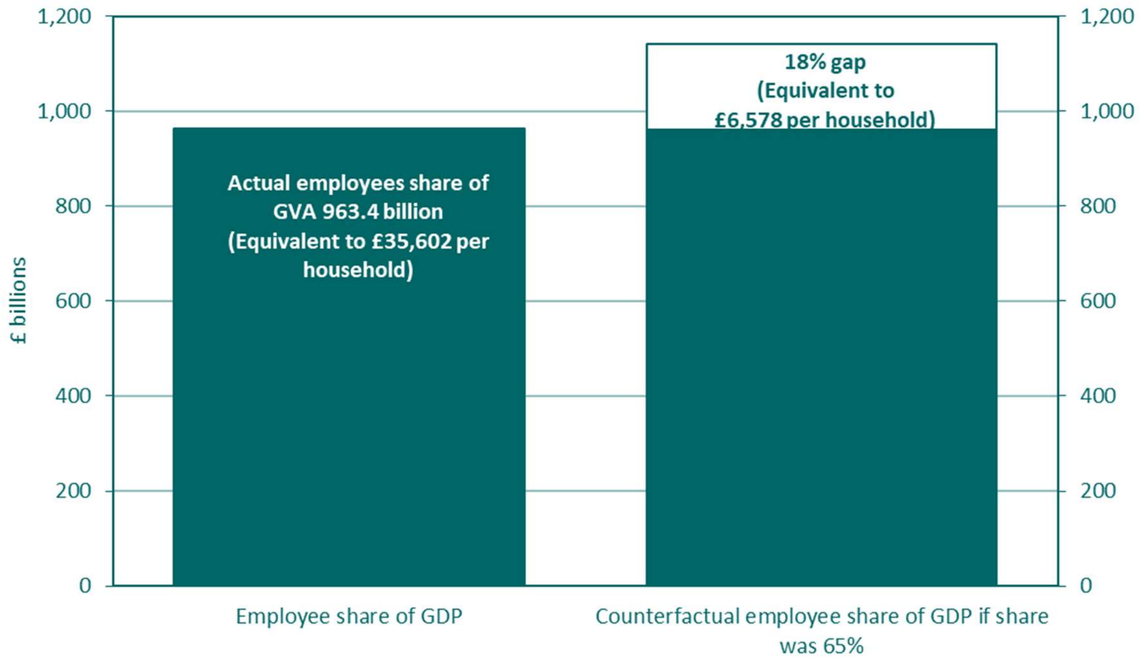
The mainstream policy approach of GVA growth is problematic in many ways. To begin with, its objective can only be rationalised if we ignore all the disconnects between higher GVA per capita and foundational liveability or any other economic benefit for the mass of households. Because GVA is not a fund freely available to households in the bottom half of the income

[34] Source: Nomis, ONS. Note the spike at the end of the graph is due to the amalgamation into an 85+ category.

distribution, from which they can draw to individually pay themselves more and then collectively pay for health, care and the other foundational things of value.

And this objection is not dealt with by saying the aim is inclusive growth because the advocates of inclusive growth in the UK generally will the end without the means. They are not, for example, prepared to encourage strong unions which could strengthen labour's bargaining position to reverse the 50-year decline in labour's share. The UK labour share is currently 55% and if it moved back to 65% as in 1970s, wages would be 18.5% higher. This lever is in any case increasingly irrelevant in a regional economy like Wales where 30% of the workforce is now employed in micro firms employing less than 2.

Exhibit 15: Actual and counterfactual UK employees share of GVA in 2016[35]



More fundamentally, regional and UK central policy makers are trying to control the uncontrollable because they rely on a narrow range of orthodox policy instruments which almost certainly cannot deliver higher GVA by redressing productive deficiencies either in the existing stock of firms or by attracting new investment. (And are reluctant to accept that economic growth is heavily dependent on a cyclical housing market fed by easy credit which leaks into consumption demand via re-mortgaging and downsizing)

Regional and national policy makers meanwhile robotically deliver more of the same. The Welsh Government perseveres with approved policy interventions like transport infrastructure and upgrading skills to "make the market work"; like other regions, Wales lives

[35] Source: ONS, https://www.ons.gov.uk/economy/grossdomesticproductgdp/compendium/unitedkingdomnationalaccountsthebluebook/2017/uknationalaccountsthebluebook2017 Note: Long-run data on employees share of GVA is also available from https://web.archive.org/web/20170810183836/http://budgetresponsibility.org.uk/docs/dlm_uploads/WorkingPaperNo1-Estimating-the-UKs-historical-output-gap.pdf

with the consequences of a 30-year national experiment in blanket "business friendly" concessions to encourage employment by de-regulating, lowering tax rates and tolerating tax avoidance.

The consequences are disappointing or perverse. A deregulated labour market proliferates poor quality jobs which increase the demand for publicly funded wage subvention. Meanwhile corporate big business and fund investors largely do what they were going to do in any case and pocket the incentives which are hugely expensive because they are no longer selective. Business incentives since the 1980s have involved across the board lower corporation tax rates and concessions on interest payments and tax avoidance which make profits tax optional. In this way, main stream national and regional policies become part of the problem not the solution.

There is more to be said for the radical view that the UK is over centralised and London's political and economic relation to the regions is malign. London limits local and regional political power, centralises much high end (private and public) service employment and decision making, consolidates revenues from its hinterland to a financial centre. A capital city of this size also requires the support of huge social overhead capital investments in transport systems, sewerage, Thames barrage and all the rest which squeeze out the more modest requirements of regions in the North and West for electrified rail and such like.

But the essentialising of "London" as the evil centre is not justified. Because London is the epicentre of the national crisis about housing affordability, it includes many more distressed young renters than any other region as well as the fattest of fat cat property owner occupiers. London is the Brecht vision of one place realised as hell for the young and property poor and heaven for the old and property rich; and of Hugo's vision that the rents of the poor sustain the wealth of others. And London is at the leading edge of a broader national problem about house prices increasing to create growing problems about unaffordability and unliveability for younger new entrants even in peripheral rural areas like the Lleyn or Cornwall in the West of England.

The idea of which regional differences matter and how they should be managed and closed has to be rethought. Public policy needs to focus on what's relevant, manage what's controllable and deliver on socially meaningful objectives. Closing regional differences in GVA is a poor policy objective because such differences no guide to liveability defined by the intersection between regional house prices, generational effects and household position in the local hierarchy of incomes and wealth claims.

Relevance means addressing the UK regional problem of the excess of wealth accumulation in the leading regions of London and the South East which is at the same time making housing unaffordable for so many ordinary Londoners. This London housing bubble has lasted two generations and will continue in a stop/ start way as long as unregulated credit fuels house prices which will continue to rise in relation to income inside and outside London. The number one political challenge for regional policy is taxing unproductive, unearned capital gains; and regulating the mortgage market to check long run appreciation of house prices while hoping the whole precarious structure built on post 2008 low interest rates does not come crashing down in the meanwhile

The long run trends of house prices in relation to median earnings are sobering. The problem is not that (real) individual earnings growth has stalled since the financial crisis but that nominal house prices have (with leads and lags) outrun nominal earnings increases in the long run. In England and Wales as a whole, the trajectory from 2002-2016 is that national median prices have moved from 5 times single median gross earnings to 3.9 times dual gross earnings This is a multi- decade consequence of easy credit since the 1980s reinforced by cheap credit with low interest since the 2008 financial crisis which effectively reduced the cost of borrowing every £1k. But the post 2008 experience is interestingly divergent. The rise in the ratio of prices to dual gross earnings of 3.1 in Wales all took place before 2008; the ratio in London simply increased faster after 2008. The median house in London has risen 2002-17 from 6.9 to 13.2 times individual median gross earnings in London; and from 3.4 to 6.6 dual median earnings.

Exhibit 16: Median earnings per individual and median house prices[36]

	England & Wales		North East		London		Wales	
	Median gross earnings £	Median house price £	Median gross earnings £	Median house price £	Median gross earnings £	Median house price £	Median gross earnings £	Median house price £
2002	20,596	104,000	18,075	59,500	25,235	174,000	18,411	67,500
2003	21,387	125,000	18,349	72,000	26,201	195,000	19,156	82,500
2004	22,317	145,000	19,311	91,000	27,046	215,000	20,211	108,000
2005	23,197	155,950	20,132	105,000	28,177	228,000	20,998	124,000
2006	23,604	164,000	20,431	117,000	28,671	240,000	21,155	130,000
2007	24,300	174,000	21,026	121,000	29,841	250,000	21,589	139,000
2008	25,397	175,000	21,872	121,500	31,097	265,000	22,324	138,000
2009	26,000	165,000	22,847	118,000	31,941	250,000	23,124	130,000
2010	26,113	178,000	23,184	124,500	32,003	280,000	23,490	135,000
2011	26,307	177,000	23,204	118,500	31,852	292,500	23,606	130,363
2012	26,643	180,000	23,769	119,000	32,509	297,500	23,918	133,000
2013	27,189	183,000	24,234	121,000	32,750	315,000	24,427	133,500
2014	27,346	190,000	24,805	125,000	32,768	353,000	24,848	138,000
2015	27,693	204,000	25,232	130,500	33,109	390,000	25,254	142,950
2016	28,340	215,250	25,660	133,417	33,694	435,000	25,755	148,000
2017	28,952	225,000	26,061	135,000	34,752	460,000	26,327	150,000

[36] Source: Ratio of house price to residence-based earnings (lower quartile and median), 2002 to 2017, ONS

Exhibit 17: Ratio of median gross earnings of individuals and dual earners to house prices[37]

	England & Wales		North East		London		Wales	
	Ratio of		Ratio of		Ratio of		Ratio of	
	Gross earning to house price	Dual gross earning to house price	Gross earning to house price	Dual gross earning to house price	Gross earning to house price	Dual gross earning to house price	Gross earning to house price	Dual gross earning to house price
2002	5.0	2.5	3.3	1.6	6.9	3.4	3.7	1.8
2003	5.8	2.9	3.9	2.0	7.4	3.7	4.3	2.2
2004	6.5	3.2	4.7	2.4	7.9	4.0	5.3	2.7
2005	6.7	3.4	5.2	2.6	8.1	4.0	5.9	3.0
2006	6.9	3.5	5.7	2.9	8.4	4.2	6.1	3.1
2007	7.2	3.6	5.8	2.9	8.4	4.2	6.4	3.2
2008	6.9	3.4	5.6	2.8	8.5	4.3	6.2	3.1
2009	6.3	3.2	5.2	2.6	7.8	3.9	5.6	2.8
2010	6.8	3.4	5.4	2.7	8.7	4.4	5.7	2.9
2011	6.7	3.4	5.1	2.6	9.2	4.6	5.5	2.8
2012	6.8	3.4	5.0	2.5	9.2	4.6	5.6	2.8
2013	6.7	3.4	5.0	2.5	9.6	4.8	5.5	2.7
2014	6.9	3.5	5.0	2.5	10.8	5.4	5.6	2.8
2015	7.4	3.7	5.2	2.6	11.8	5.9	5.7	2.8
2016	7.6	3.8	5.2	2.6	12.9	6.5	5.7	2.9
2017	7.8	3.9	5.2	2.6	13.2	6.6	5.7	2.8

This is not recognised as the regional problem because our capitalism has moved on with financialization but GVA / GDP is stuck in a 1940s mode of thinking where earned incomes are primary. This is reinforced since the financial crisis in 2008 by increasing national government reliance on expansive monetary policy which remains fixated on 1970s issues about commodity price inflation while it unintentionally boosts asset price inflation which has much more radical redistributive effects.

At the same time, under the rubric of controllable and socially meaningful outcomes we should be aiming to boost liveability by making housing more affordable right across the UK. Good quality affordable housing is everywhere important in itself and as a major determinant of net residual income. As Ryan Collins argues we cannot do that by "building more houses"

[37] Source: Ratio of house price to residence-based earnings (lower quartile and median), 2002 to 2017, ONS. Note: Dual gross earnings category is calculated by doubling of the median gross earnings of individuals.

because the problem is unlimited credit meeting a finite supply of house property[38]. In our view, we need to build more social housing which disconnects housing stock from wealth accumulation circuits and disconnects renting households from markets and insecurity of tenure.

As part of a broader commitment to collective provision of goods and services (after we stop assuming high wages deliver liveability) collective consumption through provision of providential services like health and care or utilities like transport becomes crucial. There is no good reason why a low GVA per capita region like Wales could not have a world class adult care system. And the idea of a laggard region and its associated problem definitions could be quietly buried while the Welsh had the necessary debate about how they want to be excellent in foundational provision for all our citizens.

Next steps

This is a short working paper which aims to float important ideas and break up the log jam in main stream thinking about spatial and territorial differences. More research is needed so that evidence and argument can develop and refine what we have argued in this paper. All our argument in this paper is provisional and readers should expect revisions.

[38] Ryan Collins, J. (2018) *Why Can't You Afford a Home.* Cambridge: Polity