# Mind the Gap: Implications of Overseas Investment for Regional House Price Divergence in Britain

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#### Abstract

The UK has had a long standing regional house price gap with London much less affordable than the rest of the UK. Using price data from 1969–2017 we track price differentials through several cycles of boom and bust, and note the growing divergence of London, particularly central London, from the rest of Britain. In explaining this divergence, we highlight the growing importance of international investment since the global financial crisis. We conclude that, although 'Brexit' may have brought the latest long London boom to a close, there is nothing to suggest that the regional house price gap will close. Given the ongoing importance of global financial inflows to major world cities, this has significant implications for how governments approach affordability and housing policy.

#### Introduction

Almost all countries exhibit some form of spatially uneven economic development. In developed countries, one common manifestation of this is the distribution of residential property prices. Traditionally, this is thought to be due to endogenous differences in regional economic prosperity and the role of higher earnings/incomes pushing up prices in more prosperous or attractive areas and depressing them in others. However, these differentials have become particularly marked in the high prices which characterise most of the world's major financial and business centres such as New York, Toronto, Paris, Beijing, Shanghai and Sydney. Britain is no exception to this: the market has a strong South/North divide with average prices in Inner London currently at 4.8 times those of Northern cities such as Newcastle (Tyne and Wear) or Liverpool (Merseyside). The decade since the financial crisis therefore raises an important question regarding inter-regional house price gaps: the run of record-breaking prices in London suggests a range of potential exogenous factors in play—we focus here on international investment—that have little to do with local changes in income, and this calls into question some underlying principles of neo-classical housing market models and consequently has important implications for affordability and for housing policy.

A substantial inter-regional difference should, according to neo-classical theory, encourage the migration of households and businesses to lower-cost locations, resulting in the long-run *convergence* of incomes and economic growth even if at a fairly slow rate (*e.g.* Barro *et al.*, 1991). In a housing context, it is reasonable to expect that the impact of this migration would

then be observed in a set of pricing ripples spreading out over time from the capital to places such as Brighton or Bristol (see: Evans 2017; DTZ 2008) and in the existence of an implicit cap on property values tied to price-to-earnings multiples as well as softening demand. Of course, many economists recognise that factors such as education, sunk costs, place attachment, and regional development complicate this picture substantially and there remains an active debate regarding the rate and type of convergence—absolute or relative—and their co-occurrence (e.g. Sala-I-Martin 1996, Young et al. 2008).

So it is broadly expected that, even if real property prices do not converge, the inter-regional ratios—the regional house price multiples, in other words—should stabilise rather than continue to widen (*e.g.* Holmes and Grimes 2008). However, critical theorists have long argued that interregional differences could persist indefinitely, or even intensify (Smith, 1984), and Myrdal's theory of cumulative and circular causation (1957) also suggests that regional inequalities can intensify over time: under-developed regions in countries like Italy or Britain can suffer from 'backwash effects' that reinforce the advantages of more prosperous regions such as Piedmont, or London and the South East, while the freer movement of goods, services, and capital movements would exacerbate inequality (Myrdal 1959, p.28).

The continued rapid appreciation of prices in London and depressed housing markets in peripheral regions since the onset of the Global Financial Crisis (GFC) adds to this view of the limits of the neoclassical approach. Given the impact of the crisis on the banking sector, we might have expected a significant decline in property values in major financial centres, but aside from a short, sharp correction this has not happened. By the 4th Quarter of 2009 average prices in London had already surpassed their pre-GFC peak and by far the biggest impacts were felt elsewhere in America and Britain. So while the historical data shows the expected cycles and a strong 'ripple effect' emanating from London (Meen 1999; Cook and Watson 2015), the magnitude of the gap between London and the rest of Britain has widened during each cycle to surprisingly little attention from researchers and we argue below that this may be connected two things: first, that housing in London is both shelter and (often international) investment vehicle; and second, that there is an absence of policy levers able to distinguish effectively between the 'use' and investment roles of property.

However, it is not the purpose of this paper to model this process, but to point out that its existence would call into question underlying assumptions—and resulting policy choices—about the behaviour of housing markets in an era of globalisation. Indeed, the work of Fernandez *et al.* (2016), Ley (2017), Walks (2014), Moos and Skaburskis (2010), and Ley and Tutchener (2001) on the role of cities such as London and New York and Vancouver as 'safe deposit boxes' for the global elite point to the increasing role of international capital and investment flows in pushing up property prices. This issue poses the question of whether prices in some of the world's major cities are now driven, at least in part, by global financial

investment flows rather than by purely domestic factors and the policy implications that might flow from continued price divergence. To the extent that this is correct, it could cast further doubt on neo-classical arguments regarding convergence and the appropriate response to global investment flows. We investigate these questions in a specifically British context, focusing on the evolution of the regional house price gap between London and the rest of Britain since the late 1960s.

## Why history matters

A frustrating characteristic of most media discussions of house prices in Britain is its pervasive short-term focus: in a kind of *Groundhog Day*, a reader could flip between articles from the 1980s, 1990s, and 2000s and, changing only the year, find similar fears of a boom or bust in London and its likely impact on the remainder of the country. When there is a boom, and we have now witnessed four since the early 1970s, the media focus on the fact that for the price of a flat or small terraced house in London it is just about possible to buy a whole terrace of houses in some depressed part of Northern England, or even a modest baronial estate in Scotland (*e.g.* Ivey 2017). When the gap between average prices in London and those elsewhere reaches its greatest extent, the example is usually wheeled out of some miniscule pied-à-terre apartment or 'broom cupboard' in Kensington—usually close to Harrods—which has sold for an astronomical sum.

Earlier modelling work on booms and busts (Muellbauer and Murphy 1997) at the UK-scale had argued that these were driven by debt-to-income ratios, expectations of future rises or falls in one or both measures, and non-linear effects (*i.e.* feedback) amongst other things. Perhaps optimistically, Muellbauer and Murphy (*ibid.*) went so far as to argue that "three forces will dampen the next upturn: unfavourable demographic trends, high levels of debt and high real after tax interest rates... [and] greater awareness by mortgage lends of default risk..." The trajectory of house prices in London and the South East suggests that that confidence was misplaced; however, it has also long been the case that house prices are much higher in London and the South East than they are in the rest of Britain so it's hard to know quite how to reconcile national, regional, and local differences.

In fact, the existence of a Regional House Price Gap (henceforth RHPG) can be traced back at least as far the late 1960s using official house price data, but by Q4 2016, the mean property price in England & Wales (Scottish data is no longer integrated) was £283,000, while in London it was £532,000 (1.88 times higher). Meanwhile, in the North East, the cheapest region, the average was just £172,000: 61% and 32% of the UK and London averages respectively. There is, of course, considerable variation within individual regions (Gray 2012), with high prices dotting the Midlands and the North, and a few areas of lower prices in London and the South East, but the overall trend is clear. Put simply, Britain has a very large and very long-running

North/South RHPG in which proximity to London has always been the best predictor of a region's prices relative to its neighbours. The gap has survived four major residential property booms, including the long boom running from the mid-1990s through to the onset of the GFC in 2007/8, though Holmes and Grimes (2008, p.1542) note that across this entire period "there is constancy in the long-run house prices ratios between all regions" even though the absolute size of the gap has changed considerably.

In many respects the North-South divide is a manifestation of a deeper North-South gap in regional economic structure and prosperity. This difference has been well known since the 1930s, if not earlier (Martin 1988, 2010; Dorling 2010), and it seems obvious that regional house price differences must to some extent reflect differences in economic conditions, income and wealth. To get a sense of the scale of this dynamic: between 2000 and 2010, London alone created more new jobs than the next ten largest British cities combined (Webber and Swinney 2010, pp.6–7) and the South East, East of England, and London regions accounted for more than half of private sector jobs created in the UK during that period (*ibid.*). More recent data from McGough and Piazza (2016) suggests that London contributes almost as much in tax revenue to the government as the next 37 largest cities put together.

A large gap has important implications for both households and governments: first, it affects the distribution of housing wealth and mortgage debt; second, it influences the level and direction of inter-regional migration; and third, it may have an unhealthy impact on government fiscal policy. With more wealth tied up in property assets than ever before, the room to manoeuvre for governments is drastically reduced: significant transaction costs in some markets mean that appreciation is required simply for the new owner to avoid being 'underwater' and a government that presided over falling prices would soon be voted out. In addition, when prices (and rents) are much higher in one city than another, then potential migrants—even highly skilled ones—may stay put rather than relocate, and this has potentially severe implications for labour mobility and, consequently, economic growth (e.g. Hamnett 1992).

Finally, prior to the financial crisis it was also possible to claim that U.K. interest rate policy was unduly affected by the desire to control residential property-led booms in the London area (*e.g.* Peck and Tickell 1992), but that this was having detrimental effects on the rest of Britain through unnecessarily high rates. Monetary policy was also the motor of house price inflation in both the early 1970s and the mid-late 1980s, but the 'new normal' of interest rates at or below 0.5% means that a 'loose' monetary policy—whether domestic or, in a larger sense, global—is clearly going to have an important effect not only in terms of overall lending (*e.g.* Kim and Renaud 2009), but also on the effectiveness of price signals in the capital.

A longer-term view of the RHPG suggests additional issues that must be understood in order to properly contextualise the implications of our findings. In the 1980s and 90s, Hamnett (1983,

1989, 1998) showed that the RHPG could be traced back to the late 1960s, and more recent work has developed evidence of a 'ripple effect' in which increases in property prices start in London and the South East and then diffuse over time and space to other, lower-priced areas (Holmes and Grimes 2008; Cook and Watson 2015; Holly *et al.* 2011). The ripple effect is not unique to Britain, and has been observed in the US (Payne 2012) and South Africa (Balcilar *et al.* 2013) amongst others (see Cook and Watson 2015 for an extensive bibliography), and even if results from New Zealand (Shi *et al.* 2009) nuance our understanding of this phenomenon, spatial structure undoubtedly plays a role in the observed outcomes.

Meen (1999) takes a more sceptical view of spillover effects as the driver of the pricing ripple in the UK, suggesting that debt gearing, income, and unemployment differences may play as significant a role as spatial interaction effects (e.g. migration). However, the GFC and its aftermath call these conclusions into question since several of the 'usual' dynamics—changes in interest rates and incomes, especially—are not obviously in play since both have been essentially flat or falling since the onset of the crisis. Data for the first few years following the GFC appear to show London recovering quickly and strongly while the rest of Britain at best marked time. London has even pulled away decisively from the neighbouring South East region, and it is for this reason that we argue that the 'ripple effect' has been overlaid by a structural divergence between regions seemingly triggered by changing economic and investment dynamics at a global scale and bringing external factors into play in the domestic housing market.

# Understanding regional house prices

Regional house price data is available in some form for all of Britain for the period since 1969. The earliest data in the series is based on a 5% sample of transactions collected by building societies, which were then the dominant mortgage lending institutions. This sample was subsequently extended to include the data from major retail banks when they entered the housing market in the early 1980s. Consequently, although the Land Registry (2017a) has recently begun to track cash-buyers separately from mortgaged-buyers such data is not available over the long run that forms the core of our analysis. So while some data is available for a variety of types of buyers—first-time and existing owner-occupiers, as well as all buyers—and properties—newly built and existing—the simplest and most representative approach to dealing with the varying levels of data provision is to take the entire market 'as is' and to work with simple regional averages. A more sophisticated approach, as embodied in the UK House Price Index (HPI) would incorporate mix-adjustment, but this severely limits the amount of historical data available: many regions have no mix-adjusted prices available prior to 1992. Similarly, although the median would be more robust to outliers than a crude mean, this data is also not available prior to 1995.

Most of the data underpinning this analysis were originally published by the Department of the Environment (DoE)—and its successor, the Department for Communities and Local Government (DCLG)—as statistical Table 505 which drew on a sample from the Regulated Mortgage Survey (RMS) and so never captured cash transactions. In 2010, responsibility for this data set was transferred to the Office of National Statistics (ONS), which instituted several changes including a renumbering of the table (to Table 24) and a policy of rounding the RMS data to the nearest £1,000. Early in the time series, such as in 1969 when the average price of a property in the UK was just £4,640, the rounding has an appreciable effect on the results; accordingly, we have used historical, un-rounded DoE/DCLG figures up to 2010, and the rounded ONS figures from 2011 onwards. To reiterate: we use the simple average of prices and they are *not* mix-adjusted since such data is not available before the 1990s and changing approaches to calculating the House Price Index (the ONS HPI was replaced by the UKHPI in June 2016) may cause needless confusion in the results. Although up to 40% of contemporary property purchases are now known to be cash transactions (HM Land Registry, 2017a), this number is significantly lower in London (25%), though still far from negligible. The dearth of historical data makes it extremely difficult to determine the extent of any impact on our analysis, and while the latest summary report from HM Land Registry (2017b) certainly suggests that cash buyers (average purchase price £506,000) can out-bid those using mortgages (average purchase price £475,000) in principle, in practice a sampling of the data since 2012 suggests little overall difference in price paid.

### Regional price change since 1969

As noted above, the principal objective of the paper is to examine to what extent the cycle of regional house price change noted in the 1980s and 1990s has been maintained over the period of the GFC and its aftermath, and whether the previous pattern of cyclical variation is being overlain by changes rooted London's role in a global real estate market driven by highly skilled migrants and foreign direct investment. Complicating this research is the absence of good data on sales both to overseas investors and to domestic Buy-To-Let (BTL) landlords enabled by the financialisation of mortgages and even, in some cases, by their ability to pay cash for a desirable property to serve as both income-generator and pension pot. Some sense of the extent to which housing operates as a commodity in Britain as well as the different regional dynamics can be seen in the fact that, since 1969, nominal prices have increased by 4,700% across the UK as a whole but by almost 7,500% in London, and yet within that period there have been no fewer than four major booms and busts (see Figure 1), the causes and consequences of which will be briefly reviewed below in order to more fully develop the evidence for regional divergence .

#### Figure 1. Year-on-Year Percentage Change in Prices for All Dwellings by Region

The first boom, in 1971–73, saw average prices almost double, rising by almost 40% p.a. before Chancellor Anthony Barber dramatically raised interest rates in November 1973 by 5

percentage points to try to put a stop to rising prices. This initiative proved successful and the boom came to an abrupt halt, but a property and secondary banking crisis ensued as high mortgage and borrowing rates of about 15% played havoc in the market and led to a four-year slump. A second boom in the period between 1978 and 1980 went largely unobserved, with inflation eroding any gains by 1983. Prices subsequently took off again with a much larger third boom in the 1980s culminating in Chancellor Nigel Lawson sharply raising interest rates to 10% in 1988; again with predictable effects. Both booms were the result of loose money policies.

The early 1990s slump that followed Lawson's increase was probably the longest and most severe of the post-war period (Gentle *et al.* 1994; Hamnett, 1993, 1998). Housing market turnover fell by over 50%, nominal prices fell by almost 10% p.a. in some regions (real prices by much more) and millions of households faced negative equity. During this deep and long term slump some commentators suggested that the UK housing market might never recover and that the era of house price booms was permanently over (see Hamnett 1998 for a discussion). Of course, this subsequently proved not to be the case, but it was not until about 1995 that the housing market began to recover. **Table** 1 provides a summary of price data at five year intervals from 1970-2015.

The long fourth boom saw prices rise steadily year-on-year from about 1995 until 2007, when the crisis brought this boom to an abrupt end. One of the key issues that the long-run divergence hypothesis puts into play is whether London's rapid recovery—particularly visible in the post-2010 phase—is a marker of a new dynamic, or simply the herald of a 5th boom that has only just begun to diffuse outwards from the overheated core where, even with median household earnings of £671 per week (ONS 2016), average prices in the  $3^{rd}$  quarter of 2016 stood at £1.9 million in Kensington & Chelsea and £1.5 million in Westminster. This issue is particularly topical given a sharp increase in 'stamp duty' on sales over £1m in the 2016 budget and the 'Help to Buy' scheme which offers a mix of loans and guarantees for new-build purchases, especially by first-time buyers (HMG 2017), to help get younger households 'on the ladder'.

#### **Regional variation over time**

The pattern of change in *Figure 1* can make it difficult to see how there could be a growing North/South divide, so it is helpful to normalise each region's prices against the national average: *Figure 2* shows the percentage difference between average regional prices and the overall UK average—obviously incorporating sales in all regions—and highlights the cyclical aspect of the RHPG on which most research has focussed (see the extensive review provided in Cook and Watson 2015). Four things emerge from the graph: first, prices in London and the South East are consistently higher than those of all other regions; second, there is a stable long-term hierarchy of prices with London at the top and the North at the bottom; third, the size of the RHPG is at its greatest when prices peak in London; and fourth, the size of the gap subsequently narrows again when prices in the peripheral regions begin to rise while prices in

London and the South East stabilise or fall. Crucially, this pattern seems to have (temporarily?) ceased in about 2005.

#### Figure 2. Percentage Difference between Regional and United Kingdom Reference Prices

It is possible to discern three periods during which the gap narrowed appreciably, roughly: 1971–77, 1989–83, and 2003–05. Of course, these are not quite the periods that we associate with the property booms whose beginning and end points were defined by London-based commentators. Nonetheless, it is also clear that the magnitude of the gap was increasing even before the onset of the GFC: the span between 1998 and 2001 marks a significant widening of the RHPG, even though the rest of the UK began to catch up in 2003. However, it is the period since 2010 that seems to suggest a transition to a different regime: while much of the rest of the UK saw little or no recovery, prices in London pulled away quickly, reaching 180% of the national average by the end of 2015, and it is not difficult to see that with a RHPG of this size there are major obstacles to labour migration and major problems of affordability in London.

#### A widening gap?

We can also examine the RHPG using London prices as the benchmark against which to compare each region. It is clear from *Figure 3* that prices in South East were closely linked to prices in London until the early 1990s, but that in the last 20 years the size of this gap has begun to widen significantly. In 1990 average prices in the South East were at near parity with those in London, but by 2010 they stood at 79%, and by 2014 they had fallen to 69% of those in London. Note too the spatial sorting that emerges ever-more-strongly for the English regions: the ranking of prices over the great majority of this period is effectively what we would get when ranking each region by its distance from the capital. Although the evidence that house price rises have consistently started in London and then diffused outwards has been developed elsewhere (Hamnett 1998, Meen 1999, Cook and Watson 2015), *Figure 3* remains a clear summary of the effect.

#### Figure 3. Percentage Difference between Regional and London Reference Prices

However, the critical point in *Figure 3* is that, in the aftermath of the GFC, although the short recovery in the Midlands and North between 2007–09 would appear to support the 'status quo', the RHPG quickly began to expand again in late 2009. This raises important questions about the general presumption in favour of convergence: in 1969, just prior to the first house price boom, average prices in London were 167% those of the North East, but as of 2015 that figure stood at 286%. This chart also helps us to understand how London has opened up such a large gap with the other regions: the boom of the early 2000s and the recovery beginning in 2010 pushed London's overall gains far ahead of the other regions. It now seems clear that, on average, London prices in 2017 have stopped rising and have even gone into reverse at the top end of the market in central London (RICS 2017). Recent quarterly and monthly price data suggest that

prices in the Midlands and the North are beginning to increase, indicating a new phase in the cyclical variations observed in the RHPG.

At the regional scale it may therefore be more appropriate to describe regional house changes in Britain as being characterised by *both* a cyclical fluctuation in the size of the gap over time *and* a progressive widening of the gap between London and the rest. If this is correct, then it raises important questions about the causes of the growing gap: is it simply a result of growing differences in economic structure and prosperity—particularly given London's global importance in finance and advanced business services such as law, advertising, consulting, and culture—and the occupational and income differences this generates? Or is it also a product of London's role as a focus for international inward investment? We would suggest that, historically, the gap was largely explicable in terms of London's industrial, occupational and income structure with an over-representation of higher income groups compared to the peripheral regions; however, the growing internationalisation of residential property market, lead us to suggest that the capital's attraction as a global investment destination may also play a significant role, particularly in the central boroughs which attract large numbers of overseas investors and speculators.

#### Price Change within London: a role for international capital flows?

In recent years, London has become an increasingly attractive home to international capital looking for a business or leisure pied-à-terre, a safe haven, a good return on investment, or even a luxury 'dorm' for a child at university (Atkinson *et al.* 2016; Badarinza and Ramadori 2016; BNP Paribas Real Estate 2015; Fernandez *et al.* 2016; Knight Frank 2013; Murphy *et al.* 2017; Sá 2016; Savills World Research 2014; Scanlon *et al.* 2017). Principally, these are buyers of 'new build' developments, although the international wealthy undoubtedly also buy period properties in areas of central London like Kensington and Chelsea. Overall, it is thought that overseas buyers accounted for 10.5% of new build purchases in 2014, 13.1% in 2015, and 17.9% in 2016 (Wallace *et al.* 2017, p.7); and the 13% figure is one with which the British Property Federation (2013) and Scanlon *et al.* (2017) appear to broadly concur. The *distribution* of this inward investment, however, is highly uneven with different types of investor active in different parts of the city.

In so-called 'Prime' London—the central boroughs of Kensington & Chelsea, Westminster, and City of London—evidence from the estate agents (Savills World Research 2014) suggests that approximately 50% of all sales in central London are now made to overseas buyers and that this proportion rises to over 70% for properties priced over £2 million. Quite how this squares with the contention a year later that "... over 85% of prime buyers live and work in London, even if many of them originate from overseas" (Savills World Research 2015) is difficult to determine. The British Property Federation (2013) also find that 49% of Prime London sales were to overseas buyers.

This effect can also be seen in Vancouver where Chinese buyers now account for 50% of buyers in some areas of the city (Ley 2017) and even as far afield as New Zealand where foreign investors seem to be driving growth at the top end of the housing market (Geenty and Pannett 2016). Given that there is a strong association between higher-value properties and under- or non-occupancy, and that overseas owners were more likely than domestic ones to have underused property (Wallace *et al.* 2017). A few headline figures from Kensington & Chelsea point, again indirectly, to the overall impact of overseas activity: the borough has the lowest number of residents with UK passports (61%), but was top for EU passports (20%) and second highest for the proportion of Arab residents (4%) after Westminster (8%). And over a period where London as a whole grew rapidly, Kensington & Chelsea actually saw a *decline* in population between 2001 and 2016 of about 5,000 residents (Baker 2012; ONS 2017), which strongly suggests some form of displacement effect. Westminster, the other borough of particular interest, has seen significant international net migration in excess of 10,000 residents per annum (ONS 2017).

However, in Inner and Outer London the picture is very different: here, the greatest proportion of sales to overseas investors are in 'new growth areas' (31%) such as Camden, Greenwich, Southwark and Tower Hamlets, and in Inner London boroughs (32%) such as Hackney, Islington, Lewisham and Hammersmith & Fulham (Wallace *et al.*, 2017, p.8). The British Property Federation's figures (2013) are, perhaps understandably, lower: they suggest that overseas buyers accounted for 20% of activity in Inner London, and 7% in Outer London. So, with the exception of a few 'signature' transactions such as the purchase of most of the 2012 Olympic Village by the Qatari royal family's property investment firm (Kollewe 2011), there is limited overseas activity in Outer London even though it has a much larger share of new-build properties overall. It is the spatial distribution of investment that helps to explain why half of all new-build sales to overseas buyers are thought to have been at values *below £*500,000 (Wallace *et al.*, 2017); this places the majority of such transactions firmly outside of Prime London and highlights the existence of discrete markets in London and—as was observed in Australia (Rogers *et al.* 2015)—in terms of overseas buyers.

There is thus good reason to think that the sub-regional scale is important in thinking about how pricing changes are transmitted across time and space (Ferrari and Rae 2013; Gray 2012). The finer scale data makes it obvious that significant variation *within* London needs to be taken into account. The London Data Store—which uses publicly-available Land Registry data and so dates back only to 1996—highlights the gulf that now separates the most and least expensive boroughs: Kensington and Chelsea has an average property price more than nine times that of Barking and Dagenham. London itself therefore exhibits signs of spatial differentiation with prices in Central London increasingly detached not only from Outer London, but also from parts of surrounding Inner London. This is clearly shown in *Figure 4*: by early 2016 Outer London

prices had reached 194% of the UK average and Inner London prices reached 268%. But in the central boroughs, after a short setback in 2008–9 prices recovered strongly and, even if they have now fallen back, have far exceeded the peaks reached in previous cycles.

# Figure 4. Percentage Difference in Price between Selected London Boroughs and United Kingdom Reference Prices

It is this pattern, which bears no obvious relationship to domestic trends, that has led commentators to focus on the role of overseas investment in pushing up prices (*e.g.* Goldfarb 2013, Boesler 2013; Fernandez *et al.* 2016; Norwood 2016; Wildau 2017). There is already evidence in a time series covering the period between 1973 and 2008 to suggest that London "... is influenced by international developments through its link to New York and other financial centres" (Holly *et al.* 2011, p.2). And Fohoohar (2017) argues that 'world property markets have become totally disconnected from national economies'. This calls into question the utility of purely national analyses of inter-regional house price movements in countries where one or more cities are simultaneously embedded in global markets. Instead, global price differentials and investment opportunities may lead to growing intra-national price differentials as some cities become investment destinations while other cities/regions cater largely to local demand. This mechanism would lead to long-run price divergence, rather than convergence, even as rising prices in prime areas lead to 'spatially displaced demand' (Hamnett, 2009) both within London and beyond.

To the extent that overseas buyers have become increasingly important in Central and Inner London it can be argued that they have played a role in pushing up prices in outer London as well. Since space in the Prime boroughs is highly constrained and it is the underlying availability of land itself that may be driving appreciation (Knoll *et al.* 2015), it is reasonable to expect spillovers: some high-earners who would have at one time settled in Kensington & Chelsea or other choice bits of West London are now looking a bit further out (*e.g.* Hamnett, 2009). As importantly, these displaced bankers will take their expectations of what a 'fair' price for a property in an attractive, but not *quite* so expensive, area should be: these expectations 'anchor' (Tversky and Kahneman, 1974) property prices for buyers and sellers at a new level with the result is that ever more 'ordinary Londoners', who are not able to put down £4–500,000+ for a one bed apartment, are effectively priced out altogether. At the U.K. scale, evidence developed by Ferrari and Rae (2011) suggests that it is, in fact, the most deprived groups who are displaced the furthest because their choice of destination is 'spatially constrained'.

The complicating issue is that it is difficult to disentangle the overseas investor effect from the overall boom in buy-to-let investing which saw prospective landlords snap up 48% of all new homes built in London (British Property Federation 2013); however, if overseas buyers account for almost a third of buy-to-let activity, this makes them major contributors to this dynamic (*ibid.*). One reason for this preponderance in the new-build market is that unlocking financing

for major residential development projects is often dependent on pre-sales of up to 60% of properties to off-plan buyers, and the fact that the U.K. mortgage market has few products to support this kind of delayed transaction (Scanlon *et al.* 2017, pp.21–23). As a result, many projects—particularly in times of domestic crisis—are largely or wholly depending on buy-in from risk-tolerant overseas buyers and it is thought that this may have 'lessened the negative impact of credit constraints' post-GFC (Mardsen, 2015).

#### The 'Brexit' effect

Of course, Britain is in 2017-18 in the throes of a new crisis entirely of its own making: long-term uncertainty over the shape of 'Brexit' has cooled the 'Prime' market considerably. The British Property Federation (2013, p.16) had argued that reasons for purchasing in London included: political stability with support for inward investment; an absence of restrictions on overseas owners; an avoidance of the difficulties afflicting Euro-zone countries; superb long-run returns; currency advantages; and the fact that many buyers have either lived in London or have family living or studying there. Brexit has called several of these assumptions into question with a period of profound *instability* over the future of the U.K. following the referendum and ill-fated election, and a growing perception that the political winds with respect to migration and overseas ownership have shifted. Perversely, while an increase in the 'stamp duty' charged on more expensive properties in April 2016 is thought to have led to a softening of demand up to a point, the post-referendum devaluation of the pound has also made UK property 15-20% cheaper and had the effect of attracting new buyers by offsetting the additional rates (Scanlon *et al.* 2017).

More problematically—if you are an investor—is the risk of a Brexit-driven migration of highly-skilled and highly-paid workers out of London and the impact that this might have on overall demand. Given the limited progress in the negotiations at the time of writing, it seems increasingly likely that the banks relocate parts of their operations, especially those associated with Euro-trading, to sites *inside* the E.U. such as Dublin and Frankfurt at the start of 2018, and that other sectors in which the U.K. currently excels, such as Higher Education, will also face significant negative impacts. However, this warning does carry some important caveats: the risk is not strictly of an overnight exodus of companies and workers, but of a slow decline in the importance of London relative, principally, to New York in the case of finance, and other cities in other sectors. It is important to note, however, the continued importance of U.K. law for contracts, mergers, and other complex transactions, as well as the overall depth of its markets and advantageous time zone (*e.g.* Clark and Thrift, 2004); the sheer scale of London's financial services and supporting industries will be impossible to replicate overnight anywhere else in the world, let alone in Frankfurt or Dublin.

It may therefore not matter as much as commonly thought what kind of Britain emerges one day in early 2019: a low-tax haven might not be significantly more attractive to overseas

investors in London property than one in which overseas buyers are actively discouraged via modest additional taxation. Although this might displace some of the activity around 'signature' properties in Prime London, there is probably little that would completely put off investors who have seen London both as a good one way bet for the last 20 years, and as a place offering an attractively accessible mix of amenity and security. In comparison, Switzerland has for some years operated a much more draconian quota system which sharply limits the number of new overseas buyers to 1,300 per year, broken down by canton and commune. The Swiss approach has worked quite effectively to restrict the impact of overseas buyers and investors, but this not only clearly means that global capital flows into property assets are likely to head elsewhere (*i.e.* to London) it is also fairly clear that such a policy is unlikely to be replicated by Britain where it would likely lead to a further decline in housing production.

Although the nature of Britain's *expected* departure from the E.U. is still unclear, the impact on London property is likely to be driven largely by the interaction between London's attractiveness to foreign investors and the ongoing, and fundamental, dearth of new housing (CBRE 2014). In the decade to 2013, London is thought to have grown by more than a million people, but over the same period the construction of new homes was only 200,000 (British Property Federation 2013). The supply of housing has therefore increased very slowly relative to aggregate demand, so the 'additional' demand from foreign buyers would contribute to increasing prices. But even a severe 'hard' Brexit that hit London's economy hard appears unlikely to put such a dent in housing demand as to lead to across-the-board declines; far more likely is a period of stagnation and low volumes as both investors and owner-occupiers in Inner and Outer London sit tight and wait to see what kind of country—and set of housing policies—emerges.

Although the data provided by the Land Registry is not yet available in the consolidated annual open data that we used, the most up-to-date overview of sales provided by Savills Research (2017) suggests that the areas popular with overseas investors and buyers have weakened significantly, with Central London bearing the brunt of a 15% fall since 2014 thanks to changes in tax, finance, and transaction costs. However, this comes on the back of a decade of unprecedented gains and substantial (paper) wealth for owners across all of London and it therefore still seems that the RHPG has been reset at a new, higher level than ever before. Intriguingly, Ferrari and Rae (2013) distinguish between a period of 'coherence' in U.K. property prices from 1970 to 1986, and a subsequent one of 'divergence'; this transition coincides with the increased financialisation, and 'opening up', of housing markets in which such inward investment flows are necessarily implicated.

### Conclusions

The past 45 years have seen the emergence of a marked Regional House Price Gap (RHPG) in Britain that is characterised by a sharp and growing difference between average prices in London and those in the peripheral regions. The size of the gap has varied with the stage of the housing cycle, leading to a strong evidence-base for a ripple effect; however, in this article we have highlighted that the size of the RHPG has also been increasing over time and argue that this poses a problem for those who anticipate some kind of inter-regional convergence on either a relative or an absolute basis. Given what has happened in London, we cannot fully explain the current RHPG without incorporating global capital flows and international migration into the picture, and this seems to be an important omission from the convergence literature and the types of policy recommendations that flow from its assumptions. Existing policy levers in the U.K. seem incapable of coping with a market that exist in two very different contexts at the same time and, in the absence of a major rethink of the discretion afforded the Mayor of London by the national government, this situation looks set to continue indefinitely. The implicit assumption in neo-classical economics that regional differences in house prices should tend to equalise over time seems misplaced, particularly in a world where prices may reflect not just national differences in incomes and prosperity but also international investment flows.

Measured as a ratio of the England and Wales average, prices have risen formidably in the past 15 years: as of September, 2016 average prices in London reached 2.06 of the national average, Westminster stood at 5.35 and Kensington and Chelsea at a remarkable multiple of 6.76. This suggests that cumulative divergence may be a more appropriate way to view regional house price changes in Britain. The link observed between New York and London prices by Holly et al. (2011) suggests that the divergence in growth rates between Central London and the rest of the UK should be understood in part in terms of the capital's global city status. The post-GFC data appears to highlight the weakness of approaches that either rule out or underestimate the role of the exogenous factors; our argument is that the interplay between these two distinct trends in property prices—the 'ripple effect' linked to employment, income, and mobility, and the inward 'pump effect' in Prime London—has worked in concert to increase prices in the capital relative to the rest of the UK. Either way, it is clear is that the role of international investment and its interaction with local demand from both mortgaged and cash buyers needs to be much more closely examined in those cities which are most deeply integrated into what we might call a 'global property market' as it may have large local effects on demand, prices and affordability, and consequently on the types of policy levers that are available to local and national governments.

# Figures & Tables

# Year-on-Year Percentage Change in Price for All Dwellings

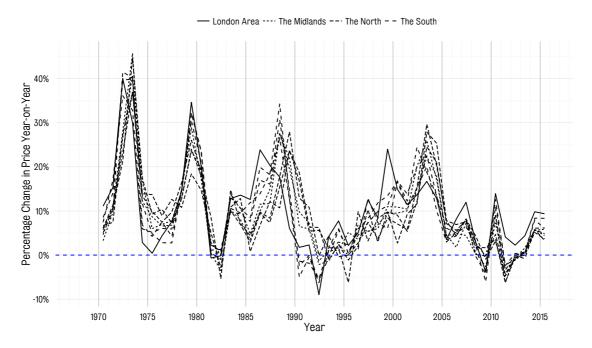


Figure 4. Year-on-Year Percentage Change in Prices for All Dwellings by Region

## Percentage Difference in Price for All Dwellings between Regional and United Kingdom Reference Prices

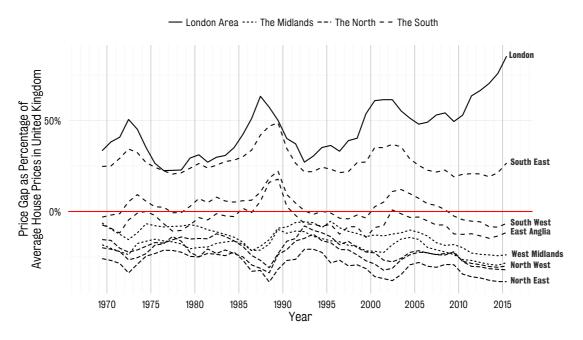


Figure 5. Percentage Difference between Regional and United Kingdom Reference Prices

#### Percentage Difference in Price for All Dwellings between Regional and London Reference Prices

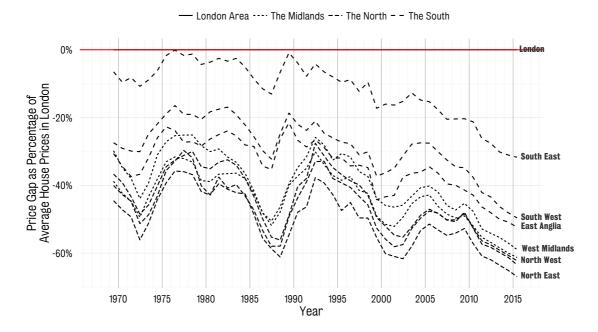


Figure 6. Percentage Difference between Regional and London Reference Prices

#### Percentage Difference in Price for All Dwellings between London and United Kingdom Reference Prices

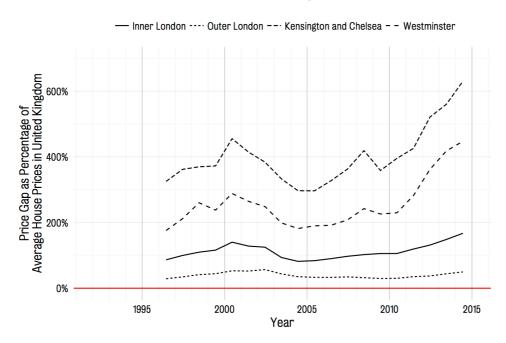


Figure 4. Percentage Difference in Price between Selected London Boroughs and United Kingdom Reference Prices

Region	1970	1975	1980	1985	1990	1995	2000	2002	2010	2015
United Kingdom	4,975	11,787	23,596	31,103	59,785	65,644	101,550	190,760	251,634	277,000
England	2,007	11,935	23,957	31,984	63,173	990'89	106,998	202,409	261,580	291,000
Scotland	5,002	11,139	21,754	26,941	41,744	53,143	69,961	129,631	185,715	193,000
Wales	4,434	10,083	19,363	25,005	46,464	52,978	72,285	149,979	171,784	178,000
Northern Ireland	4,387	10,023	23,656	23,012	31,849	42,810	72,514	129,229	168,033	152,000
North East	3,942	9,601	17,710	22,786	43,655	47,060	65,145	137,229	164,861	170,000
North West	4,184	9,771	20,092	25,126	50,005	56,533	78,415	149,599	182,821	194,000
Yorkshire And Humberside	3,634	9,058	17,689	23,338	47,231	54,356	72,176	148,014	182,383	188,000
East Midlands	3,966	686'6	18,928	25,539	52,620	55,060	79,323	161,487	184,958	199,000
West Midlands	4,490	10,866	21,663	25,855	54,694	62,123	88,431	168,904	201,498	211,000
East Anglia	4,515	11,528	22,808	31,661	61,427	60,971	92,628	184,966	219,984	245,000
London	6,882	14,918	30,968	44,301	83,821	89,528	163,577	282,548	385,180	514,000
South East	6,223	14,664	29,832	40,487	80,525	80,939	137,354	239,251	303,222	351,000
South West	4,879	12,096	25,293	32,948	65,378	960'59	104,233	204,686	240,245	259,000

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North East	3,942	9,601	17,710	22,786	43,655	47,060
North West	4,184	9,771	20,092	25,126	50,005	56,533
Yorkshire And Humberside	3,634	9,058	17,689	23,338	47,231	54,356
East Midlands	3,966	9,989	18,928	25,539	52,620	55,060
West Midlands	4,490	10,866	21,663	25,855	54,694	62,123
East Anglia	4,515	11,528	22,808	31,661	61,427	60,971
London	6,882	14,918	30,968	44,301	83,821	89,528
South East	6,223	14,664	29,832	40,487	80,525	80,939
South West	4,879	12,096	25,293	32,948	65,378	65,096