LOW INCOME HOUSING TAX CREDITS (LIHTCs): A REVIEW OF THE RESEARCH

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Introduction

The aim of this paper is to review American material on the impact of low income housing tax credits (LIHTCs). It centres on primary research in journals such as *Housing Policy Debate* over the last two decades together with a limited number of policy overviews such as Drier (2006), Joint Center for Housing Studies (2009 and 2010), McClure (2012) and Schwartz (2010).

Studies in the USA have mainly focussed on the following six topics:

- The extent to which LIHTCs have housed households on the lowest incomes and the extent to which it has led to poverty 'deconcentration'.
- Race and whether LIHTCs have increased or decreased segregation?
- Neighbourhood impact and especially degree to which there is positive or negative socio-economic change.
- The geography of housing opportunities for low income households.
- The role of profit and non-profit developers.
- Substitution and whether LIHTCs have crowded out other forms of housing provision.

Each of these topics is discussed below. This is followed by a discussion on an emerging and indirect theme from much of the research on the role of LIHTCs in planning and neighbourhood policy. The final section draws together the key findings, identifies current issues and indicates where there is a lack of primary research.

The next section provides an overview on the nature of the research.

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Research on LIHTCs

Rather interestingly a consistent theme spanning much of the research is the lack of robust studies on LIHTCs relative to its size and importance (see, for instance, Baum-Snow and Marion, 2009, Cummings and DiPasquale, 1998, and Malpezzi and Vandell, 2002). Drier (2006) implies that this is because of a number of factors such as the political consensus in favour of the programme and its unique administrative structure i.e. a federal housing initiative not managed by the Department for Housing and Urban Development (HUD) and not administered in detail by any federal agency.

The vast majority of research adopts a quantitative approach either focussing on a specific state or local area (e.g. Deng, 2011a on Miami, Deng 2011b on Santa Clara County in California, and McClure, 2000, on Missouri) and / or analysing large national datasheets (e.g. Ellen et al, 2009, and Malpezzi and Vandell, 2002). There is little if any qualitative research[2]. An exception is Cummings and DiPasquale (1998) who, while mainly analysing national datasets, also undertook a study of 50 LIHTC investors.

Much of the conceptual framework for the research is underpinned by economic principles and techniques.

It is important to appreciate that a frequently cited criticism of much of the quantitative research at a local level is the use of small scale ‘census tracts’[3] as a proxy for neighbourhoods (see, for instance, Emrath, 2010). It is argued that, firstly, there is little correlation between these two ‘spatial categories’. Secondly, and more importantly, local housing markets do not coincide with census tracts and their aggregation (Khadduri, 2010). These concerns apply, for example, to research on the impact of LIHTCs on neighbourhoods where the latter are defined by census tracts.

Much of the quantitative research includes lengthy discussions, descriptions and operationalisation of variables. For example, a wide range of definitions is used to measure poverty and household income. Reference is made to ‘extreme low incomes’, ‘very low incomes’, ‘moderate low incomes’ etc. It is not always clear whether researchers are using the same detailed definitions and how they relate to federal and state eligibility criteria for LIHTC projects.

In addition, no research studies have so far been identified that explicitly focus on the policy making process especially the role of state housing agencies and housing finance agencies in influencing outcomes through the qualified allocation plans (QAPs). This would probably require a strong qualitative research methodology. Rengert (2006) called for detailed research into administrative practices to explain variations in outcomes between and within states. But this appears to have been ignored. There also appears to be little

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[2] The Joint Center for Housing Studies (2009 and 2010) adopts a qualitative approach using focus groups, interviews and teleconferences for studies on the impact of the financial crisis and long term issues. The findings are discussed in the conclusions.

[3] The lowest level census tracts in the USA are homogeneous areas with on average a population of 4,000.

research on financial markets and tax credit syndication. The one exception to this is Eriksen (2009). He argues that nearly all developers sell tax credits at a substantial discount.

Two important issues arise from many of the studies and they are:

- Significant variations between states and within states on the impact of LIHTCs because of the QAPs – see, for example, O'Regan and Horn (2013) on low income tenants. Cummings and DiPasquale (1998) emphasise that the flexibility of the programme to meet local requirements is one of its major strengths.

- Changing impacts as the LIHTC policies and procedures have altered and matured over time since the programme began in the mid / late 1980s. McClure (2012) in an overview of the programme, comments that it has matured over the last 25 years and this has changed how it operates 'administratively, financially and spatially'. Cummings and DiPasquale (1998) note that the LIHTC programme became more efficient during the 1990s.

In other words, much of the research is area and time specific and it is, therefore, challenging to draw out overall conclusions and findings.

In addition, few if any of the studies control for the impact of other programmes and initiatives that appear to make a contribution to LIHTC projects (see, for instance, Khadduri, 2010). For example, there is often passing reference to tenants accessing rent subsidies (e.g. O'Regan and Horn, 2013) and / or projects making use of other federal, state and local development subsidies (e.g. Deng, 2011a, and 2011b). Exceptions include, firstly, Malpezzi and Vandell (2002) in their work on the 'crowding out' hypothesis, as they take account of a wide range of other federal housing programmes. Secondly Deng (2005) compares the cost effectiveness of LIHTCs and housing vouchers[4].

Tenant Income

As recently as the beginning of this decade, McClure (2012 p184) commented that 'little is known on the incomes of households served by the LIHTC programme'. In his review of existing research, he, nevertheless, indicated that a third of households in LIHTC units received housing choice vouchers. He also emphasised that the programme appears to assist low income households but not very low income households.

O'Regan and Horn (2013) in a study using tenant-level data from 18 states found that 45% of residents have very low incomes (and also usually receive some form of additional rent assistance). They, however, note that there is

[4] Deng (2005) found that, in general, LIHTC was more expensive than housing vouchers in a study of six metropolitan areas, but noted that there was considerable variation depending on the state of the local housing market and the administration of both programmes.

considerable variation between schemes with some developments comprising high concentrations of households on very low incomes while others are 'economically diverse'. The authors suggest that this is mainly because states have different QAPs. They also point out that LIHTC residents generally have relatively higher incomes than those assisted through other federal programmes. This, they argue, indicates that the shallow subsidy through LIHTCs is enhanced by other schemes to ensure that households on very low incomes are able to benefit.

Burge (2011) adopts a different perspective. He investigated the issue of 'who benefits from LIHTCs?'. He found that the rent savings by households were a small part of the costs of the programme and he further suggests that private developers and investors may capture programme benefits. He notes, however, that there are many other wider benefits for households such as improved quality of housing and neighbourhoods.

Schwartz (2010, pp 112-114) summarises key findings from a number of studies including grey literature:

- Over 80% of all schemes are 100% low income, while only 3% have 50% or more units targeted at higher income renters;

- Between 7%-13% of all housing credit voucher holders are in LIHTC units; and

- Nearly 50% of completed units between 1995 and 2006 house tenants with vouchers.

Race

Schwartz (2010) highlights in his overview that LIHTCs have been criticised for perpetuating racial segregation, as schemes have been concentrated in these types of neighbourhoods. He, however, points out that relative to other federal schemes, the degree of concentration is less. A similar point applies to neighbourhoods with high levels of poverty – see below.

Horn and O'Regan (2011) explore whether the siting of LIHTC projects exacerbates racial segregation. They investigated three aspects – the location of LIHTC projects, households living in LIHTC units and neighbourhood racial composition. On all three counts, they conclude that LIHTCs do not contribute to increased segregation.

McClure (2006 and 2012, p183) comments that over the life of the LIHTC programme, there is some evidence that projects are being targeted at 'more racially and ethnically diverse neighbourhoods with lower concentrations of poverty compared with other federal programmes'. However, this view is contradicted by Dawkins (2011, p iii) who found that that LIHTC properties are 'highly clustered in densely developed central city locations that exhibit high levels of poverty and have low levels of non-Hispanic white residents'. There are, however exceptions because of state QAPs. For example, Houston has a deconcentrated pattern of LIHTCs because of the Texas QAP.

Neighbourhoods

A major debate in the USA, therefore, centres on the impact of LIHTCs on neighbourhoods. In summary, the interrelated issues are:

- The extent to which building affordable housing in low income housing reinforces the spatial concentration of poverty (and see above re racial segregation).

- The positive and negative impacts on the neighbourhood. It should be noted that a frequently used indicator of positive impacts is a rise in house prices – see, for instance, Baum-Snow and Marion (2009) and Deng (2011b).

- The impact on adjoining neighbourhoods.

From an historical perspective, Cummings and DiPasquale (1998) note that during the first decade of the programme, one of its successes was that LIHTC projects represented the first new construction in recent years in over 25% of urban census tracts. They also point out that the proportion of projects in inner city areas increased gradually during the 1980s and 1990s[5]. Holler and Usowski (2007) point out that the LIHTC scheme is geared towards encouraging private developers to build in low income neighbourhoods through the qualified census tract requirements.

Ellen et al (2009) base their findings on a national data set on the location of LIHTC projects and a detailed case study of New York. They found that 10% of LIHTC units have been built in high poverty areas and 33% in low poverty areas. They conclude that ‘there is little evidence of the program exacerbating poverty concentration’ (Ellen et al, 2009, p 264). They further suggest from the New York case study that the siting of LIHTC projects in high poverty areas can leverage community regeneration.

Schwartz (2010) notes that the disproportionate proportion of schemes located in low income and ethnic minority neighbourhoods has resulted in criticisms that it reinforces segregation. However he also points out that other federal programmes are even more concentrated in these localities. Moreover, as LIHTCs focus on households in moderate poverty rather than extreme poverty, he suggests that they may reduce concentrations of poverty. Finally, drawing on the work of McClure (2006) and others, he implicitly suggests that the development of schemes post-2000 have been increasingly located in suburban areas and that these present an opportunity for de-concentration (but see Dawkins, 2011, above).

[5] It is important to note that one reason for this was that LIHTC had initially been linked to a ‘rural farmers home rental program’.

Deng (2011a) analyses the changes between 1990 and 2000 in neighbourhoods in the Miami area. Neighbourhoods with and without LIHTCs are compared. Overall, the conclusion is that 50% percent of neighbourhoods with LIHTCs had positive changes compared with their 'control groups'. The 'positive changes' focused on a range of demographic, social and housing variables, including house prices. The most positive changes occurred in the most disadvantaged neighbourhoods, while the least positive changes occurred in suburban areas.

This latter point implicitly indicates potential concerns over LIHTCs in transitory suburban neighbourhoods – see Nguyen et al (2013) below on opposition to affordable housing in the USA. Although the research did not investigate the issue of community regeneration, Deng (2011a) observes that LIHTCs have a significant role when they are part of a strategic and comprehensive approach that utilises a range of programmes and initiatives. Deng (2011b) has also published the results of a study in Santa Clara County in California. The research, similarly, concludes that low income neighbourhoods have benefited more strongly from LIHTCs than other types of areas in terms of rising prices.

However, McClure (2010 and 2012) notes that the LIHTC programme, as it has matured, has been targeted at neighbourhoods with lower concentrations of poverty than other federal initiatives. This has been welcomed and encouraged by private developers who have been keen to target suburban areas. They argue that schemes in such areas are more efficient in terms of finance and management. Oakley (2008) reaches similar conclusions pointing out that the LIHTC programme has been more successful than other initiatives at locating projects in less disadvantaged neighbourhoods. However, she also highlights that they are geographically concentrated. This is linked to policies that reward developers who focus on qualified census tracts (see also, Lang, 2012).

On the issue of leverage for community regeneration, Baum-Snow and Marion (2009) argue in their study of neighbourhood impact that LIHTCs lead to an increase in housing prices in both vulnerable and stable communities (which the authors regard as a positive measure).

Nevertheless, as Nguyen et al (2013) point out, there is considerable opposition to affordable housing provision in the USA. Much of this centres on its location and the perceived image of potential schemes and their tenants. Although the authors do not focus explicitly on LIHTC projects, they indicate that there are strong pressures to locate affordable housing through federal programmes in high poverty areas – see below for a fuller discussion of this issue. This point links to the research by Baum-Snow and Marion (2009) on spillover effects. They conclude that LIHTC developments 'depress local median household incomes within one km of schemes' as well as increasing turnover rates for owner occupied properties. They also comment that LIHTCs in 'gentrifying areas' have no positive impact on house prices. Deng (2011b) concludes that there is no discernable difference by type of developer in terms of impact on nearby properties using house prices as a measure of outcome.

Geography of Housing Opportunities

A long-standing and well-established policy debate in the USA centres on the balance between providing housing opportunities for low income households in their existing inner city neighbourhoods and in suburban locations (by encouraging mobility). Although there is a vast literature on this topic in relation to the HOPE VI programme for tackling run down public housing estates (see Beider, 2007, for a useful summary)[6], there is a relatively limited literature in relation to LIHTCs.

In relation to the LIHTC programme, McClure (2006) and Varady (2006) both emphasise that as it has matured, schemes have increasingly been located in suburban areas. Varady (2006) highlights that both LIHTCs and housing choice vouchers have contributed in Alameda County in California to a suburbanisation of low income households. McClure (2006) suggests that LIHTCs is a more efficient programme than housing choice vouchers in providing opportunities for inner city residents to live in low poverty neighbourhoods. Nevertheless, he also highlights that schemes are not being targeted on census tracts where there is little if any affordable housing.

Developers and Development

Schwartz (2010) provides a useful portrait of schemes between 1986 and 2007. For example:

- Non-profit sector accounted for 23% of developments and 21% of units;
- New construction forms 62% of developments and 61% of units;
- The average size of scheme is 58 units; and
- Just over 45% of schemes are located in central city areas, 30% are located in suburbs and 25% are in non-metropolitan areas.

As Cummings and DiPasquale (1998) have highlighted, the flexibility of LIHTC at the state and local levels is one of its major attractions to developers. Nevertheless, their interviews with 50 investors illustrated that there are tensions. Balancing the requirements of the real estate sector with meeting the needs of low income households and deprived neighbourhoods is not straightforward. Advocacy groups for the poor are often in conflict with private sector participants (Cummings and DiPasquale, 1998, p i).

Nevertheless, they argue that the programme matured during the 1990s and became more efficient. For example, for each dollar of tax credit more of it was used for housing and less for fees and administration. In addition, developers and investors became less concerned with risk as an increasing

[6] HOPE VI acronym stands for ‘housing opportunities for people everywhere’. It involves in principle the use of housing choice vouchers to enable low income households to move to the suburbs as well as redeveloping estates for mixed income households so as to attract middle income families back into the city.

number of projects were successfully completed[7]. This point is confirmed by McClure (2012, p183) who states that investors, initially, viewed the programme as high risk and, thus, expected significant yields in the order of 17-19%. A number of writers (e.g. Cummings and Pasquale, 1998, and McClure, 2012) have noted that the vast majority of schemes are in sound financial and management health with, for instance, relatively low levels of voids. Schwartz (2010) reports that in 2005 there was a median occupancy rate of 95% and, on average, properties generated a positive cash flow of $240 per unit.

McClure (2000, 2006 and 2012 p184) reiterates the point about the balance between private sector requirements and the needs of the poor and of disadvantaged communities. He further comments that this issue was addressed by bringing together 'many layers of subsidy'. But this has created an additional problem of the complexity of individual schemes. Based on analysis of schemes in Missouri, he found that the syndicated proceeds from LIHTC accounted for only a third of the development finance (McClure, 2006). Conventional lending provided an additional 44%. The remainder came from a number of other federal and state supply subsidy initiatives. Linked to this point, the work of, for instance, Burge (2011) and Oakley (2008) further emphasise the point that LIHTC schemes are developer-led and, thus, are geared to produce a stream of benefits for this group of stakeholders.

Baum-Snow and Marion (2009) in their study on LIHTCs and neighbourhoods focus in part on private developers' response to the programme. They found that, firstly, the size of the tax credit impacted on developer behaviour with, on average, a 30% increase in tax credits leading to six additional units from a base of seven units per census tract. Secondly, there is a geographical dimension, as this effect is strongest in areas with the highest rises in house prices. Lang (2012), however, in a study based on national datasets from 2004 and 2006, notes that private developers also initiate schemes in low price and low rent areas.

It should be noted that Deng (2011b) on a study of Santa Clara County in California, briefly considers the role of three types of developers (for-profit, non-profit and public). He emphasises that projects built by large non-profit and public agencies have generated the greatest positive impact on neighbourhoods.

Finally, in relation to development funding and finance, Cummings and DiPasquale (1998) provide some data from their national study on development performance (though this is based on information from the 1990s):

- Average cost per unit: $65,000 with non-profit sponsored units costing 15% more;

[7] Cummings and DiPasquale (1998) highlight the novelty of the LIHTC programme when it was established in the mid 1980s. This resulted in developers and investors acting cautiously in terms of their involvement.

- Cost to the federal government of $38,000 in tax credits per unit; and
- Tax credit equity provides on average 38% of total development costs.

Substitution

Malpezzi and Vandell (2002) focus attention on whether the LIHTC programme has added to the existing stock or substituted for unsubsidised units that otherwise would have been built i.e. the economic principle of 'crowding out'. Based on data held by the National Council of State Housing Agencies and controlling for the impact of other federal housing programmes, they conclude that there is potentially a high rate of substitution. They argue that factors such as population growth, the state of the local housing market and urbanisation explain the variation in housing supply. Thus, LIHTC projects were developed in the 1980s and 1990s in locations where one would expect non-subsidised schemes to have been developed. Nevertheless, the authors note that this analysis does not justify the abandonment of the programme, as there are other significant considerations such as affordability and community regeneration.

Baum-Snow and Marion (2009) in their study of neighbourhood impacts briefly consider the 'crowding out' issue. They also conclude that LIHTCs crowd out private rental construction especially in 'gentrifying areas'.

Lang (2012 p142) focuses on location incentives for private developers (see above), and concludes that they are 'more likely to build subsidised housing in locations with low rents'. This is because of both the low income location specific incentive associated with qualified census tracts and because of the opportunity cost of building subsidised housing[8]. Implicitly, this suggests that crowding out is less significant.

A different perspective is provided by Eriksen (2009). He suggests that the LIHTC programme leads to developers to construct units that are on average 20% more expensive per square foot than the industry standard.

McClure (2006 and 2012) also adopts a somewhat different focus. He argues that state agencies through QAP are not directing investment to areas of need (though this appears to contradict Lang, 2012). He indicates that over 90% of allocations between 2000 and 2004 went to neighbourhoods where there was a surplus of units i.e. areas where there were more units in the price range of a LIHTC project than renter households in the relevant income category. He also emphasises that many states do not appear to target LIHTCs in areas where there is little or no affordable housing.

Overall, there are mixed and contradictory messages on crowding out and on the locational decision making by developers.

[8] Holler and Usowski (2007) emphasise that qualified census tract requirements are aimed at encouraging private sector developers to target low income / high poverty areas.

Housing and Planning Policies

It has already been pointed out that there is little research on, firstly, the policy making process and, secondly, on the linkages between LIHTCs and other programmes. A number of the research studies make passing reference to this topic e.g. Deng (2011a) and McClure (2012).

State housing agencies and housing finance agencies are responsible for allocating LIHTCs (also referred to as 'housing credit') as well as other programmes e.g. federal initiatives such as housing bonds and HOME investment partnership[9]. Larsen (2009) focuses on state housing trust funds in Florida. She notes that many of these funds generate their own resources through real estate transaction fees but, according to some commentators, they do not compensate for the long term withdrawal of federal funding for housing. There is, however, little if any mention of LIHTCs in this paper.

As well as these federal programmes and initiatives allocated and managed at the state level, there are also other federal programmes that contribute to affordable housing and regeneration. For example, the community development block grant (CDBG) has been in operation since the mid 1970s and provides federal assistance to low and moderate income neighbourhoods. In total, over $130 billion dollars have been allocated over the last forty years[10]. Again, however, evaluations of the impact of CDBG rarely consider the relationship with other programmes such as LIHTCs (see, for instance, Malanga, 2010, for a critical review of CDBG).

A further implicit issue arising from research principally on neighbourhoods and LIHTCs (e.g. Malpezzi and Vandell, 2002) is the close relationship between LIHTC policy and planning strategies for revitalising cities through 'smart growth'[11]. This is the equivalent of our 'sustainable communities' programme. Aurand (2010) emphasises the role of urban managers and planners in specifying housing types (as well as density and mixed use) in implementing policies for smart growth neighbourhoods. However, McClure (2000 and 2012) observed that the LIHTC programme has not met one of its early objectives of delivering mixed income housing. One of the original aims was to develop mixed income housing schemes by subsidising only a small proportion of units. He notes that while the LIHTC programme requires a proportion of units being set aside for those with low incomes[12], the reality is that 84% of units have tax credits for 100% of units in projects.

Deng (2011b) notes that the most positive neighbourhood impact is where LIHTCs have been delivered by large non-profit and public agencies.

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[9] For more details, see the website of the National Council of State Housing Agencies at https://www.ncsha.org/.
[10] *Housing Policy Debate* has announced that there will be a special edition on CDBG in 2014. One of themes is the extent to which CDBG is used to leverage other investments.
[11] A useful website on Smart Growth is http://www.smartgrowthamerica.org/.
[12] The formal criteria are either 20% of units for those with incomes below 50% of area median family income, or 40% of units for those with incomes below 60% of area median family incomes.

Research on Maryland by Lewis et al (2009) highlights how the state intended to concentrate spending in urban areas through priority funding areas to achieve smart growth. This included a wide range of housing and regeneration programmes including LIHTCs. Lewis et al (2009), nevertheless, point out that resistance among suburbanites to low income housing often pushes such provision into inner city priority funding areas (see also Nguyen et al, 2013, on opposition to the siting of affordable housing). In relation to 'suburban resistance', Varady (2006) suggests that state housing agencies must engage with local communities at an early stage in the allocation process to tackle what we would refer to as NIMBYism.

Moving Forward

The Joint Center for Housing Studies (2010 p 33) reiterates a common theme across most of the research that the LIHTC is a 'successful and resilient program'. Drier (2006) indicates that there are five factors that have contributed to this situation:

- Invisibility as it is not run by a federal department or agency, such as HUD.

- LIHTC subsidies are low compared to other housing federal programmes (though of course this hides a reoccurring point in much of the research that schemes make use of other demand and supply subsidies).

- It is attractive to corporate investors pre-2008 (and see below).

- There is considerable cross-party and stakeholder lobbying in favour of LIHTCs.

- There is support from the non-profit sector (though this partly because of the reduction in other federal housing programmes).

In moving forward, the Joint Center for Housing Studies (2009 and 2010) has focussed attention on, firstly, the impact of the financial crisis and, secondly, long term issues. In relation to the former, the authors point out that the LIHTC programme was disrupted in 2007 and 2008 because of lack of investor demand. Furthermore, Schwartz (2010 p 116) comments that 'until 2008 the LIHTC was widely considered one of the nation's most successful housing programs, but the financial crisis raises new questions about the program's sustainability'. He stresses that the scheme depended on a small number of large financial institutions and 'the demand for tax credits collapsed in 2008' (Schwartz, 2010, p 123). The Joint Center for Housing Studies (2009) emphasises that due diligence concerns over the initial development assumptions and over the sale of tax credits came to the fore, leading to a lack of confidence among investors. More generally, this report highlights that an emerging issue was concern over a 10-year tax credit for a development scheme with a minimum compliance period of 15 years (see below).

In relation to the latter, the report by the Joint Center for Housing Studies (2010) focuses on long term issues. It addresses three key questions where there are considerable differences of opinion:

- Is the LIHTC programme appropriately targeted in relation to very low income households and, if not, should it?

- How can and should LIHTCs make a contribution to mixed income developments?

- How should the LIHTCs be spatially focussed? For example, should it be part of the armoury of policies and tools to provide low income housing in moderate and high income suburbs?

Taking a broader perspective, Khadduri (2010) observes that much of the research on LIHTCs considers the phenomenon in isolation. Instead, it should be considered as part of a national programme for affordable housing provision that involves supply side subsidies (e.g. CDBG, HOPE VI, LIHTCs etc) and demand side subsidies (e.g. housing choice vouchers). For example, the role of LIHTCs in addressing the spatial isolation and segregation of low income households and ethnic minorities is fraught with difficulties. LIHTC projects often involve other federal demand and supply subsidies. A similar point is made in a paper by Park (2013) on housing choice vouchers. A linked debate that has emerged is the relative advantages and disadvantages of LIHTC compared with other federal schemes. Eriksen (2009), for example, concludes that place-based subsidies, such as LIHTCs, are likely to be more expensive than tenant-subsidies (e.g. housing choice vouchers). Clearly, there are similar debates in the USA to those in the UK and Western Europe on supply and demand subsidies.

This leads on to wider more contentious areas of policy debate. For instance, to what extent should low income households and ethnic minorities have their housing needs met in their existing neighbourhoods or in suburban areas?

In terms of un-researched topics, both McClure (2012) and Schwartz (2010) highlight that there has been a lack of consideration of what happens to LIHTC developments when they reach the end of their 15-year compliance period. For example, at this point, owners can seek to refinance or sell the developments. McClure (2012) notes that after 15 years, there is frequently a need for resources to undertake major repairs and maintenance of some elements of the building components. Schwartz and Melendez (2008) speculate that the majority of schemes will remain targeted at low income households because of the cost of capital improvements, but express concern over the potential deterioration in the quality of the stock.

This reiterates a re-occurring theme throughout this paper that the LIHTC programme is illustrative of the compromises and tensions that exist in schemes that attempt to balance meeting the housing needs of low income households with the imperative of real estate and investment sectors (see also Burge, 2011, and Oakley, 2008).

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