

1 **Title: Unlocking Value: the impact of traditional valuation practices on the number of vacant retail**
2 **units in the built environment.**

3 Across the social science and humanities disciplines, there has been an increased interest in questions
4 of value and valuation. This paper responds to the new emphasis by scrutinising the evolution of real
5 estate valuation techniques over time, their embedded nature, and the implication of this for the
6 (re)production of the built environment. This is achieved through the lens of two conceptual positions
7 which are rarely used in the realm of real estate valuation. These are a) path dependency which in this
8 case charts the evolution of the discipline of valuation as it relates to retail related real estate assets;
9 and b) lock – in, which seeks to understand how valuation techniques and attitudes have become
10 embedded during this evolution. This position sits alongside a series of investigatory interviews with
11 professional valuers in international real estate organisations specialising in the commercial real
12 estate market. This is often a missing voice in recent research into real estate and the wider subject
13 of valuation. Findings suggest that valuation practice is reliant on confirmatory market practices that
14 do not necessarily capture the contemporary affordability-based requirements of tenants. Instead,
15 practice is locked into reinforcing the nature of zone-based market values for landlords and investors.
16 The geographical implications of this situation at the micro-level can be vacant or poorly performing
17 properties that undermine local areas in the interest of maintaining the headline value of properties
18 in macro-level global capital markets. This new conceptual analysis provides understanding of how
19 the physical built environment is developed and reproduced over time through notions of value, helps
20 to connect often hidden practices of real estate valuation into existing academic debates in urban
21 studies and geography, and in conclusion sheds some light on how practices of real estate valuation
22 can be improved in the disrupted world of retail.

23 **Key words:** Real estate valuation, retail, built environment, path dependency, lock-in, vacancy.

24 **1.Introduction**

25 The aim of this paper is to engage with ideas and methods of valuation in contemporary society,
26 specifically real estate valuation. The lens for this enquiry is the current challenge of valuing retail
27 assets in England, within the context of severe disruption in the sector caused by changing consumer
28 habits driven by the rise of e-commerce and the more recent difficulties caused by Covid-19 and
29 inflationary pressures on consumers. While empirically centred in England, this focus is important
30 because retail assets underpin the international financial sector. The International Property Forum
31 (IPF) estimates the value of retail investment at the end of 2020 to be £271bn – in comparison the
32 total office value is estimated at £263bn for the UK. The analysis in this paper therefore has
33 international significance as it provokes debate and sheds light on how valuation practices intertwine
34 with global capital markets.

35 The retail asset class has historically been perceived as the most attractive of the traditional real estate
36 sectors. This is because retail was situated in central locations that occupied buildings offering a long
37 economic life with good tenants that would remain in occupation for lengthy periods of time (Jones,
38 2010). The significance of this research goes beyond the world of retail. Gilbertson and Preston (2005)
39 describe the importance of real estate valuation, indicating that real estate underpins a major
40 proportion of financial decisions and capital markets in international financial systems. In 2020, the
41 Royal Institution of Chartered Surveyors (RICS) indicated that 70% of global wealth is held in land and
42 real estate assets with much of financialised bank lending secured on these assets. It is therefore
43 surprising that valuation techniques have not received more attention. Indeed, Gray (2021) argues,
44 there is much social change around the built environment and there is a growing perception that real
45 estate valuation is struggling to account for this situation.

46 The original interpretation of valuation techniques in this paper also opens space for a broader
47 intellectual discussion of how techniques and processes of valuation influence and shape the socio-
48 built environment in which we live and work. The underlying research question that guides this article
49 is: *how do contemporary real estate valuation practices capture the new world of retail and what are*
50 *the implications of these practices for the wider built environment?*

51 While there have been some interpretations of value and valuation processes in select fields of
52 academia. (Konings 2015; Chiapello 2014), at the time of writing the topic of real estate valuation is
53 largely either passing underneath the scholarly radar, within the typically atheoretical technical
54 practice of valuation (Amidu, Boyd & Agboola 2018; Crosby & Henneberry 2015; Tidwell & Gallimore
55 2014; Pagourtzi & Assimakopoulos 2003) or obliquely via academic research considered here as critical
56 real estate studies. Examples include research into Tax Increment Financing and calculative practices
57 (Weber, 2010, 2020), municipal financialisation (Beswick and Penny, 2018), the mortgage market
58 (Aalbers 2012, 2016), the appropriation of public land (Christophers, 2018) the securitising of single-
59 family assets (Fields, 2018) or historically, research into uneven development, gentrification, and
60 displacement (Smith and Williams, 1986; Lees and Ferrari, 2016).

61 While much of this latter research deals with the impact of real estate practice on society, rarely does
62 it consider the technical process of valuation that triggers and underpins these processes. Fields (2018)
63 captures this situation when discussing the connected process of financialisation, arguing that it is
64 often poorly understood and utilised as an all-encompassing explanation without any investigation
65 into how the process of financialisation occurs. Indeed, much of this research views real estate
66 practice as an uncontested negative that extracts value from individual locations or asset categories.
67 It rarely delves into the black box of how these processes, underwritten by real estate valuation, occur
68 or how they are undertaken.

69 By investigating today's challenges of valuing retail assets, the article sheds new light on this situation
70 by showing how processes of valuation underwrite specific decisions in the built environment and
71 wider capital markets. The paper examines how valuation techniques have evolved and become
72 embedded in contemporary practice. The article pursues this agenda through a novel treatment of
73 two conceptual positions which are rarely used together and never in the realm of real estate
74 valuation. These are *path dependency* which charts the evolution of the discipline of retail asset
75 valuation - Section 4 is structured around the degrees of path dependence outlined by Liebowitz and
76 Margolis (2014). This structure is then complimented by *lock-in*, to understand how valuation
77 techniques and attitudes have become embedded during their evolution.

78 This perspective sits alongside a series of investigatory interviews with Valuers of real estate working
79 for international real estate practices – the authors have recruited professionals who specialise in the
80 practice of valuation and retail-based assets. These are professionals who are actively involved with
81 retail markets and have knowledge of changing occupier needs but also wider valuation processes.
82 This approach is significant because it sheds new light on how methods of valuation are struggling to
83 make sense of the new world of consumer behaviour, and the impact on the use of real estate assets
84 – most clearly seen through vacant buildings on the high street. While there are numerous numeric
85 counts of vacant retail properties, econometric assessment of economic performance and policy
86 response that seek to counteract vacant properties, there is little examination of how we arrive at
87 persistently vacant properties. Further, this perspective allows for an exploration of the geographical
88 reality of retail valuation practice and the continual reinforcement of the zone-based market value
89 approach to retail valuation.

90 The next part of this paper will explain the techniques of valuation practice, how they are applied to
91 retail assets and how they are utilised to underpin the discussion in this paper. This section argues
92 that several facets of the system act as bulwarks against meaningful valuation of retail assets in
93 contemporary times. Yet these methods underpin the continuing development of the built
94 environment and related financial markets and economies. To understand the persistence of inertia
95 in the valuation of retail assets, the paper presents an alternative conceptual framework for
96 understanding real estate valuation, introducing ideas of path dependence and lock-in to its practice.
97 The methodology then follows, indicating the sample technique and decision-making process that was
98 followed when approaching and selecting respondents. It then applies the conceptual framework to
99 contemporary valuation techniques alongside interviews with valuers to reveal the current nexus of
100 value, consumer, society, and the built environment. The underlying argument in this section is that
101 valuation practice is reliant on confirmatory market practices that do not necessarily capture the
102 contemporary affordability-based requirements of tenants, instead such practice is locked into
103 reinforcing zone-based market values for landlords and investors. The geographical implications of
104 this situation at the micro-level can be vacant or poorly performing properties that undermine local
105 areas in favour of maintaining the headline value of properties in macro-level capital markets. The
106 paper then presents a conclusion, where the authors discuss the significance of the findings for
107 academic debate and valuation practice.

108 **2. Valuing retail-based real estate assets**

109 **2.1 The concept of value**

110 To understand the process deployed in the valuation of retail assets it is important to fully recognise
111 what value means in this context. Baum et al (1997) suggest that 'value' is the amount of money which
112 something is exchanged for in the open market. Further, Isaac and O'Leary (2012) state that real estate
113 value is the capital or rental value which a valuer places on a real estate asset in advance of an
114 exchange or debt agreement. It reflects what the valuer feels could be achieved if the asset were to
115 be sold or leased. Value is essentially an amount a purchaser is willing to pay, and a vendor is willing
116 to receive for an asset in the open market. Pagourtzi et al (2003) go further and define value as
117 clarifying the assumptions made in estimating the exchange price in the open market. Many
118 assumptions are made within the valuation process, and these include variables such as legal interests,
119 physical conditions of the building and more importantly market conditions. The RICS have
120 standardised the term to provide consistency across the real estate profession. The meaning of value
121 or 'market value' has been long established by the institution and is defined in IVS 104 paragraph 30.1
122 as:

123 *'The estimated amount for which an asset or liability should exchange on the*
124 *valuation date between a willing buyer and a willing seller in an arm's length*
125 *transaction, after proper marketing and where the parties had each acted*
126 *knowledgeably, prudently and without compulsion'.*

127 *RICS Valuation - Global Standards (January 2022)*

128 **2.2 Traditional real estate valuation processes**

129 Establishing a value is ultimately determined by applying a valuation method. The traditional methods
130 of real estate valuation were historically termed the '5 methods', namely, the comparison method,
131 the profit method, the residual method, the contractor's method, and the investment method
132 (Blackledge, 2017). More recently, they have been amended and consolidated into three approaches
133 within the RICS Global Standards and are now known within the profession as the market, income,

134 and cost approach (RICS Valuation – Global Standards 2022). This paper focuses on the market
135 approach only as this is the method that is predominantly adopted to provide values for commercial
136 income producing assets. In other words, a given real estate rent (the income derived from a tenant)
137 within the marketplace (considered market rent) is calculated over a given period and then capitalised
138 into a value using an all risks or investment yield (ARY)¹ Underlying this calculation is the need to make
139 comparisons with a variety of real estate transactions within a location to arrive at a market view and
140 consideration of relative risk (Shapiro 2012 & Pagourtzi et al. 2003).

141 Blackledge (2017) states that the market approach has become the simplest and most reliable method
142 and it is not only employed by the profession but by everyone in everyday life as they look to buy or
143 sell an asset. This view is supported by the RICS (2019) who claim that comparable evidence (in other
144 words recent asset transactions) – the output of which is referred to in this paper as ‘comparables,’ is
145 at the heart of every meaningful real estate valuation. In principle, comparable evidence, when used
146 to value a target property, should be similar in terms of use, location, and characteristics and
147 demonstrates the rental tone of a given area. An analysis of the data is then undertaken, and any
148 adjustments made for differences between this evidence and the target property. Finally, an
149 appropriate opinion on value is made whether that be via market rent and/or yield.

150 The appropriate data established from this approach is capitalised via the investment method to
151 arrive at an opinion of market value. Pagourtzi et al. (2003) explains that the direct comparison is
152 rarely appropriate for the investment method and therefore the comparison needs to be broken down
153 further to consider both an opinion of rent and all risks yield (ARY). The focus on market rent in this
154 paper is significant for retail real estate as it allows the valuer to establish a rental tone (the level of
155 value which becomes established through transactions) for an individual area. The tone determines
156 the market rent which a tenant is contracted to pay for the occupation of the premises. The rental
157 tone is important to the investor as it aids the maintenance of Market Value (and the underwriting of
158 associated debt) - the main aim of investors in real estate.

159

160 **2.3 Establishing retail rents through the market approach**

161

162 As discussed in the previous section, rents have a direct correlation to investment value and
163 historically this has been one of the drivers for stakeholders to increase investment values particularly
164 in retail assets (Jones, 2010). The increase in rental value is usually justified through new open market
165 transactions – in other words new lettings of similar properties agreed between parties. These form
166 the comparable evidence, or market tone, to justify new market rents. The rental analysis of a retail
167 unit is based on the concept of ‘zones’ - the valuable space is at the front of the premises nearest the
168 entrance fronting the mall or high street. Historically this made good business sense as retail frontages
169 attracted consumers into the retail space. Blackledge (2017) suggests that the larger the shop display
170 the more likely a potential customer is to venture into the shop. Therefore, the theory of ‘zoning’
171 means the shop floor reduces in value the further back the premises goes. In summary, valuers use
172 comparable evidence, duly adjusted, to determine the market based zoned rental tone (referred to
173 within this paper as rental tone) which then establishes the market rent. It is widely recognised by
174 academic and professionals alike that this process (market approach) is not a statistical analysis but a
175 heuristic approach (French, 2013) and that real estate valuation is a professional judgement (Amidu,
176 2011; Gallimore 1994) rather than an exact science.

177

¹ ARY or Market Yield is defined as ‘the remunerative rate of interest used in the valuation of freehold and leasehold interests, reflecting all the prospects and risks attached to the particular investment, including the likelihood of future rental and capital growth.’ (Parsons, 2004).

178 This judgement is demanded because of the heterogeneous nature of the real estate market, it's
179 imperfection, lack of a central marketplace and incomplete information which valuers analyse to
180 provide values. While this interpretation betrays the myth that real estate valuation is an objective
181 calculation, it also opens the opportunity for an interpretive enquiry. For example, Chiapello (2014)
182 albeit within the realm of values in financialisation suggests that there is an element of secondary
183 judgement in any valuation process.

184 **2.4 The importance of retailing and changing markets**

185 It is widely acknowledged that for several years retail businesses have come under increasing pressure
186 to change the way they operate and use space. Consumer habits have changed significantly with the
187 increase in e-commerce, heralding a shift from bricks and mortar retail business processes to ones
188 characterised by bricks and clicks. To provide some context to the importance of retail investment in
189 the UK, the Investment Property Forum in their January 2022 report illustrated that the value of retail
190 assets had fallen dramatically from £366 billion in 2017 to £271 billion in 2020 – a situation that has
191 been further exacerbated by Covid and inflationary pressures.

192 The Centre for Retail Research (2022) claims that there is a retail crisis and that the sector has
193 experienced 5 years of change in just 18 months, with 2020 recording 54 corporate retail failures and
194 the closure of over 5,200 stores across the UK. These figures do not include smaller independent
195 retailers so the total number will certainly be higher. This situation has led to challenges around
196 affordability which has resulted in calls for rent reductions, more complex lease structures, changes
197 in payment of rent and adaptation of retail properties into alternative use. Tenants are taking a
198 pragmatic view on the affordability of units and showing scepticism toward market based rental tones.
199 They are concerned with business turnover generated from real estate and essentially whether they
200 can afford to pay all outgoings associated with building occupation including rent, rates, service
201 charge, and other costs. This has exerted pressure on landlords to restructure leases to increasingly
202 take account of business turnover, rather than relying on a simple zone-based analysis of real estate
203 value.

204 Yet the RICS Valuation Global Standards, and a great deal of professional practice, is continuing to use
205 traditional valuation methods regardless. Today most retail asset valuations are still undertaken on
206 the market approach where valuers consider rental tones and comparable evidence. Baum (2017)
207 and Blackledge (2017) both agree that there is a reluctance in the profession to change. While the
208 reasons for this are contested (arguments range from the methodological purity of retaining
209 consistency in technique to landlords wishing to retain control over the division of their space), the
210 central argument put forward by the authors is that there is widespread fear in the market in relation
211 to the adoption of new valuation techniques. As Baum (2017) argues, there may be concern within
212 the profession that core skills are outdated. However, he goes onto argue that more important is the
213 potential for the alternative approach, based on turnover, to lead to a revision in traditional valuation
214 processes that would make the market approach and zone-based rents redundant. Any alternative
215 approach would lead to changes in market values and potential problems with debt agreements. The
216 results of this situation can have negative consequences for the built environment and society. For
217 example, landlords choosing to leave retail units vacant rather than reducing rents to attract new
218 tenants. The remainder of this paper examines this persistent behaviour further, particularly
219 considering why valuation techniques do not readily adapt to the new circumstances set out in this
220 paper and instead become locked into previous modes of consistent production.

221

222 3. Methodology and Conceptual Framework

223 This section of the paper gives a summary of the method adopted and a short foreground to the
224 conceptual framework that is deployed, namely path dependence (to understand how valuation
225 practice has evolved over time) and theories of lock-in (to understand how valuation practice have
226 become ingrained) to better understand valuation practice in the retail sector. Each element of the
227 conceptual framework will then be addressed again in further detail in the subsequent applied
228 sections.

229 3.1 Method

230 The authors have undertaken a qualitative approach across a 12-month research project examining
231 the practice of valuing retail properties in England and its impact on the built environment. Focus is
232 entirely on private sector valuation professionals. In part, the originality of this research is giving these
233 professionals a voice in the valuation debate. The authors consider that valuation professionals have
234 meaningful insights into the process and challenge of valuing retail-based assets, because they
235 experience it daily in their profession. It is recognised that by not approaching valuers, and in general,
236 investors, landlords, or financiers that we present a partial picture of the valuation profession in
237 international academic debate.

238 The empirical material in this article is based on a two-stage research process, where the main private
239 valuation practices in England were approached for interview, these included both international and
240 national private practices (five in total). The sample appears low however it must be noted that the
241 number of firms undertaking retail valuations has reduced over recent years with only larger private
242 practices instructed on such assets in England. The same professionals were interviewed at both
243 stages in the process, an improvised Delphi technique was used to gain consensus in viewpoint
244 (Linstone & Turoff, 1975; Muldoon-Smith & Moreton, 2022). A conscious decision was taken to
245 organically weave the participant content into the text to, where possible, create a narrative account
246 of valuation practice to counter the relative silence given to professional valuers in this debate
247 (Etherington, 2007; Hertz, 1997). The intent behind this approach is to bring to the surface the varying
248 types of institutional language and attitudes that texture the valuation of retail real estate. Therefore,
249 throughout the article, those taking part in the research are considered and referred to as research
250 participants, rather than respondents, and all effort is made to give voice to their opinions.

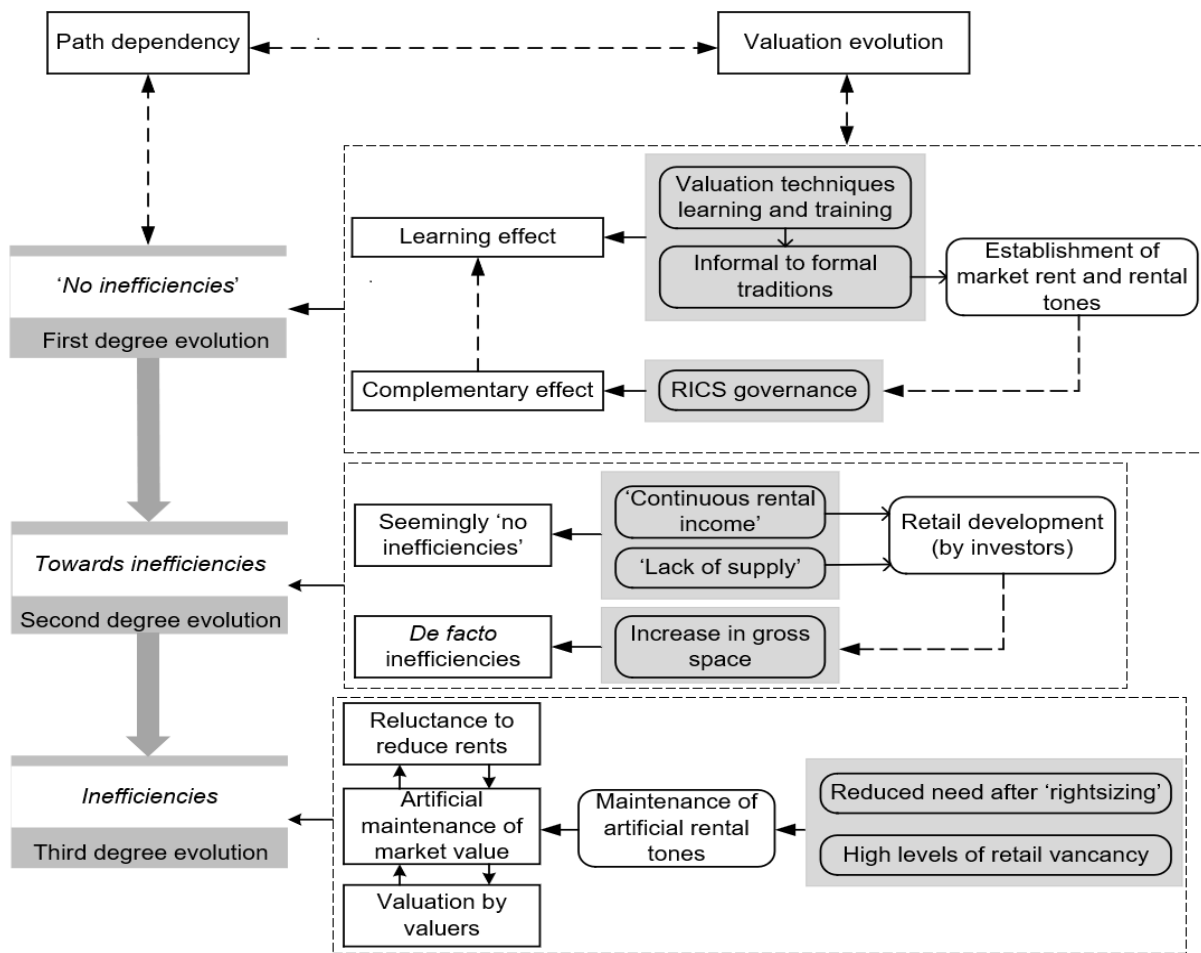
251 The authors approached valuation practices directly, rather than via Freedom of Information Request
252 to avoid the risk of legalistic and sanitised responses. Although a relatively modest response was
253 gained, this methodological approach generated a unique sample of responses from experienced
254 practitioners across a comprehensive geography. The valuers all worked within commercial real estate
255 valuation throughout England with senior responsibility for valuation departments undertaking retail
256 asset valuations. Due to the period when the research was undertaken, interviews have been
257 conducted over a variety of mediums, including telephone and software-based communication
258 platforms and when allowed face to face interviews. All findings were recorded, transcribed, and
259 coded using a matrix. The analysis matrix was used to theme findings within an overall grounded
260 theory (Glaser & Strauss, 1967) and constant comparative (Goertz & Le Compte, 1981) form of analysis
261 and theory development. Upon request, practitioner identities and explicit location information have
262 been redacted to protect participant identity (only general location information is revealed). This
263 approach stimulated candid discussion in relation to valuation practice. Yet, on balance, we argue that
264 our perspective provides an original counter narrative to the current critical view of real estate often
265 found in academia – one that often talks about value extraction without giving a voice to those
266 involved in this process.

267 **4.0 Conceptual framework**

268 Path dependency originated from research conducted by Arthur (1989) and David (1985) into how
269 early decisions affect technological pathways in the field of institutional economics. More recently it
270 has been expanded into fields including organisational studies by (Fortwengel & Keller, 2020), Sydow
271 et al. (2009; 2010; 2012), Dobusch & Schubler (2013), Vergne & Durand (2010) physics and
272 mathematics considered in association with chaos theory Gleick (1987), complexity (Waldrup, 1992)
273 and historical contingency (Gould, 1989). Path dependency eventually leads to a situation of 'lock-in,'
274 where the historical evolution of a process or procedure means that people, society, business, and
275 locations are through time locked into old practices and circumstances and in this situation no longer
276 have access to better services to improve their situation (Henning et al, 2013). Grabher (1993) was
277 one of the first to consider the transition from path dependency to ultimate lock-in with his work in
278 the Ruhr Valley, integrating the field of path dependence and evolutionary economics into economic
279 geography and regional development.

280 It can be argued that the practice of valuation is on a similar pathway, whereby the central techniques
281 are considered in a rigid framework. To investigate this situation, the authors have adapted the work
282 of Liebowitz and Margolis (2014). Although it is acknowledged that their research is relatively dated
283 and that path dependence has since been explored in various domains, more recently in the realms
284 of education development (Choi, 2022), politics, management, (Garud, Kumaraswamy and Karnoe,
285 2010) and conflict management (Loga, Cardow and Asquith, 2021), it is Liebowitz and Margolis (2014)
286 early theory on the evolution of path dependence that provides a meaningful analogy with the
287 practice of real estate valuation This is because it has provided a framework that has allowed the
288 researchers to appreciate changes in the retail asset market alongside the valuation processes. Figure
289 1 and Section 4.1 describes this situation.

290



291

292

Figure 1. Path dependency: the case of real estate valuation practices (Authors)

293

294

4.1 First Degree Evolution

295 Liebowitz and Margolis (2014) argue that the first degree of evolution is a pathway of complete
 296 innocence, the path taken is considered the right one at the time with no inefficiencies. Under this
 297 position in the practice of valuation, the underlying method, its market assumptions, and decisions
 298 made are taken to be correct without critical appraisal. This situation can be further characterised by
 299 the work of Fortwengel and Keller (2020) who extend this concept with their consideration of ‘learning
 300 effects’ (the knowledge acquired through education and experience) and ‘complementary effects’
 301 (the interplay of routine, rules, and governance).

302 In this case a learning effect is a specific task or an operation which is performed often and repeatedly.
 303 The process becomes more efficient, reliable, and ingrained with each subsequent attempt. To
 304 illustrate this in terms of valuation, Vandell (2007) argues that eventually the processes and
 305 techniques of valuation are adapted, learnt, and handed down via informal traditions, and then
 306 through formal training with the establishment of associations. In addition to academic and
 307 institutional learning of the market approach to establish market rent and rental tones. The
 308 ‘complementary effect,’ in this case, are the rules and dominance of the valuation procedures and
 309 guidance of the RICS which co-evolved with valuation techniques.

310 These two effects have led the way for further coordinated and adaptive processes where real estate
 311 stakeholders have become reliant on both methods and guidance within the global marketplace. This

312 was certainly the case for the method of zoning and establishing rental tones through the traditional
313 processes. Historically it was beneficial to stakeholders and tenants as the value of the asset to both
314 parties were the 'attractiveness' of the front of the shop. Of course, as consumer habits have changed,
315 and tenants are no longer relying on footfall (rather relying on other mediums to attract consumer
316 spending) their use and occupation of real estate has changed, and this renders zoning and rental
317 tones obsolete.

318 In conclusion, we argue that first-degree evolution in this case characterises the adoption and
319 establishment of the traditional valuation processes and complementary RICS governance. Over time,
320 there has been very little critique of the valuation process, something that continues today even in
321 the face of changing business productivity and empty retail units.

322 **4.2 Second Degree evolution**

323 Second degree path dependence, when applied to the evolution of real estate valuation, still assumes
324 no inefficiencies in the method when carried out, although in hindsight inefficiencies are
325 demonstrated. Historically, retail assets have been the attractive asset sector for investors and
326 although there was a slight shift towards office accommodation in the 1980s retailing regained its
327 position in the early 1990s. Jones (2010) argued that historically there were two key aspects that
328 attracted investors to retail assets, rental income and continued rental growth (increasing rental tone)
329 which was supported by the longevity of consumer spending. Second was the lack of supply in retailing
330 locations due to urban limitations on development. This point illustrates the hegemonic market
331 opinion in relation to retail assets, that retail will always be the best asset class with continued rental
332 growth associated with limited supply of physical space but considerable demand.

333 However, in today's market when we consider the amount of vacant retailing space and the problems
334 associated with high streets and shopping centres some truth can be gleaned from Liebowitz and
335 Margolis who suggested

336 *'The inferiority of a chosen path is unknowable at the time of choice made, but later*
337 *recognized that some alternative path would have yielded greater wealth'.*

338 Liebowitz and Margolis (2014) pp 985

339 As the retail market experiences a retraction in physical presence through the process of rightsizing²,
340 the consequences can be clearly seen in the increase of high streets and shopping centres peppered
341 with vacant and void units throughout both town and city centres in England including Newcastle,
342 Gateshead MetroCentre, Sheffield Meadowhall, Trinity Square in Leeds to name a few.

343 As demonstrated above with the evolution into second degree path dependence, the problems
344 surrounding retail values is not new, the disruptions to the market and consumer habits have been
345 evolving and changing for some time. In hindsight the relaxation of the planning laws coupled with
346 an increase in car usage in the early 1990s led to the development of new out of town retail centres.
347 In addition, the high street experienced a decline of department stores as cities began to develop
348 through the addition of new covered shopping malls. Despite this increase in retail space, market
349 stakeholders continued to assume that market rental tones would increase into the future with little
350 thought to the increase in supply and reduction in demand as retailers adapt and change their retailing
351 format.

² Rightsizing defined as the need to plan for place continuation in the context of shrinkage (Hollander and Nemeth, 2011)

352 **4.3. Third degree evolution**

353 Finally, Liebowitz and Margolis (2014) put forward what they called ‘third degree’ path dependence
354 which explains past, present, and future events or conditions that effect and promote errors in
355 practice (in this case the mispricing of retail assets) but recognise that the error was avoidable. They
356 argue that persistent behaviour leads to an inefficient outcome, while recognising that a preferable
357 outcome can be achieved, but a choice is made not to obtain it. It is this third-degree pathway that
358 has most relevance to real estate valuation in the retail sector. It has been clearly demonstrated that
359 there have been changes in occupier demand in the sector as businesses have strived to consider ways
360 of adapting to the contemporary challenges– particularly through companies reducing their physical
361 store footprint.

362 This process has led to an increase of vacant space in town and city centres. The expectation would
363 be that an increase in vacant space would influence the downward tone of market rents (the case for
364 which is set out in Section 2). However, there is little appetite from investors and landlords to consider
365 reducing rental tones to a) reflect the increase of additional space on the market and b) to reflect the
366 reduced need of rightsizing rents. Instead, their main concern is retaining the high tones which defines
367 the overall market value of their asset. This echoes the work of Levy and Schuck (2004) who consider
368 the influence that clients have on value. They indicate that valuations are likely to retain biased
369 estimates of market value. They argue that

370 “Clients have economic incentives to influence valuations in order to maximise asset-based
371 fees or increase loan books”.

372 (Levy & Schuck (2004) pp 185)

373 In this section, we have set out a framework that explains how the practice of valuation has evolved
374 and been constrained over time, through various stages of path dependency. In the proceeding
375 section, the authors develop this argument to explain how this inefficient behaviour becomes locked
376 into practice, inhibiting improvement.

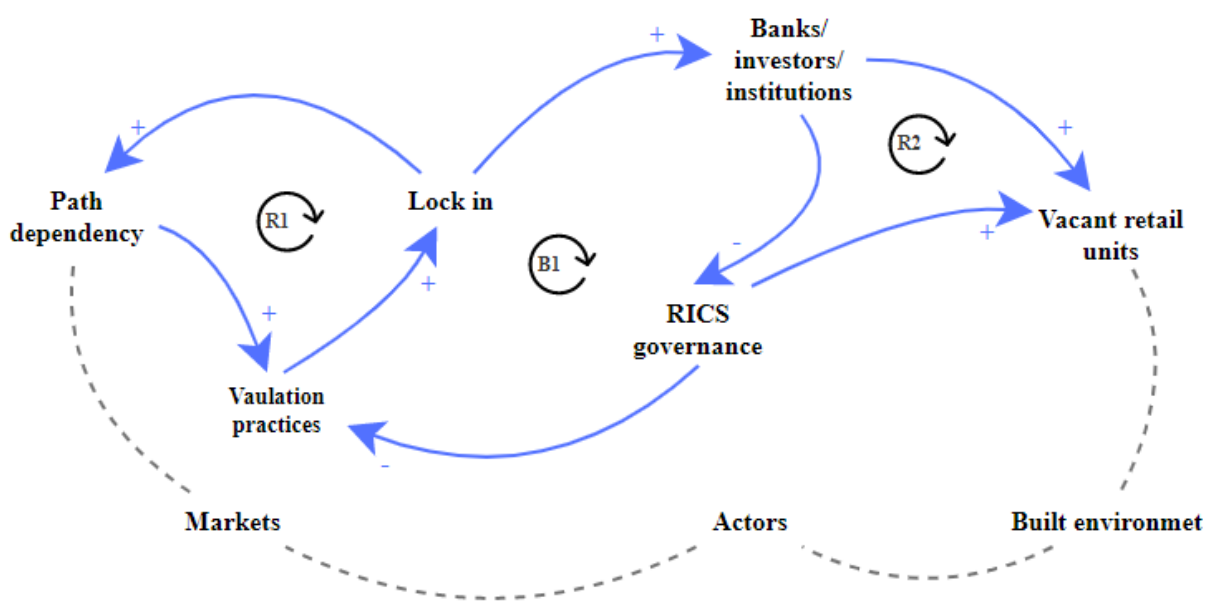
377 **4.4 Conventional lock-in**

378 Grabbers’ (1993) notion of lock-in, developed initially in the domain of regional development, shows
379 how the lock-in of processes and close relationships (often agglomerating) between actors can at the
380 beginning be beneficial but detrimental as economies and occupiers change and processes become
381 outmoded and harmful to progress going forward. Grabher (1993) presents three types of traditional
382 lock-in: functional; cognitive; and political. Functional lock-in refers to the hierarchical and close
383 relationships that exist between actors or as Hassink (2011) suggests, enterprises. In this sense we can
384 observe that real estate valuations underpin financial decisions within the built environment and there
385 are close relationships between the actors involved (e.g., investors, developers, financiers, and
386 institutions). The close historical relationships between stakeholders results in a lack of research,
387 development, and marketing as they are too heavily reliant on one another, self-perpetuating market
388 values and a consequent lack of self or comparative critique. Secondly, cognitive lock-in refers to
389 markets or ‘secular trends.’ In this case, we can observe the practice of valuation developing an
390 attitude or mindset that markets will continue moving in the same general ‘herd’ direction for the
391 foreseeable future. An example of this is research into (and market adherence) to the idea of regular
392 short term real estate cycles (and subsequent shocks) which help to regulate markets over time
393 alongside a longer-term belief that value will increase progressively in the long term (Barras, 2009;
394 Ball, Lizieri and MacGregor, 2011). Reinforcing a belief that retail assets will, eventually, regain and
395 maintain their value based on a zonal system and conventional lease structure.

396 The final form of lock-in, political, is concerned with organisations themselves or actors. The concept
 397 of political lock-in captures the institutional or network values of the organisation who wish to
 398 preserve existing traditions and processes and in doing so tamper with new development and
 399 creativity. The practice of valuation is overseen and regulated by the RICS. The organisation governs
 400 and regulates all the techniques, quality, and professionalism of the international real estate
 401 profession. The organisation is widely interlinked with other stakeholders across other professionals
 402 and is influenced by investors, banks (financiers), and institutions within the market. The RICS is in a
 403 very difficult position, charged on one hand with maintaining a meaningful valuation system but on
 404 the other pressured by major investors who want to maintain their asset value in global systems of
 405 capital, firstly to use as security to raise loans, and secondly to protect the share price of listed
 406 companies (Crosby and Henneberry, 2016). This highlights the underlying importance attached to the
 407 value of real estate assets and the close links to the economy, society, and the built environment.

408 Previously Fields (2018) and Brendt and Broecklers (2009) have argued that markets do not simply
 409 appear but are continually produced and constructed socially with the help of actors. These actors are
 410 interlinked in dense and extensive webs of social relations. In a different sense, we argue that webs
 411 of social actors (investors, developers, financiers, and institutions), all of whom have varying degrees
 412 of power, come together to prevent a new affordability-based market forming in the retail asset
 413 sector. Instead preserving market norms, credit systems and a false sense of value in capital markets
 414 – with the local outcome being vacant or poorly occupied properties.

415 Figure 2, a causal loop diagram, describes the complex relationships that influence value, the
 416 connection between value and the built environment and wider society through capital flows. It helps
 417 to understand the links with other important aspects of the valuation process. The figure illustrates
 418 the reinforcing loop that encompasses path dependency (R1) and lock-in through the valuation
 419 processes. This is influenced by actors, specifically the RICS through governance, bankers, investors,
 420 and institutions which creates a balancing loop (B1) that depicts the interconnection between these
 421 actors based on valuation, markets, and the built environment. Whilst R2 illustrates the lock in (R2) of
 422 vacant units influenced by the valuation practices and the actors. The loop demonstrates the positive
 423 and negative result of actions. In this paper the authors argue that specific actors (specifically
 424 institutions and investors) have more power and vested interest than others and have prohibited new
 425 market conventions forming, hence their dominance within the loop.



427

428 **Figure 2: Interlinking sub-systems influencing value and infiltrating *the build environment***
429 **(Authors)**

430 In partnership with research participants, the proceeding section takes forward this conceptual
431 framework to investigate this situation further.

432 **5. Discussion**

433 **5.1 Establishing the traditional valuation processes through first degree evolution**

434 The previous section set out an argument that valuation professionals are becoming aware of the
435 complexities that traditional valuation processes present, particularly the market approach. This
436 process was established very early in real estate markets and has been used throughout valuation
437 practice with no critical and/or adaptive view of the retail sector.

438 All participants in the research agreed that historically the retailing sector has always been perceived
439 as the best performing commercial sector. The group of participants considered their own early
440 experiences in valuation practice. There was a consensus regarding training all suggesting that they
441 'learnt' the process of establishing rental tones and subsequently market rent through practice and
442 discussion with experienced practitioners. The traditional processes established through the
443 profession have been passed to further generations of practitioners hinting at Fortwengel and Keller's
444 (2020) 'learning effect' introduced in the previous section.

445 All participants interviewed agreed that their skill with the market approach had been passed to them
446 by senior professionals whilst training as graduates. They themselves are now training their own
447 graduates with the same procedures, skills, and knowledge.

448 *"Although I was taught the principles of valuation techniques at university the real skill of*
449 *valuation was learned once I was in practice. I learned from my boss who learned from his."*

450 Director of valuation (International Surveying Practice).

451 *"The skill of doing a valuation is learnt when in practice from experienced practitioners who have*
452 *knowledge of the real estate markets and have undertaken valuations for a long time."*

453 Partner of valuation (International Surveying Practice)

454 This evidence suggests the 'learning effect' has aided the development of traditional valuation
455 processes throughout the market. Supporting the arguments of Fortwengel and Keller (2020) that the
456 learning effect is a specific task performed repeatedly.

457 There is then evidence that Fortwengel and Keller's (2020) 'complementary effect' has taken shape
458 while the traditional market process has become embedded in practice. Participants agreed that this
459 effect is observed in regulations and governance produced by the RICS. All participants agreed that
460 the RICS involvement in governance has aided the development of valuation processes. However, the
461 consensus from participants was that the RICS do not offer opinion or recommendations in relation
462 to changes in techniques or processes.

463 One participant commented as follows: -

464 *“The RICS are keen to see changes in the way we value real estate although they are not willing*
465 *to put forward advice other than quality procedure and best practice, they tend to leave the*
466 *application of the methods to the professionals.”*

467 Director (International Surveying Practice)

468 Participants suggested that to some extent this was down to external influence on the RICS, they are
469 aware that changes to processes would have huge implications for the headline values of real estate
470 in global capital markets and by extension the wider economy. Echoing the compromised valuation
471 levels in the sub-prime mortgage crisis in 2008. All participants agreed that systematic changes to
472 retail based valuation practice would send shockwaves through the valuation of real estate assets and
473 the wider economy.

474 **5.2 The evolution of the retail asset category**

475 The participants interviewed remembered changes in planning laws which opened the way for the
476 development of out-of-town shopping centres and retail parks. This development contributed an
477 increase in retail floor space under different formats. In fact, an interesting comment from one
478 participant suggested that the new formats (retail warehouses and out of town centres) became
479 occupied by tenants already present within city centre locations who at the time wanted to increase
480 their representation in different areas, offering consumers better parking facilities, easy access, and
481 more product choice.

482 ‘Most large retailers became represented in different formats throughout the retailing sector
483 but still retained their city centre presence’.

484 Partner of valuation (International Surveying Practice)

485 Unfortunately, during this time, the practice of retail valuation was not adapted to account for these
486 new circumstances. This can be seen as the point of transition into the second degree of path
487 dependency. Liebowitz and Margolis’s (2014) assumes that there are no inefficiencies at first glance,
488 although in hindsight inefficiencies are demonstrated.

489 Indeed, one participant commented that development of new retail warehouses and out of town
490 shopping centres increased total retail floor space significantly. However, most participants agreed,
491 this was not scrutinised when considering values and valuation processes at the time. Naively, city
492 centre retailing was still considered to be the best assets class, while in theory the increase in total
493 floor space should have resulted in a reduction in rents due to the excess supply.

494 **5.3 Demonstrating third-degree evolution**

495 The first two processes of path dependence demonstrate how the valuation process has developed
496 over time through a defined trajectory of technique and repeated practice. The third captures the
497 current situation in retail real estate valuation, describing a situation where there is some concession
498 that retail valuation is inefficient, indeed there is concession that the valuation practice could be
499 improved (e.g., considering business turnover) yet this preferable outcome is not obtained. Instead,
500 the practice of retail valuation is locked into the conventions of the market method. Research
501 participants were asked about the reasons for this persistence and consensus formed around the
502 pressure from clients to maintain values and consequently the traditional processes.

503 The research participants were questioned on the current issues surrounding zoning and whether
504 valuation practice was starting to accept the need for change in valuation practice. All suggested that
505 their clients (clients in this sense are taken to mean investors/landlords) did not understand any other

506 practice and zoning was the only way they could relate value to retail assets. This illustrates that it is
507 not necessarily valuation professionals themselves who are locked into market norms, rather it is
508 landlords and investors who rely on 'market based' valuations to make their financial decisions – and
509 in turn pressure valuation professional to adhere to market convention. Altering the format of this
510 information, and potentially the underlying valuation, would draw scepticism (and an altered
511 assessment of risk) from the banking system as secured debt would have previously been agreed on
512 a consistent forward projection of value.

513 Consequently, the solidification of current valuation practice can be considered a recursive situation
514 that is not only led by valuation practitioners. Market stakeholders also influence (see Figure 2)
515 professionals to provide and retain traditional processes. Corroborating this assertion, a respondent
516 suggested that,

517 "Clients only understand rental tones and Zone A rates when considering their retail investments".

518 Partner (International Surveying Practice)

519 Whilst another reiterated a similar view.

520 "I have advised some of my clients about the problems with zoning and that tenants are no
521 longer considering rent on this basis".

522 Partner in valuation department (International Surveying Practice)

523 In fact, the respondent explained that tenants now consider the affordability of the unit. They
524 contemplate costs associated with occupation including tax and service charge against intended
525 consumer spend and subsequent profit from the unit. Feedback is often that the market rental tone
526 is too expensive when considering other costs.

527 All participants indicate that they are keen to develop an understanding of different ways of
528 establishing rental tone and market rent however there appears to be pressure from clients to remain
529 consistent (even if the information is consistently flawed) when carrying out valuation practice.
530 Participants indicate there is genuine concern from valuers in relation to establishing more meaningful
531 valuation calculations. However, they also indicated that this is a multi-faceted situation. All
532 participants acknowledge that the retail sector has undergone significant change which has seen
533 tenants adapt quickly to changing consumer habits and that they deserve a more accurate and
534 meaningful rent. Tenants are now more likely to prefer a rent based on affordability, rather than any
535 market calculation and wish to negotiate with landlord to 'rightsize' their physical footprints and
536 timing of payments. Indeed, tenants now appear to prefer flexibility and affordability over the
537 traditional priorities of location and proximity to maximum footfall.

538 One participant advised that,

539 "Tenants are considering not just rent, but all other outgoings and they are more likely to
540 agree a rent that includes business rates and service charge."

541 Partner within valuation department (International Surveying Company)

542 However, from the landlord/investor point of view, any alteration could potentially undermine the
543 valuation of assets. When questioned about potential changes to processes in establishing rental
544 tones and market rents one participant suggested that: -

545 "Investors always have an eye on income and cashflows more so today than ever as they
546 have constant financial decisions to make and consider."

547

Director of valuation (International surveying company)

548 **5.4 Locking in traditional valuation processes**

549 Participants discussed increased pressure from landlords and investors to retain conventional
550 valuation procedures. This can be described through the lens of lock-in set out in Section 4. Within
551 the conceptual framework the authors considered three types of lock in, namely functional; cognitive;
552 and political (Grabher, 1993). Most notably, functional lock-in refers to the hierarchal systems and
553 organisations which surround a given situation. As discussed in the previous section, the participants
554 understood that any valuation change would need to be considered with their clients. It was
555 interesting to note that more than one participant commented that clients insisted rental tone
556 remains consistent during falling markets (i.e., the rental tone does not reduce in line with markets
557 but remains at the historic high level), rather than being reduced in line with market sentiment. A
558 clear finding in this research is that client pressure prohibits improvements in valuation practice,
559 further demonstrating the causal situation described in Figure 2.

560 Closely linked to this finding is the manifestation of political lock-in. As previously discussed in Section
561 4.2, the RICS does not seek to change valuation processes, rather they seek to retain consistent
562 approaches. Participants indicated that the RICS has also come under pressure from external parties
563 including financial institutions, investment funds and investors. There was agreement between
564 participants that the RICS retains an unspoken concession that retail-based valuation processes need
565 to evolve. However, the organisation is facing the same degree of pressure as individual valuers to
566 resist this.

567 Under this pressure, it was clear from the interviews undertaken that the RICS are particularly wary
568 about changing processes or directly advising on valuation methods. One participant commented that
569 there appears to be lack of interest from the governing body to change valuation processes or give
570 advice on this aspect.

571 *“The RICS are keen to see changes in the way we value real estate although they are not willing*
572 *to put forward advice other than quality procedure and best practice. They tend to leave the*
573 *application of the methods to the professionals.”*

574

Director (International Surveying Practice)

575 Finally cognitive lock in describes dominant word views or narratives (in this sense the market
576 valuation technique) and can be seen to interrelate with the third degree of path dependency set out
577 in Section 4.4. Research participants indicate that the mutual ties and conventions of the market
578 approach over time has led to a form of group thought that now underpins the valuation of retail
579 assets across England. Just as in Grabhers’ (1993) original work into the coal industry, where slumps
580 in performance were onerously interpreted as short term phases in a business cycle that would
581 maintain long term growth. Slumps in retail real estate performance are onerously explained away as
582 short-term economic glitches which will be recovered once the economy rebounds.

583 All participants were asked about lock-in and whether adherence to the traditional valuation approach
584 was contributing to the increased number of vacant retail units. All valuers agreed that the
585 consequences of retaining high rental tones was an increase in vacant units as more tenants become
586 concerned with ‘affordability’. Although it was recognised that other factors such as ecommerce and
587 more recently COVID have accelerated this problem.

588 The consensus of opinion from the participants was time to change practices as the techniques of
589 valuation are become obsolete within retail practices. In fact, one participant mentioned that the

590 valuations have become so complex that they are calling on specialist teams to consider rents and
591 market values, suggesting:

592 “Even before the pandemic it was becoming increasingly difficult to value retail assets as
593 thorough analysis of income suggested rental tones were inconsistent, however we are now
594 looking to bring in specialist teams to consider this type of asset.”

595 Partner (International Surveying Practice)

596 **6. Conclusion**

597 This paper set out to explore whether traditional valuation practices are contributing to the increase
598 in void and vacant retail units within the physical built environment in England. In response to the
599 underlying research question - *how do contemporary real estate valuation practices capture the new*
600 *world of retail and what are the implications of these practices for the wider built environment?*
601 Findings suggest that the evolution of real estate valuation and the ‘market approach’ is defined
602 through a constrained and specific evolution. Although, this research has been based on practices
603 within England only, which is perceived by stakeholders as a mature market. It is considered that real
604 estate assets operate within a global capital market. While it should be acknowledged that many
605 countries in the global north have different valuation practices, particularly when establishing rent,
606 they are all grappling with the challenge of adapting valuation techniques in the face of changing socio-
607 economic conditions. Therefore, the findings in this paper have a) relevance for any context
608 considering how concepts of value and associated techniques play out in territorial situations and b)
609 the conceptual framework and practitioner focus can be used to study any market context.
610 Furthermore, the evolutionary approach can also be used as a reference point for any location in the
611 formative stage of developing a valuation procedure, as the findings provide a knowledge basis to
612 avoid similar issues.

613 With reference to Liebowitz and Margolis’s (2014) interpretation of different degrees of path
614 dependence, the process of valuation has evolved through a combination of ‘learned processes’
615 followed closely by the ‘complementary effect’ or the rules and governance which define the valuation
616 procedures set out by the RICS. This ‘learning effect’ demonstrates how the market approach utilises
617 comparable information, the often-heuristic nature of associated analysis which has been passed
618 down through generations of valuers and has followed a specific path dependence. However, there
619 was unanimous agreement between research participants that the retail market has evolved over
620 several years and the change has not been accommodated within valuation practice.

621 Retail tenants are being driven by disruptions in the market to become flexible both in business and
622 in their occupation of space – something that has only been accelerated by Covid. It is, however,
623 concerning that although these changes have taken place old valuation practices persist, coalescing
624 around market rent, zoning, and the process of establishing a rental tone through the market
625 approach. This can be seen as a form of market wide confirmation bias. The real impact of this
626 situation on the ground is void and vacant units that litter the traditional high street because landlords
627 and investors do not want to revise down their rents. Preferring instead to maintain the headline
628 values agreed at previous valuation dates which were subsequently fed into debt agreements.

629 From this research it has been established that problematic forms of lock-in have not only arisen in
630 the process of valuation but that powerful stakeholders have a vested interest in maintaining
631 traditional valuation methods that underpin valuation processes. Stakeholders in this instance include
632 the RICS, banks, financial institutions, investors, and developers – who all have a stake in maintaining
633 conventions of market value. Grabher (1993) and Hassink (2011) would argue that these stakeholders

634 have become too reliant on old ideas and the interested parties are too reliant on each other with
635 little objective scrutiny.

636 Research participants, and indeed retail tenants, do offer a potential way of improving this situation.
637 The traditional market approach now produces unaffordable rents that are unrealistic for occupiers.
638 This prices them out of occupation and in most instances out of business which leads to vacant
639 buildings. To develop new practices and procedures, the authors argue that there needs to be a new
640 engagement with affordability which has the potential to lead to rents that are more palatable to
641 tenants.

642 In making these arguments, it is also important to highlight some limitations of the study at hand. This
643 research has been solely concerned with market rent and the process of investment value or market
644 value has not been considered in any depth. This is also an area of current concern for the RICS who
645 are undertaking a review of investment practices. This paper only provides a general description of
646 valuation approaches and more detailed research will be needed to fully understand the situation
647 surrounding the investment approach and indeed alternative approaches to value that are undertaken
648 elsewhere in the world.

649 Furthermore, value is only one part of a complex web of actors, interests and relations who are either
650 directly or indirectly involved in the production and reproduction of the built environment. This paper
651 has only focused on the perceptions of private sector valuers involved with the valuation of retail-
652 based assets. Clearly, additional research into the complex relations between the different actors
653 involved (investors, landlords, developers, financiers, and agents) will enrich this line of enquiry.
654 Despite these caveats, we consider that the material within this paper, situated within a new
655 conceptual framework for the discipline of valuation, provides a range of interviewee perspectives on
656 current valuation processes and gives other disciplines an insight into the black box of real estate
657 valuation. Indeed, this initial conceptual framework creates some scope for real estate professionals
658 to exert leverage over the RICS, valuation policy and an opportunity to collaborate with other
659 disciplines in its application to wider intellectual debate.

660 **References**

661 AALBERS, M. (2012) *Subprime cities: the political economy of mortgage markets*. Wiley-
662 Blackwell, Oxford. doi:10.1017/S1537592713001771

663 AALBERS, M. (2016) *The financialization of housing: a political economy approach*. Routledge Studies
664 in the Modern World Economy. Routledge, London and New York. DOI:10.1007/s10901-017-9555-4

665 AMIDU, A.R., BOYD, D. & AGBOOLA, A.O. (2019) The role of knowledge in valuation practice: expert
666 valuers' perception. *Journal of Real estate Investment and Finance* Vol 37 No 6 2019 pp 524-540.
667 DOI: 10.1108/JPIF-11-2018-0089

668 AMIDU, A.R., BOYD, D. & GOBET, F. 2019. A protocol analysis of use of forward and backward
669 reasoning during valuation problem solving. *Real estate Management*, 37, 638-661. DOI 10.1108/PM-
670 10-2018-0056

671 BALL, M. LIZIERI, C AND MACGREGOR, B.D (2011) *The Economics of Commercial Property Markets*.
672 Routledge Oxon

673

674 BARRAS, R (2009) *Building Cycles: Growth and Instability (Real Estate Issues)*. Wiley Blackwell

675

676 BAUM, A. (2017) 'PropTech 3.0: the future of real estate' Said Business School: University of Oxford

677

678 BAUM, A. MACKMIN, D. & NUNNINGTON, N. (1997) The income approach to property valuation.
679 International Thomson Business Press
680
681 BLACKLEDGE, M. (2017) Introducing property valuation. London, England

682 CHIAPELLO, E (2014) Financialisation of Valuation. *Hum Stud* (2015) 38:13-35 DOI: 10.1007/s10746-
683 014-9337-x

684 CENTRE FOR RETAIL RESEARCH (2022) Available at: <https://www.retailresearch.org/retail-crisis.html>
685 (Accessed: 8 February 2022)

686 CHRISTOPHERS, B. (2018). The new enclosure: The appropriation of public land in neoliberal
687 Britain. Verso. <https://doi.org/10.4000/metropoles.7715>

688 CROSBY, N & HENNEBERRY (2016). Financialisation, the valuation of investment real estate and the
689 urban built environment in the UK. *Urban Studies Journal special edition: Financialisation and the*
690 *production of urban studies Vol.53 (7) 1424-1441. DOI: 10.1177/00420980/5583229*

691 FIELDS, D (2017). *Urban Struggles with financialization*. Geography Compass 2017. John Wiley &
692 Sons Limited. DOI: 10.1111/gec3.12334

693 FIELDS, D. (2018). Constructing a new asset class: Property-led financial accumulation after the
694 crisis. *Economic Geography*, 94(2), 118–140. <https://doi.org/10.1080/00130095.2017.1397492>

695 FRENCH, N. 2013. UK freehold reversionary properties: valuation practice revisited. *Journal of*
696 *European Real Estate Research*, 6, 218-235. <https://doi.org/10.1108/JERER-04-2013-0004>

697 FRENCH, N & GABRIELLI, L (2004) The Uncertainty of valuation. *Journal of Property Investment and*
698 *Finance*. Vol.22 No 6 2004 pp 484-500 <https://doi.org/10.1108/14635780410569470>

699 FORTWENGEL, J & KELLER, A (2020) Agency in the face of path dependence: how organisations can
700 regain scope for maneuver. *Business Research* (2020) 13:1169-1201 DOI: 10.1007/s40685-020-
701 00118-w

702 GALLIMORE, P & WOLVERTON, M. (1997) Price-knowledge-induced bias: a cross-cultural
703 comparison. *Journal of Property Valuation & Investment*. Vol 15 No 3 pp261-273
704 <https://doi.org/10.1108/14635789710184989>

705 GARUD, R & KARNOE, P. (Eds) *Path Dependence and Creation*, pp 69-90. Lawrence Erlbaum
706 Associates, Mahwah, NJ <https://doi.org/10.1111/j.1467-6486.2009.00914.x>

707 GILBERTSON, B. & PRESTON, D. 2005. A vision for valuation. *Journal of Property Investment &*
708 *Finance*, 23, 123-140. <https://doi.org/10.1108/14635780510699998>

709 GRABHER, G (1993). *The embedded Firm: On the socioeconomics of Industrial Networks*. London:
710 Routledge pp 255-277 [https://doi.org/10.1016/0024-6301\(93\)90123-W](https://doi.org/10.1016/0024-6301(93)90123-W)

711 GREY, P (2021), *Independent Review of Real Estate Investment Valuations*. RICS. Available at:
712 [https://www.rics.org/globalassets/rics-website/media/upholding-professional-standards/sector-](https://www.rics.org/globalassets/rics-website/media/upholding-professional-standards/sector-standards/valuation/independent-review-of-real-estate-investment-valuations.pdf)
713 [standards/valuation/independent-review-of-real-estate-investment-valuations.pdf](https://www.rics.org/globalassets/rics-website/media/upholding-professional-standards/sector-standards/valuation/independent-review-of-real-estate-investment-valuations.pdf) (Accessed:4 Jan
714 2022)

715 GRICE, N.M. (2013) 'Why Zone As don't work', *Estates Gazette Retail Focus* (Summer): 5

- 716 GUY, S. & HENNEBERRY, J. (2002) Bridging the divide: complimentary perspectives on property.
717 Urban Studies, 39(8), 1471-1478. <https://doi.org/10.1080/00420980220142736>
- 718 GUY, S. & KARVONEN, A. (2011) Using Sociotechnical Methods: Researching Human-Technological
719 Dynamics in the City. in J. Manson and A. Dale (eds) Understanding Social Research: Thinking
720 Creatively about Methods, London: Sage Publications, pp 102-
721 133 <https://dx.doi.org/10.4135/9781446287972.n8>
- 722 HASSINK, R (2011) 'Locked in decline? on the role of regional lock-ins in old industrial areas', in
723 Boschma, R & Martin, R (eds.) Handbook of Evolutionary Geography. Edward Elgar, Cheltenham.
724 pp450-468 <https://doi.org/10.4337/9781849806497>
- 725 HENNING, M. STAM, E & WENTING, R (2013) Path Dependence Research in Regional Economic
726 Development: Cacophony or Knowledge Accumulation? Regional Studies Vol 47, No 8, 1348-
727 1362. <http://dx.doi.org/10.1080/003s43404.2012.750422>
- 728 HOLLANDER, J B AND NEMETH, J. (2011) The bounds of Smart Decline: A foundational Theory for
729 Planning Shrinking Cities. Housing Policy Debate 21/3: 349-367 DOI: 10.1080/10511482.2011.585164
- 730 INVESTMENT REAL ESTATE FORUM (2022) Size and structure pf the UK property market year end
731 2020. Available at: [https://www.ipf.org.uk/resourceLibrary/size---structure-of-the-uk-property-](https://www.ipf.org.uk/resourceLibrary/size---structure-of-the-uk-property-market-year-end-2020-table---chart-data.html)
732 [market-year-end-2020-table---chart-data.html](https://www.ipf.org.uk/resourceLibrary/size---structure-of-the-uk-property-market-year-end-2020-table---chart-data.html)
- 733 ISSAC, D. & O'LEARY, J. (2012) Property Valuation Principles. 2nd edn. London. Palgrave Macmillan
- 734 JONES, C. (2010) The rise and fall of the high street shop as an investment class. Journal of Property
735 Investment and Finance. Vol.28 No 4, 2010 pp. 275-284. DOI 10.1108/14635781011058884
- 736 KARVONEN, A (2018) Afterword: Planning and the non-modern city. Relational Planning: Tracing
737 Artefacts, Agency amd practices. London: Palgrave Macmillan pp317 - 325 DOI: 10.1007/978-3-319-
738 60462-6_13
- 739 LEES, L. and FERRERI, M. (2016) Resisting gentrification on its final frontiers: lessons from the
740 Heygate Estate in London (1974-2013), Cities, 57:14-24. <https://doi.org/10.1016/j.cities.2015.12.005>
- 741 LIEBOWITZ, S.J & MARGOLIS, S.E (2014) Path Dependence and Lock-in DOI:
742 <https://doi.org/10.4337/9781784713218>
- 743 [LINSTONE, H.A AND TUROFF, M. \(1975\) The Delphi Method: Techniques and Applications.](#) ISBN 0-
744 201-04294-0
- 745 MOOYA, M. (2011) Of mice and men: automated valuation models and the valuation profession.
746 Urban Studies, 48, 2265. <https://doi.org/10.1177/0042098010391301>
- 747 PAGOURTZI, E., ASSIMAKOPOULOS, V., HATZICHRISTOS, T. & FRENCH, N. (2003). Real estate
748 appraisal: a review of valuation methods. Journal of Property Investment & Finance, 21, 383-401.
749 DOI:10.1108/14635780310483656
- 750 PARSONS, G. (2004) The glossary of property terms. 2nd Edn. London: Jones Lang LaSalle and Estates
751 Gazette
- 752 RICS (2019) Comparable evidence in real estate valuation. RICS Professional standards and guidance,
753 global. 1st Edition.

754 RICS Valuation - Global Standards January 2022

755 RYAN, A.B. (2006) Post-Positivist Approaches to Research. In *Researching and writing your thesis: a*
756 *guide for postgraduate students*. MACE: Maynooth Adult and Community Education, pp 12-26 DOI:
757 <https://doi.org/10.4135/9781446294994.n1>

758 SHAPIRO, E. 2012. *Modern Methods of Valuation*, Abingdon, Abingdon : Taylor and Francis Group

759 SMITH, N. and WILLIAMS, P. (Eds.) (1986) *Gentrification of the City*, Unwin Hyman, London.

760 VANDELL, K. D. 2007. Expanding the academic discipline of real estate valuation. *Journal of Property*
761 *Investment & Finance*, 25, 427-443. DOI: <https://doi.org/10.1108/14635780710776657>

762 WALLIS, T (2020) UK rent collection and COVID 19. Available at:
763 <https://ww3.rics.org/uk/en/journals/property-journal/uk-rent-collection-and-covid-19.html>
764 (Accessed: 19 October 2022)

765 WEBER, R (2010) Selling city futures: The financialization of urban redevelopment policy. *Economic*
766 *Geography* 86(3): 251–274. <https://doi.org/10.1111/j.1944-8287.2010.01077.x>

767 WEBER, R. (2020) Embedding futurity in urban governance: Redevelopment schemes and the time
768 value of money. *Environment and Planning A: Economy and Space*, 53(3), 503-524. DOI:
769 <https://doi.org/10.1177/0308518X20936686>