



Globalizing financial valuation: International property consultants in São Paulo

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Abstract

International property consultants (IPCs) have become key intermediaries in the globalization of property markets by providing a range of services that generate transparency and comparability in land and property-based investments. While their role in generating standardized information on local markets is well known, what is less known is how IPCs help turn property into an income-yielding asset in less developed economies. This article investigates the contested diffusion of financialized valuation approaches in São Paulo's local property market. Through a qualitative inquiry into large IPCs and their main clients in the city, we show that IPCs have promoted valuation approaches that are tailored to the needs of financial market investors, thus affecting key investment decisions taken by diverse actors. Though these financialized techniques have at times clashed with more traditional views of property ownership prevalent in the country, we show that most often they co-exist with long-established valuation techniques that reflect the social and economic circumstances of Brazil's economy. The socially contingent nature of property valuation raises theoretical issues concerning the complexity of attributing value to fixed capital, as well as several policy issues.

Keywords

International property consultants, financialization, valuation, real estate markets, Brazil

Introduction

Property valuation is a professional practice that enables the commensuration of heterogeneous real estate commodities so that they can be more easily traded either as real

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property or as property-backed securities. While it increasingly mobilizes calculative techniques commonly used for the pricing of other financial assets, the practice of valuation in real estate has the additional effect of shaping the ownership structure of cities and regions, and of driving investments in urban production (Crosby and Henneberry, 2016). They do so either directly, by influencing market prices or underpinning viability studies in urban (re)development projects, or indirectly, by providing the knowledge and expertise used by local agents involved in market transactions (Bitterer and Heeg, 2012). As a growing literature has shown, in a context where investment in property is becoming globalized, standardized valuation is widely regarded by market players as a key condition for ‘anchoring financial capital’ in the city (Searle, 2014; Theurillat et al., 2015).

Since the 1990s, a profusion of agents have devoted themselves to intermediating between global finance and the production of the urban built environment, giving rise to trans-scalar territorial networks in real estate investment (Halbert and Rouanet, 2014). Among these, property consultants stand out by conducting operations crucial to connecting local real estate markets with international investors (Magalhaes, 2001; Aveline-Dubach, 2013). These firms are not merely advisors or knowledge providers, and the techniques they use to assess and classify real estate assets are not objective representations of the ‘real’ qualities of such objects. Instead, their operations actively produce the speculative bets, dispositions, and values that circulate within this business field (Weber, 2015). If investors can nowadays compare returns on property with returns on other financial assets globally – one of the key dimensions of the ‘actually existing financialization’ of real estate (Guironnet et al., 2016) – this is owed considerably to the work of consultants.

As international property consultants (IPCs) conduct business simultaneously in several countries, studying these firms provides opportunities for understanding how their business activities get embedded in diverse institutional settings across specific territories. This article investigates the practices of IPCs in São Paulo’s real estate market from a particular angle: that of property valuation. Our fieldwork in the city of São Paulo has shown that a small group of recently-arrived IPCs were instrumental in diffusing property valuation techniques in line with international standards, in particular, the income-based method of discounted cashflow (DCF), which consists of realizing a set of future income streams (Doganova, 2014).

However, consistent with the idea that context matters even in a globalized economy, we also noted that the use of such new techniques did not fully displace more traditional methodologies for appraising property values, such as those based on adding the costs of construction and those based on comparisons with similar transactions. This is not unexpected, as the co-existence of different valuation methods is also found in other contexts (Crosby and Henneberry, 2016). We claim, though, that there are historical and institutional reasons why the financialized valuation methods introduced by IPCs have not fully replaced other, more traditional methods for appraising property. One of the main reasons concerns how land and property have historically been viewed, by Brazilian elites, as a store of value that must appreciate over time, and several scholars have characterized how rent extraction is a structural feature of the country, resulting from the way land was appropriated under Iberian colonization (Fernandes, 1976; Martins, 2010). Pereira (2019: 463) dubs this breed of patrimonialism, oligarchic, insofar as the state was controlled by oligarchs that encouraged the “sterile hoarding” of land.

But other institutional aspects, such as the role of state-owned bank, Caixa Economica Federal, in mortgage lending that promoted traditional valuation methods, likewise create barriers to the full dissemination of financialized valuation. This leads us to conclude that, even though financialized methods, such as discounted cashflow, have gained ground in the

real estate sector over the past decade, financialization is still a partial, incomplete process that affects more intensely the globalized portion of the market.

The present article thus analyses how income-based methods of property valuation are used and disseminated by IPCs in their everyday business practices in São Paulo, as well as how other actors in the city's property market receive, react, and adapt these techniques to their particular needs. Our aim is to advance on analyses that use a sociological approach to enrich our understanding of structural processes of capital accumulation, thus combining sociology, economic sociology, critical geography, and political economy.

The article is divided into three main sections. In the first section, we discuss the work of valuation performed by property consultants and revise the existing literature on the subject. In the second section, we characterize the agents we studied and describe our research methodology. In the third section, we delve into the history and recent evolution of valuation practices in São Paulo's real estate market and discuss how the income approach diffused by consultants co-exists with the traditional views and institutions of property ownership in the country. We conclude by drawing out some theoretical and policy implications of our research.

Property consultants and the making of real estate as an investment object

Over the last few years, an extensive body of literature has shown that the integration of (global) finance and (local) property markets is not a smooth process, relying instead on state-enabled regulatory frameworks to 'create liquidity out of spatial fixity' (Gotham, 2009). Important as they are for the integration of global and local markets, however, regulatory reforms and tax incentives put in place by governments are only part of what Carruthers and Stinchcombe (1999) have called the 'social structure of liquidity'. Several studies in economic sociology have thrown light on how a set of market devices, co-produced by market actors through everyday interaction, create the conditions for multiplying the transactions of different types of goods and assets (Fligstein and Calder, 2015). Indeed, as Chiapello remarks in her conceptualization of financialization as a socio-technical process, different layers of professional work, carried out by both private and public actors, are needed for financialization to make progress in any given domain (Chiapello, 2020; see also Birch and Muniesa, 2020).

In this article, we claim that international property consultants (IPC) play a key role in devising and disseminating market devices, such as valuation standards, that help make property markets more transparent for international investors. In other words, and using Chiapello's terms, consultants are crucial players in the work of 'tangibilizing' real estate objects so that investors can understand what they are investing in and can assess risks and returns on their investments (Chiapello, 2020). To situate our study within the existing literature, we begin by reviewing previous studies that have analyzed more generally the role played by property consultants in different national contexts, after which we engage in more detail with the debate surrounding the social construction of value and the historical evolution of valuation methods.

International property consultant strategies in developed and emerging economies

The origins of today's dominant consultancy firms can be traced back to the activities of sales intermediation (brokerage) and land and property valuation, already well-developed in the nineteenth century in the UK and US. However, these firms only began to gain prominence at a global level in the wake of neoliberal globalization (Magalhães, 2001). Their rise as service

providers is tied to two complementary developments in international property markets: on the one hand, multinational corporations in the process of geographical expansion have relied on durable relationships with international consultants to find suitable space for optimizing their activities in foreign markets; on the other hand, the growing interest of institutional investors in property as an investment alternative (Clark and Monk, 2017) have led them to value the work of IPCs as providers of information on lesser-known markets, especially in emerging economies. Currently, the four largest property consultancy groups hold a substantial share of the market in the major economies and have been expanding lately to less developed economies across Asia, Eastern Europe, and Latin America.

Property consultants have thus performed a crucial role in the internationalization of property markets by operating as intermediaries between developers, builders, investors, and tenants, becoming a key node in multifaceted market relationships. By collecting, analyzing, and diffusing information on local markets, as well as by providing a wide range of services to market players (sales and rental intermediation; project development and project financing; advisory on portfolio management), these firms make local markets more accessible to outside (and especially foreign) players, thus helping to 'anchor' capital to specific places (Theurillat and Crevoisier, 2013). More than that, due to their embeddedness in local networks, they can provide valuable insights into local politics and policy-making (Bitterer and Heeg, 2012).

Magalhães' (2001) research comparing the activities of British property consultants in two southern European cities (Madrid and Milan) provides valuable insight into the strategies employed by these actors in different national contexts and how their activities shape local market practices. Magalhães shows that IPCs have been instrumental in bringing local practices in line with international standards governing commercial property markets, as well as in connecting foreign investors and corporate end-users in such markets. He notes, however, that this trend does not amount to a full convergence of practices, as these consultants have had to adapt their strategies to fit into local institutions and networks. These findings find echo in Fuchs and Scharmski's (2009) study of international investors' decision-making in commercial property markets. Their research attributes an increasing role to consultants involved at all stages of decision-making in property investment, especially through their role in 'translating' local markets to distant investors.

Guironnet and Halbert's (2014) working paper on the financialization of urban development projects also deserves close attention. The authors argue that property consultants play a key role in generating and disseminating cognitive representations of the property market. In doing so, however, IPCs are not simply describing the market as it is, but actually making it, inasmuch as the data they collect on property transactions and the cognitive framework they employ to represent such data in a systematic way potentially shapes the views held by investors and developers on property as an investment asset. The authors likewise note that local governments increasingly rely on market data and representations provided by IPCs when undertaking urban development projects. This trend may lead to projects that largely favor building typologies, location, and types of tenants that are suitable to investors that treat property as an income-yielding asset.

A few studies have also addressed the role of IPC in emerging economies. Aveline-Dubach (2013) tracks the activities of five large IPCs (Savills, DTZ, JLL, Colliers, and CBRE) in China, underscoring the crucial tasks carried out by these actors in order to generate more transparency to a market that is generally considered opaque by foreign institutional investors. Their work encompassed at least two dimensions. At a more general level, they have created a hierarchy of cities according to their investment attractiveness, using demographic, economic

and property market data. This classification has served as a guide to the most promising regional markets for international investors. At a more specific level, IPCs have produced a range of market data and information on local property market trends, including on potential local business partners. Aveline-Dubach claims that IPCs' intermediary role has been crucial in attracting foreign capital to China's property markets, especially through listed investment vehicles, such as Real Estate Investment Trusts (REITs), and non-listed property funds.

A similar context is described by Bitterer and Heeg (2012) in their study of IPCs in Poland in the wake of the country's opening to the global economy. According to the authors, IPCs have pushed for the 'professionalization' of the real estate market through the training of practitioners in the industry (both expatriates and local professionals), the implementation and diffusion of international standards of property valuation, and the creation of indexes and other standardized databases to improve transparency and facilitate international comparisons of investment performance. All these actions promoted by IPCs have strengthened the links between Poland's property market and investors and users in Western Europe and the US. In Latin America, the case of Argentina is analyzed by Socoloff (2017), who shows that the arrival of international property investment funds in the 1990s, along with changes in the real estate sector that turned property development into a profitable pursuit, fueled the growth of office markets in Buenos Aires, as well as the growing influence of IPCs as intermediaries for foreign investment funds.

In sum, the studies that have focused on IPC all indicate that these actors have become key intermediaries between global investors, corporate end-users, and local markets, chiefly by translating – or 'tangibilizing' – local market characteristics into the language of globalized financial investors. Few studies, however, have focused more specifically on how consultants have promoted new valuation methods and calculative techniques that help align local market practices with those prevalent in more mature markets, as well as how these methods co-exist and/or clash with entrenched local standards and routines.

As an example of this selected group, the work of Duros (2019) is in line with the approach of this article, as it considers valuation practices as the result of a stabilized set of rules, organizational forms, and devices specific to this professional sector, which are continuously renegotiated and contested. Her argument is that, in the case of the financialized real estate sector, this institutional architecture helps the accumulation of asset managers and the promotion of real estate bubbles in large metropolises (Duros, 2019).

Valuation and the spread of income-based methods

The discussion of property valuation methods inevitably brings us to the more general theoretical problem of the social construction of value. Sociology and science and technology (STS) approaches have been engaged in socio-historical analyses of valuation methods for quite some time, treating value as malleable to the different representations, assumptions, institutions, and calculations that are used in these devices. Weber (2021) calls this trend the social-constructivist approach. In urban studies, this approach has inspired a set of studies that have sought to analyze the performativity of financial feasibility appraisal models in urban projects and housing (Christophers, 2014; Robin, 2018; McAllister, 2017), and of practices of financialized calculation (Weber, 2021).

In a more structuralist fashion, Marxist approaches have also sought to identify the processes of production, circulation, and reproduction of value in capitalist accumulation. Rejecting any substantialist conception of labor value, Harvey (2006; 2018) has argued that value is not an objective metric, but a social relation that embodies all sorts of contradictions

and uncertainties with regard to the future. This is particularly notable in relation to the built environment used as fixed capital. When the elements of the built environment function as fixed capital – like the buildings that give physical support to the circulation of capital, such as factories, warehouses, offices, etc. – there are some particularities that are related to its durability as a use value, to its long turnover time, and to its fixity on land. These very same characteristics of fixed capital, claims Harvey, make it hard to appraise its value at any given time since the latter is subject to all kinds of future uncertainties pertaining to its location relative to other items of the built environment (including key nodes of transport networks) and to additional rounds of investment in maintenance and improvements. This uncertainty is what gives rise to different approaches for estimating the value of fixed capital.

Understanding value as socially constructed, and thus historically contingent, brings to light valuation as a social practice influenced by the conflicting interests of actors. The sociology of quantification together with constructivist approaches helps us better grasp how new valuation methods are disseminated and rooted in social and economic practices. As we will see, one prominent technique that was disseminated by IPCs was the income-based method, focused on Discounted Cash Flow (DCF).¹ Although DCF is nowadays commonly associated with financial market investors, this technique has a history that precedes the current era of financialization.

Doganova (2014) identifies three configurations of the DCF over time. The first manifestations applied to real assets date back to the mid-nineteenth century, when the technique was used by German forestry managers. The second was the conceptualization and elaboration of the DCF formula by Irving Fisher in the early 20th century. Fisher made the original postulation that any valuable object has a kind of discount rate that allows its true value to be expressed and updated within a theory of time in the history of financial thought. The third configuration was the dissemination of the DCF in the management of state investments and in private companies, as an instrument for ensuring the rationality of managers-shareholders in their everyday decision-making. Today the DCF is one of the first contents of finance courses and is widely disseminated (Doganova, 2014).

While the technique of DCF has its intellectual roots in debates outside the realm of finance, over the past few decades it has been increasingly taken up by financial market actors as a key tool for dealing with the future (Muniesa and Doganova, 2020). And, as financial market investors have become prominent in several industries, DCF has been diffused as a standard valuation technique that allows a direct, standardized comparison between heterogeneous activities. Our claim in this article is that property consultants are at the forefront of the work of standardizing market practices that make an intrinsically heterogeneous use value, like property, directly comparable with other financial securities and tradable in global markets (Theurillat et al., 2015). Income-based methods, such as calculative techniques, valuation models, and definitions of product quality, participate in the work of rationalizing and legitimizing the evaluation process in order to justify value *a posteriori* (Duros, 2019).

In particular, consultants have contributed to the development of valuation techniques that actively produce and perform the future value they prospectively imagine (Weber, 2021). This does not mean, however, that other modes of valuing property are swept aside. Rather, they often co-exist and enter into conflict with financialized valuation techniques (Crosby and Henneberry, 2016; David and Halbert, 2014; Santilli, 2015).

The argument developed in this article is that the hybrid and contradictory nature of property, which is at once a financial asset and a real commodity, largely explains the coexistence of different valuation approaches. During our field research, we identified the

coexistence of three valuation approaches. On the one hand, cost and comparison methods subsist in the face of the real and fixed attributes of real estate property. On the other hand, the income-based method reflects the financial nature of fixed capital that greatly facilitates the conversion of property into a financial asset (like REITs and mortgage-backed securities).

In Brazil, the co-existence of these valuation methods is also tied to the way land and property have been conceived and treated by local elites since colonial times. Land property has historically been viewed as a store of value that needs to appreciate over time – what scholars in Brazil have called ‘old patrimonialism’. With the recent wave of real estate financialization in the country (Fix, 2011; Sanfelici and Halbert, 2016; Pereira, 2017; Shimbo, 2019; Klink, 2020), this rationality may clash with the volatility of income-based valuation approaches, which are commonly favored by real estate investment funds and other financial market investors. In this sense, conflicts may arise when a ‘traditional’ owner hires a consultancy that uses the income-based method, thus contesting deep-rooted views of property ownership.

Methodology

This article aims to fill the gap between the studies on IPCs and the works on valuation methods by looking more closely into how IPCs operating in São Paulo since the 1990s have disseminated new valuation standards, which are gradually (and often reluctantly) being adopted by market practitioners in the city.

With the aim of highlighting the practices that ascribe value to the elements of the built environment, this article presents key findings of qualitative research conducted on the main property consultants operating in São Paulo (Brazil). The study encompassed both international consultants (which were among the five largest such firms in 2019, in a ranking that included both listed and non-listed firms) and local consultants (SharpLaunch, 2018).

International consultants provide an array of services to real estate markets, for which reason they are known as ‘full service’ firms. As a rule, they offer services of: (1) valuation and advisory; (2) property management; (3) facility management; and (4) brokerage. They operate across all continents, organized into three main regions: the Americas, Europe, Middle East and Africa (EMEA), and Asia-Pacific.

The property consultancy market in São Paulo

The city of São Paulo is currently the leading market for property consultancy services in Brazil. The city’s market structure is split into two. On the one side, there is a group of four large international consultants (CBRE, JLL, Cushman and Wakefield, and Colliers). On the other, there is a broader range of smaller, local consultants that mostly provide services of valuation and advisory. According to one of the interviewees, “it is a universe that grew significantly: you have the four largest, but also other 400 that work with valuation” (Manager, asset management firm, February 2018).

With the exception of CBRE, which had been in Brazil since the 1970s under the brand Richard Ellis, international consultants arrived in the country in the mid-1990s. This largely coincides with these firms’ arrival in other developing economies. A second wave of property consultants expanding into emerging economies took occurred in the mid-2000s. Both waves accompanied the growth of foreign investments into these countries (Bitterer and Heeg, 2012). Brazil was thus part of the first phase of IPC expansion among ‘emerging markets’.

JLL and Colliers' expansion strategy relied on setting up partnership with local firms that had long operated both in property development and brokerage.² CBRE and Cushman and Wakefield, on the other hand, chose to acquire established firms in the market.

Their entrance into São Paulo's market in the mid-1990s changed the strategies of local firms that operated with brokerage and valuation. In São Paulo, there already existed an established market of valuation firms that possessed knowledge, data, market research, and professionals specialized in the real estate market (Magalhães, 1996). This was the case of Empresa Brasileira de Estudos de Patrimônio (Embraesp), founded in 1972, and of Amaral d'Ávila, founded in 1990. For the most part, though, these firms had been specialized in valuation services. It was only after the 1990s that they diversified to include advisory and other services.

Research design

Between 2018 and 2019, we conducted a total of 15 semi-structured interviews with the managers of the valuation department in IPCs, as well as senior managers of local consultants and other firms that operate directly or indirectly in the real estate market (such as real estate investment trusts, auditing and valuation firms, independent analysts, and managers at property asset management firms). Additionally, we analyzed documents and publications available at these firms' websites, as well as material published in the specialized business press, to trace their history, business profile, annual revenues, and the main services provided.

In the interviews, we discussed the role of IPC in the changes that took place in São Paulo's property market with the arrival of international financial investors and agents that acted as intermediaries between finance and property development. The interviews addressed four main issues: the education and career of the interviewee; the services provided by the firm and its main clients; the approaches and techniques used in valuation; and changes in the local market for consultants, as well as in their relationship with key agents in the real estate and finance sectors. Table 1 summarizes the main characteristics of the international consultants studied.

Looking at the numbers in the table, we can identify two distinct groups. CBRE and JLL are similar in terms of their number of employees and their roots, with both dating back to the nineteenth century. As for their area of operation, both earn approximately half of their revenues in the Americas. Cushman and Wakefield and Colliers are smaller firms, though the former is almost twice as large as the latter in number of employees and revenues. Cushman and Colliers obtain 70% and 56% of their revenues in the Americas, respectively. Brazil's share of these firms' overall revenue is still meagre. While precise information could not be found, we verified that only 4% of JLL's total revenues come from the Americas, excluding the US and Canada. In the case of CBRE, only 0.8% of the revenues accrued was in Brazilian Reais (BRL).

Regarding their shareholding structure, CBRE and JLL are also similar: both have more than 90% of their shares owned by institutional investors. The share of institutional investors is slightly lower for Cushman than for Wakefield and Colliers – 66% and 70%, respectively. While it is beyond the scope of this article to identify major shareholders in these firms, it is worth nonetheless noting that Vanguard Group is the largest shareholder in both CBRE and JLL (with 15% in each) and also owns shares in Cushman and Wakefield (5.8%) and Colliers (2.8%).

Another aspect that is common to these four consultants is the fact that they still rely substantially on the original services of brokerage and rental intermediation, which make up

between 23% and 36% of these firms' revenues. Although they do not classify their services in the same way, consultancy and valuation services (our focus here) only generate between 5% and 9% of the revenues of JLL, CBRE, and Cushman. Colliers is an outlier in this regard, with 30% of its revenues coming from consultancy and valuation

Company name Date, previous names, acquisitions, mergers, countries of origin	Current headquarters	Number of offices	Number of employees	Annual revenue (USD billion)
CBRE				
1773 Richard Ellis (England)	Los Angeles	489	90,000	21.3
1896 Hillier Parker (England)				
1906 Coldwell Banker (USA)				
1907 CB Commercial (USA)				
1948 Trammell Crow (USA)				
1998 CB Richard Ellis				
JLL				
1783 Winstanley (England)	Chicago	299	88,000	16.3
1939 Jones Lang Wootton (England)				
1968 La Salle Partners (USA)				
1999 Jones Lang LaSalle				
Cushman and Wakefield				
1820 Healey and Baker (England)	London	400	51,000	8.2
1917 Cushman and Wakefield (USA)				
2014 acquisition of DTZ				
Colliers				
1898 Macaulay Nicolls (Canada)	Toronto	c. 100	17,300	2.8
1976 Colliers International (Australia)				
1984 Colliers Macaulay Nicolls				

Figure 1. General characteristics of the studied international property consultancies, 2018.
Source: Authors, based on Socollof (2017) and data from annual company reports.

Property valuation practices in São Paulo

Historically, property valuation has served to guide private decisions regarding buying and selling of property, as well as to substantiate technical reports used in judicial litigation and public policy actions involving the (transfer of) ownership of land and buildings. In today's global investment market, appraisals are used to inform three key market decisions:

- (1) What rent to offer/accept/agree for the use of accommodation (rental valuation); (2) what price to offer/accept/agree for the purchase of a property asset (investment valuation); and (3) whether to proceed with a development project – that is, whether such a project is viable (development appraisal). The valuer may act

for the purchaser, the vendor, the developer or some interested third party (e.g. the funder, insurer or regulator of the transaction). (Crosby and Henneberry, 2016: 4)

After briefly describing how valuation has evolved in Brazil, we then look more closely at how IPCs have promoted the income-based approach in São Paulo and how other actors have reacted to its diffusion.

Origins and changes since the 1990s

In Brazil, the valuation of property, as well as technical reports and feasibility studies, are all exclusive domain of professionals in the fields of engineering, architecture, and agronomy.³ The technical foundations of valuation procedures can be found in the Luis Carlos Berrini's book, *Valuation of Property*, the first edition of which was published in 1941. In this book, Berrini (1957) introduces the income-based method, calculated using a cap rate, without introducing, however, any technique of discounted cashflow. His main contribution was to develop the comparative approach through improvements in calculations. The book was re-edited several times and strongly influenced the professional field known as 'valuation engineering'.

The valuation guidelines used in Brazil identify three main approaches to the valuation of property, following the American and European models: comparison, cost-based, and income-based. The cost-based approach is further divided into two, resulting in four different approaches that can be used to appraise the market price of a property: comparative (using sample data from transactions of similar properties, often applied to land, standard houses, stores, and apartments); reproduction [*evolutivo*] (when there is a lack of data on transactions, the value of property can be arrived at by adding up all the costs of an equivalent property; this is more often used in high-end property, and warehouses); replacement [*involutivo*] (used in technical-economic feasibility studies, for instances, in land plots used for development; it considers the hypothetical revenue from the sale of the units based on prices obtained in surveys, projected expenses, and profits); and income-based (which relies on the capitalization of net future income, often used in projects that generate recurrent revenues, such as shopping malls, warehouses, hotels, etc.) (Brasil, 2018).

Statistical inference and other sophisticated financial methods have only begun to be more widely used in the 1990s, with all the obstacles posed by limited computer power at that time. According to one manager at a consultancy interviewed, it used to take as long as 95 hours to process an appraisal using statistics software (Director, local consultancy, February 2018). But the key change in the field of valuation was the treatment of property as an income-yielding investment. According to a manager at a consultancy: "previously, you had a few houses, you had a few offices, it was the price of land and of brick [...]. Now it is different ... the truth is that today a property is worth its capacity to generate income from it" (Director, international consultancy, February 2018).

Such changes were prompted by, but also laid the foundations for, a more active investment market in commercial real estate in Brazil, including offices, logistics and industrial property, shopping malls, hotels, hospitals, and more. This market was boosted in Brazil since the 2000s thanks to a greater availability of development funding, to the growth of REITs and other property investment vehicles, and to the arrival of international institutional and corporate investors (Sanfelici and Halbert, 2019).

In this context, the demand for property valuation grew substantially with the diversification of rental contract types, such as built-to-suit arrangements (when a developer

builds a property following the specifications of a future tenant, with a pre-established long-term contract), and sale-and-leaseback operations (when a firm sells its property and becomes a tenant in the same building). Valuation has also gained traction among REITs and pension funds, which have engaged in more active property portfolio management, buying and selling assets in conformity with data such as rental prices, occupation rates, and expectations of price rises. Finally, the more stringent requirements of transparency in quarterly results for listed property firms and real estate investment trusts has pushed up demand for the valuation of assets in order to include more precise and updated information in the balance sheet these firms have to disclose to their shareholders (Shimbo et al., 2021).

One consultant sums up how he experienced such changes since the 1990s:

Economic activity in the real estate sector was quite limited at the time [...]. If you see... establishing a built-to-suit contract in 1998, 1999, was really hard, it was rare. You didn't have a reference to assess the market, determine rates. And when money comes in, the interest rates fall, money gets cheaper... it starts to have a knock-on effect, new niche products are created... There is where consultancies come in: they serve to shore up, give support to the needs of firms. Long ago, we did a lot of valuation using the reproduction [*evolutivo*] approach, [that is] cost of land plus construction and depreciation. And now? If we're talking about capital, income [...], you start to do everything using discounted cashflow. In the consultancy market, I have the view of the developer. (Director, local consultancy, February 2018)

Dissemination of the income approach

This change in property valuation with the more extensive use of income-based approaches has brought together the views of appraisers, developers, and financial investors. For this reason, we claim that understanding this practice is key to analyzing the production and circulation of value in the urban built environment (Harvey, 2006). It is exactly in the valuation of property for investment (chiefly in the commercial property sector) that the income approach has gained prominence among property consultants in São Paulo, especially using discounted cashflow (DCF). However, as we will see in this section, this convergence of views among different actors did not occur without conflicts.

Discount cashflow (DCF) techniques underlie the calculations of Net Present Value (NPV). By employing models, tools, and representations that derive from the knowledge and practices of financial market professionals, NPV is often described as 'financialized valuation' (Chiapello, 2020). This calculation method proceeds by projecting and anticipating future cashflows to be generated by the appraised object using a discounted rate to bring these future revenues in the present. These calculations are predicated upon variable assumptions that entail more or less arbitrary choices in the construction of future scenarios. This is the case for the discount rate employed to assess an investment opportunity: depending on the level at which it is set, it may lead to different conclusions about the feasibility and profitability of a project (Chiapello, 2015).

In the case of real estate, the income-based approach consists in estimating the 'market value' (some consultants use the term 'fair value') or 'present value' of future income streams generated from rents, discounted with an appropriate rate for a given period.⁴ The approach relies on estimating both the returns from rental income and the risks involved (reflected in the selected discount rate), along with several assumptions about other future economic events. It can be distinguished from the conventional approach of income capitalization, which consists in applying a cap rate determined through comparison with similar transactions. The DCF method, instead, is premised on the use of more sophisticated financial-economic models (Crosby and Henneberry, 2016).

A consultancy professional clearly explains the specificities of the income-based approach:

The income approach is the closest we get to the financial market. We use the income approach to calculate how much we can pay on a property, how much it will generate in income [...]. The more professionalized became the market, the more weight was given to mathematical finance in such models. So today we do not appraise [a property] using a cap rate; we have a discounted cashflow, we discuss the economic fundamentals, we discuss all the assumptions that are used in these models. DCF is a sophistication [on previous approaches]. (Director, international consultancy, February 2018).

To illustrate the practical use of this approach, we present a valuation report prepared by Cushman and Wakefield (2018) for XP Malls, a real estate investment trust specialized in shopping malls. The report was used for transactions, as well as submitted to the Comissão de Valores Mobiliários (CVM), the agency responsible for overseeing the financial market in Brazil. It is a 61-page document describing the appraisal of a property of approximately 7.500m² of built-up area and 4.400m² of gross rentable area, located in São Paulo. The report is organized as follows:

1. Brief explanation of all existing valuation methods, followed by a justification of the choice made: income-based approach using discounted cashflow.
2. A characterization of the location (site, neighboring properties, public improvements, transport) and of the property itself (construction and improvements);
3. An analysis of the constraints posed by land use regulation (zoning, land use restrictions, densification limits, etc.) and by the economic environment (overall scenario, the market for shopping malls in Brazil and in the regions, the market for REITs);
4. The valuation procedure, with all the information and assumptions embedded in it: methodology, model of analysis, assumptions and scenarios adopted, as well as revenues, fees, expenditures and discounts throughout the period of analysis (10 years);
5. Final assessment of the mall market value at the date of the report (March 2018): BRL 147,935,000,00;
6. Attachments: a photographic documentation of the property and a spreadsheet with the projected cashflow in the scenario proposed.

The report assesses the market value of a projected shopping mall taking into account the site's location within the city, the planning rules in effect, the characteristics of the property (a land plot with a few run-down structures on it, now used as a parking lot), and the information on the expected future scenario. With this in hand, the managers of the REIT can make an informed decision on the purchase of the site and on the development of the mall without even having an architectural plan or an estimate of construction costs, as would be the case for a feasibility study.

In sum, the use of the income-based method is related to the preference of the client (usually, international investors prefer it) and to the use of the building (normally, commercial, offices and logistics buildings).

Persistence of the comparison method

By adopting the income approach, the investor's standpoint regarding the property is privileged at the expense of valuation approaches that reflect the positions and views of other agents in the value chain. One head manager at an important consultancy in São Paulo notes that such changes often spark conflicts:

Owners that are seeking funding do not like the income [approach] when there is a recession, because it doesn't matter if the mall costs 9,000 a square meter to build [if] the market is paying 6,000 because what the property generates in rental income is worth 6,000. [...] so there is widespread misinformation in the market that is caused by this Portuguese culture of expecting to own a property that does not lose value [...]. So we end up facing situations in which bringing intelligence to the [negotiation] table is not welcomed by the market. Then our role is to tell the bank: "look, guys, lending money in this market [using] the reproduction [*evolutivo*] approach is dumb, because if it goes to auction, nobody will pay [the value] according to the reproduction [*evolutivo*] [approach], they will pay you using the income [approach], so you have to use the latter. (Director, local consultancy, February 2018)

What we see here is a conflict between different valuation practices in which the referred consultancy firm endorses the view of the financial investor, according to which the price of a property should be estimated using the expected future income. He also laments the fact that certain agents in the market, such as developers seeking funding, still regard property as a differentiated asset whose price should not be calculated in such manner. Additionally, it is worth noting the contrast our interviewee draws between a "Portuguese (and, we can add, Brazilian) culture" of considering land and property as assets in relation to the 'patrimonialist' feature referred above, and the volatility of financial market benchmarks (chiefly the discount rate) that are used in the income-based approach. As Birch and Muniesa (2020) contend, this clash of opposing rationalities – centered respectively on the viewpoint of the investor and that of the entrepreneur, and their symbolic identities – is recurrent within social processes of assetization.

Such patrimonialist culture is also attributed to the fact that many companies still insist on owning the property they occupy, that is, on building up their own real estate portfolio, even if leasing has increased through sale-and-leaseback.

The persistence of the comparative method is also explained by the historically wide fluctuations in the interest rates in Brazil, which leads to very large variations in the income method. One interviewee compares the country's situation with more 'mature' markets:

The standard that is considered more appropriate is the comparative method. That is universal. Now, you have, for example, the use of the so-called rent or capitalization of rent methods, they are very strong in the richer countries, because you have a less crazy financial market than ours, these are economies that operate at very low interest rates. So, the rental yield is also more stable, they are more consolidated markets. (Director, local consultancy, February 2018)

Another reason for the large use of the comparative method is that the main demand for property valuation comes from the Caixa Econômica Federal, a state-owned commercial bank with social purposes that offers mortgages for home buyers:

I would say the following: maybe 70% or more of the appraisals end up being done with the comparative method. Also, because most of the properties that you evaluate are normal properties. [...] Caixa is the biggest evaluation services contractor in Brazil, because it is the biggest portfolio of real estate credit that exists. (Director, international consultancy, February 2018)

The interviewee points out the 'normal' properties, that is, the ordinary residential units that are evaluated as a condition for granting mortgages. They are different from the commercial market that are valued internationally by the income method. But in Brazil even the latter can be evaluated by the comparative method, given the fragmentation of ownership in the 'condominium' modality. Instead of having only a single owner that facilitates the entry of institutional investors, the ownership of commercial buildings is mostly diluted among many

small owners, the so-called ‘small rentiers’, organized in the legal form of the condominium.

Beyond such coexistence of methods, there is also a difference in the metrics adopted by international standards and those used in Brazil. One asset manager interviewed, for instance, claims that foreigners do not use the square meter unit to appraise a property as is still done in Brazil (Director, asset management firm, January 2018). This creates conflicting representations that must be dealt with by intermediaries through a dual reporting system.

Spatial effects

It is worth noting, finally, that the income approach, and the return criteria that underlie it, increasingly shape portfolio management decisions through what consultants call ‘real estate intelligence’, understood as a service that goes beyond valuation and brokerage. In the interviews we conducted, we were able to identify three examples where the income approach was used to guide the property portfolio decisions of a pension fund, a real estate developer, and a manufacturing firm, respectively. In all three cases, there were changes to the locations and uses of the assets owned by these organizations, interfering directly in the territorial and spatial dynamics.

In the first example, the consultancy had an influence on at least two dimensions of the portfolio management practices adopted by a large state-sponsored pension fund: on the one hand, it encouraged the entity to divest from projects in which it could not exercise full control (more than 50% of the project), as this would limit its autonomy to carry out improvements and renovations; on the other hand, it brought to the management strategy a greater sensitivity to the property value curve, referred to by the interviewee as the ‘life cycle of the asset’. In the second example, a family-run local real estate developer hired the advisory services of an IPC looking for the most profitable use of land already acquired by the developer. The consultancy recommended investing in a residential development instead of building a warehouse. In the final case, a manufacturing firm that occupied a large plot of land in a highly valued region of São Paulo followed the advice of a consultancy firm to move its headquarters to the interior of the state in order to cash out on the value of the land it owned and occupied. After selling the land plot in the metropolitan core, it rented out space in a smaller town away from the metropolitan area, thus ‘unlocking’ value from land to use in its core activity.

Although diverse in many respects, in all these cases IPCs nurtured an outlook that privileges the financial dimension of real estate among their clients, based on criteria understood to be clearer and more focused on capital gains extracted from land and property. In this sense, they influenced the geography of investment of both real estate and non-real estate agents. The question that remains is whether this geography is even more selective – and would further reinforce the social inequalities of Brazilian cities – than the one defined by local traditional firms using the ‘patrimonialist culture’ of regarding real estate as a reserve of value.

Implications and conclusions

The findings described in this article raise several theoretical and policy issues that deserve further consideration. First, the research underscores the socially contested nature of valuation, especially in the case of a complex, heterogeneous, and durable commodity as is the case of land and property. Indeed, because of its hybrid nature – as commodity that can be bought and sold and, at the same time, as an asset that stores and generates value in the

long-run – the appraisal of property has always been subject to considerable uncertainty. This is so because land and property give rise to a ‘socio-spatial fix’ that enables the extraction of differential rents at different times and scales (Harvey, 2003). Such a spatial order is the result of fixed investments made on land and buildings that function as infrastructure, a collective ‘social fixed capital’, but which at the same time takes the form of fictitious capital, with its value represented in a property title, whether securitized or not (Pereira, 2019). Therefore, the process of ascribing value to land and property, encompassing both present use and future income-generating potential, is entangled with the contextual and local characteristics of such infrastructures. These contextual particularities can be at odds with the logic driving the internationalization of financial and real estate markets. This is why uncertainty is compounded, in the eyes of investors, in a context in which valuation procedures and practices diverge substantially from those long prevalent in the Global North. For this reason, since the 1990s international property consultants operating in São Paulo have played a crucial role in turning property into a tangible investment by disseminating accounting and valuation practices that are better understood by investors. In Chiapello’s (2020) framework, IPCs thus perform the task of ‘tangibilization’, consisting in a range of operations through which expectations take on an existence to be included in accounts and contracts before the financial structuring itself.

In an economy that has been often plagued by (hyper)inflation, and in which financial markets have long been underdeveloped, property has become a mainstay in the imaginary of middle- and upper-class subjects as an investment that preserves (and expands) value over time. In the Global South, the agrarian and financial oligarchies, along with the middle class, have long relied on ‘sterile hoarding’ of property as a value reserve in the face of economic instability. This process has been somewhat renewed, though now under the influence of corporate governance and global financialization (Pereira, 2019). In this transition, the financial rationality underlying income-based valuation methods can collide with the traditional views of property owners, often described as ‘old patrimonialism’ and typical of the developmentalist accumulation regime. Furthermore, local, alternative valuation approaches are entrenched in real estate market practices, such as the long-standing role of the state-owned bank Caixa in mortgage lending (Royer, 2014). Discarding them in favor of new approaches also arouses opposition from professionals trained in these traditional methods.

Finally, it is worth pointing out that these new valuation and calculative techniques have been spreading to domains as varied as the valuation of urban development projects (Klink and Stroher, 2017), infrastructures (Purcell et al., 2019; Ashton et al., 2016), and social housing (Byrne and Norris, 2019; Christophers, 2014). In other words, they are increasingly being applied to urban objects that can be considered part of the collective social capital, and which ideally should not be valued according to strict financial risk-return criteria. This raises some important policy issues. As we have tried to show, valuation is a social process, a convention that can be contested and eventually be changed to incorporate broader goals, such as environmental sustainability – as is the case in Rambaud and Richard’s (2015) proposal of accounting methods that take into consideration the renovation of environmental services, or the innovation indicator recently implemented in the UK’s smart grid, which centers on decarbonization goals (Hall and Foxon, 2014). In a country marked by structural inequalities, like Brazil, preserving foundational use values (Engelen et al., 2017) would be essential to expand citizenship rights, but these goals are far-removed from today’s financialized valuation approaches. It is thus useful to understand the limitations of such approaches in order to develop policy measures that might encourage alternative valuation approaches in urban development projects.

Notes

1. Broadly speaking, the technique of DCF can be used to determine the value of an investment in the present based on projections of the returns this investment can generate in the future. DCF is considered a form of financialized valuation because it deploys models, tools, and representations stemming from the knowledge that underpins the professional practice of financiers. By relying on future cashflows (discounted by a capitalization rate) to determine the value of an investment, DCF differentiates itself from a conception of value that builds on the past, that is, that considers value as that which has already been created, a rationality that originates in the world of manufacturing and the reproduction of goods (Chiapello, 2020).
2. A similar strategy was used by such firms in China (Aveline-Dubach, 2013).
3. The valuation of property can only be performed by professionals with a higher education degree as an Engineer, Architect, or Agronomist, according to Federal Law 5194/1966. Because of this, real estate brokers who do not have a higher education degree in these professions can only “give an opinion” about the market value of a property, without issuing technical reports or feasibility studies. This is specified in another Federal Law, 6530/1978, which regulates the exercise of the real estate broker profession in the country.
4. Richard (2013) notes that new international accounting rules were introduced in the 1990s to include the valuation of assets at market value in firms’ accounts. This amounted to a new type of future-oriented accounting providing information on so-called ‘fair value’ – a procedure that differed substantially from the practice of registering the price of assets at their original cost.

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