

Research paper

# Real estate valuation: A case study on Continental versus Common Law System

**Avalúos inmobiliarios: un estudio de caso sobre el sistema Continental frente al Common Law****Avaliações imobiliárias: um estudo de caso do sistema Continental vs. Common Law***Received: 09/04/2024 - Accepted: 18/09/2024 - Published: 10/10/2024***Nestor Garza\***<https://orcid.org/0000-0003-2038-1368>**Dann Payares\*\***<https://orcid.org/0000-0002-0256-3777>

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## Abstract

We use Colombia as a case study of a situation where emerging real estate valuation practices, mostly based upon the logic of Common Law legal systems, and oriented to market prediction and global standards, collides with a valuation tradition based upon the Continental legal tradition. In this tradition, the valuation process first and foremost must satisfy limiting regulatory checklists. These requirements minimize the value of focusing on market analyses to offer accurate predictions (appraisals). Our analysis builds upon the Laws 9 of 1989 and 388 of 1997, and their corresponding implementation legal enactments (resoluciones), showing that the valuation practice for public purposes determines a logic where appraisers operate as ‘temporary public workers’. Appraisers and their associations (Lonjas) have subsequently transferred such limiting procedural principles to valuation for business purposes, which should be oriented to market analysis and prediction.

**Keywords:** Land value, appraisals, real estate, valuation, spatial economic analysis.

## Resumen

Este artículo toma el caso de Colombia para analizar el choque entre dos sistemas de avalúo inmobiliario. Por un lado, tenemos métodos emergentes, basados en la lógica del common law, que buscan adaptarse a estándares globales y predecir resultados de mercado. Por otro lado, encontramos el sistema tradicional colombiano, anclado en una estructura legal de tipo continental que prioriza el cumplimiento de listas de chequeo sobre el análisis científico del mercado. Analizamos las Leyes 9 de 1989 y 388 de 1997, y sus respectivos actos legales de implementación (resoluciones), para demostrar cómo la práctica del avalúo para fines públicos en Colombia ha moldeado una figura del evaluador como un “empleado público temporal”. Esta lógica, con sus limitaciones procedimentales, ha sido transferida al avalúo inmobiliario privado, a pesar de que este último debería centrarse en el análisis y predicción de mercados.

**Palabras clave:** valor del suelo, avalúos, estudios inmobiliarios, valoración, análisis económico espacial.

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## Resumo

Este artigo analisa, no caso da Colômbia, o choque entre dois sistemas de avaliação imobiliária. Por um lado, temos métodos emergentes, baseados numa lógica de direito comum, que procuram adaptar-se aos padrões globais e prever os resultados do mercado. Por outro lado, encontramos o sistema tradicional colombiano, ancorado numa estrutura jurídica continental que dá prioridade ao cumprimento de listas de controlo em detrimento da análise científica do mercado. Analisamos as Leis 9 de 1989 e 388 de 1997, e os respectivos actos jurídicos de aplicação (resoluções), para demonstrar como a prática da avaliação para fins públicos na Colômbia moldou uma figura do avaliador como “funcionário público temporário”. Esta lógica, com as suas limitações processuais, foi transferida para a avaliação imobiliária privada, apesar do facto de esta última se dever centrar na análise e previsão do mercado.

**Palavras chave:** valor da terra, avaliações, estudos imobiliários, avaliação, análise económica espacial.

## Introduction

Real Estate Valuation around the world builds, implicitly in some cases, upon a common conceptual framework. That is, a spatial economic model of the functioning of the urban economy which determines real estate values. However, different countries use different approaches to the valuation process itself. These diverse approaches build upon historical and institutional conditions, and regardless of an increasing globalization of real estate markets, there is a diversity of valuation processes (Thorne, 2012). A fundamental reason for the lack of common criteria is that different legal systems, embedded in different countries' political structures, underlie the valuation activity (Small, 2022). In this paper, we use Colombia's planning and valuation framework as a case study to analyze how different legal traditions collide in the urban market processes, gen-

erating uncertainty and a disputed urban development process. Our case study illuminates the differences and transpositions between the *Common Law* System, prevalent in Anglo-Saxon nations, and the *Civil Law* System, prevalent in Continental Europe and Latin America (Jacob, 2016; RICS, 2017).

There is abundant research regarding the effect of urban regulations on real estate prices and on built environment quantities, using case studies in diverse countries and cities (Cheshire, 2013). However, our discussion here goes further, an attempt at understanding how the legal framework itself affects valuation processes, and its possible effects on market information efficiency. We interrogate the relationship between the valuation profession in Colombia, inspired in urban land economics theories and closer in spirit to a *Common Law* framework, and this country's *Civil Law* legal framework. We will detect antagonistic elements in this relationship, which disrupt and challenge everyday valuation activity and urban development processes. For instance, this conflicting relationship creates systematic biases in appraised values, and undermines land-based economic tools for planning (Shukla, 2021; Sadayuki, 2019).

Our analysis dwells at the intersection of real estate and urban planning, and it is informed by the canonical spatial economic theory that underlies valuation science and techniques. We describe the evolution of the valuation profession in Colombia, founded on the *Civil Law* tradition but challenged in the context of market-oriented reforms since the 1990s, and recently resembling elements of valuation under the *Common Law* tradition, as has been the case in other countries (Ploeger & Bounjoh, 2017).

Our analysis is embedded in the transformations to the development strategy undertaken by Colombia and other Latin American countries during the 1990s. These transformations,

generically known as neoliberal reforms, have been an attempt at developing a market-oriented legal framework for urban development. However, the reforms have not tried to change the general legal framework itself, and it is at this juxtaposition that a conflicting urban development relationship emerges (Del Granado & Mirow, 2008).

The Latin American nations were grouped as “developing countries” during the period of government-led industrialization. However, with the emergence of the neoliberal paradigm they are now grouped as “emerging markets” or “global south”. This change in the denomination signals an attempt at adapting to globalized markets standards. In the case of urban development, changes have been made to the institutional framework of the Latin American real estate and finance sectors, in a bid to attract international resources (Murray, 2015). In other words, these countries have tried to adapt the institutions that regulate their urban development towards resembling the flexibility of Anglo-Saxon *Common Law* legal frameworks. This transformation has been performed while the general legal systems are firmly anchored in their *Civil Law* tradition, as is the case of Colombia. The result of these contradictions is an embattled urban development and planning process, prone to valuation error and inefficient market processes.

The paper consists of five sections, the first one is this introduction. The second section presents the two legal frameworks for valuation: *Civil Law* and *Common Law*. Section three discusses the role of appraisers in the Colombian *Civil Law* based valuation practice, when confronted with market-oriented reforms to the valuation and planning frameworks. Section four highlights how the same common canonical urban land economics theoretical framework underlies both legal traditions, regardless of their differences. Section five concludes.

## Valuation under Civil and Common Law

There are essentially two legal systems underlying real estate valuation in Western countries. The Roman-Germanic *Civil Law* System, used in Continental Europe and inherited by most Latin American nations (Lluis, 2000), and the Anglo-Saxon *Common Law* System, inherited by countries as diverse as the USA, Singapore, and Jamaica. In the Continental System, explicitly codified procedures underlie everyday civic life, while the *Common Law* builds upon accumulative judges’ decisions and the rational process (jurisprudence) through which their verdicts are made (Iregui, 2014).

In the Continental System, general constitutions or codes compile all the fundamental principles (Gaviria, 2012). These legal frameworks assume that the law always offers a parameter of reference, and any verdict is made interpreting ‘the spirit of the law’ (Canosa, 2014; Meneses, 2014; Gioacometo, 2015; Trujillo, 2018).

The Common Law system builds upon a jurisprudential system, where judges’ verdicts become precedents and strengthen the normative system (*stare decisis*)<sup>1</sup>. It assumes that the verdicts are obtained following a rational evaluation of alternatives and distilling into the ones with the clearest logic and/or justice (Legarre & Rivera, 2006; Jacob, 2016; Choi & Talley, 2018).

In relation to Real Estate Valuation, the *Civil Law* system offers a detailed compilation of laws to be used in any possible case. In contrast, *Common Law* is dynamic and accumulative, using common standards determined by professional/academic associations. In the case of real estate valuation, the standards are discussed and determined by associations like RICS (2017) and IVSC (2019). This is a peer-review approach, which in the case of valuation puts the emphasis in predicting spatial market results, and therefore requires a scientific understanding of such processes (Schultz, 2009).

The experience of 2008 shows that due to its flexibility, the *Common Law* appraisals framework is prone to over-valuation and mistakes (Ding & Nakamura, 2015; Calem et al., 2020). However, it does not limit the valuation process itself, as we will see below in the case of *Civil Law* systems.

We are not arguing that in *Common Law* countries the valuation profession does not respect or follow general legal guidelines, it is understood that national and subnational laws are above it. However, the valuation profession is oriented to understanding real estate markets dynamics, and based on that knowledge, to discussing and determining the valuation guidelines (Pennington-Cross & Ho, 2006; Pence, 2016; Bostic et al., 2008; IVSC, 2019).

### **Role of appraisers in the Colombian *Civil Law* framework**

In contrast to what we saw in the last section, the Colombian *Civil Law* framework determines the valuation guidelines in the first place, and then in the second, the valuation profession must adapt itself to such a framework. In addition, the legal framework itself does not foresee modifications in methods, regardless of progress in valuation science. Given the need to process an entire set of codes to compile a resolution or a law, it can take even decades to adapt to changing markets and to the progress in research methods. In this case, as we will see below, the public law (*jus publicum*) determines the scope of the private law (*jus privatum*) (Bernal, 2008; Castro, 2014; Perez & Galindo, 2017).

The Colombian legal order follows a hierarchy, where the Constitution is the superior legal framework. Immediately below the constitution are the *Leyes* (laws), enacted by the Congress. The more instrumental, day to day *Decretos* (decrees), are emitted by the president. The specific technical or procedural issues required to implement the *Leyes* and *Decretos* are called *Resoluciones* (legal enactments)<sup>2</sup>. This is a long

and convolute process for the *Leyes* to be implemented (Otero et al., 2016; Gomez, 2017).

In the case of Real Estate Valuation, the higher hierarchy legal framework is the Territorial Development Law: *Ley 388* of 1997, enacted to improve and replace the *Ley 9* of 1989. These laws required appraisals of real estate value in eminent domain cases<sup>3</sup>. According to *Ley 9* of 1989 the National Geographic Institute (IGAC, acronym in Spanish) was the sole provider of these appraisals. Unfortunately, IGAC had a slow, and non-fully transparent approach to valuation, which led to contentious litigation in some cases. Therefore, *Ley 388* of 1997 (article 56) made the provision of including private appraisers as providers of appraisals in eminent domain cases. In Colombia, the appraisers are associated in *Lonjas de Propiedad Raiz* (appraiser guilds), private organizations with a role to play as technical boards in high profile valuation cases, for instance eminent domain cases (Castro, 2014; Munevar, 2016).

The effective implementation of *Ley 388* of 1997 required *Lonjas* to engage with IGAC (the National Geographic Institute) in determining technical guidelines, that is, a *Civil Law* framework to perform private valuation. The corresponding legal enactments were *Resolución 762* of 1998 and *Decreto 1420* of 1998. The more up to date version of these are *Resolución 620* of 2008, regarding valuation, and *Ley 1673* of 2013 regarding the role of valuers. These *Resoluciones* have been issued to clarify that the maximum and best value guides valuation in eminent domain cases, requiring a definition of this concept, and of the temporality required in appraising (maximum and best value at the exact moment of appraisal, not including the corresponding public works that require eminent domain in the first place). This modification towards using market criteria in determining appraisals for eminent domain cases, signals a more general process of adaptation of the Colombian urban development institutional system to the

requirements of globalized real estate (Arias & Sanchez, 2011; CTCP, 2011)<sup>4</sup>.

Regardless of being an attempt at adapting to the market-orientation of global standards in valuation, the *Resolución 620* of 2008 is clearly a product of the *Civil Law* tradition. For instance, it determines a  $\pm 7.5\%$  Coefficient of Variation when sampling data for comparative purposes in real estate market analyses. The definition of this value is: a) arbitrary, the document does not clarify the reasons for the selection of this value, which means that it implicitly assumes normality in the distribution of the collected data. It forces appraisers to use only traditional parametric descriptive statistics, which in small samples are very difficult to verify; and b) inflexible, given the spatial and temporal dynamics of real estate markets. Guijarro (2017) discusses this feature of *Resolución 620*, and concludes that it ultimately biases sampling, because appraisers first and foremost fulfil this criterion before performing any market analysis. The appraisers are incentivized into choosing real estate units in their sampling such that the indicators calculated have at most  $\pm 7.5\%$  Coefficient of Variation, instead of choosing the observations following their market knowledge, or using a geographical/statistical selection method<sup>5</sup>.

We argue that the technical guidelines produced by professional/academic associations in *Common Law* countries are more flexible. The reason is that they recognize the dynamics of real estate markets, while more clearly relying on a market-oriented analysis to justify individual appraisal cases.

The idea that appraisals can be justified on methodological/analytical grounds, instead of inflexibly following guidelines, builds upon the 'expert witness' feature of *Common Law* systems. The Colombian legal system, in its efforts to adapt to global standards and participate of globalized real estate resources, also includes the possibility of using 'expert witnesses': Article 382 of the Legal Procedure Code of 2004

(Haack, 2004, 2014; Ruiz, 2015)<sup>6</sup>. However, this adaptation still requires the 'expert witness' to follow the legal framework that regulates valuation practice, the inflexible *Resolución 620* of 2008 (Soba, 2015).

The valuers as 'expert witnesses' in the hybrid legal model determined by *Resolución 620* of 2008 and *Ley 1673* of 2013, become what we call 'temporary public workers'. The reason is that they can use their expertise only after they have fulfilled the legal requirements: for instance, the  $\pm 7.5\%$  Coefficient of Variation in sampling properties. We call them temporary public workers because such a behavior belongs in the Colombian legal framework, where public workers can only perform the actions that are explicitly attributed to them by law. Private individuals, in contrast, can perform any action as long it is not explicitly forbidden by law (Orduz, 2010). In the case of real estate valuation related to public interest cases, the role of expert witness fulfils a public service, therefore in these cases appraisers need to perform only the actions that are explicitly attributed to them by law, the valuation process checklists. This role has been regulated by a more general Colombian legal enactment, the General Process Code (*Código General del Proceso*), *Ley 1564* of 2012, where it is clarified that individuals with a particular expertise in arts and sciences can be required to participate in legal public affairs. The regulation of their participation will be based upon legal certificates and affiliations, as for example appraisers' credential affiliation to their corresponding *Lonjas* per city.

In Colombia, valuations for public purposes have an extra layer of complexity that compels appraisers to behave as "temporary public workers". Such a practice becomes a problem when transferred to valuation as a private service to private clients. Given the fact that valuation in those cases is intended to support private business decisions, it should try to predict market values and tendencies with the highest degree of accuracy. Therefore, as a private ser-

vice for private clients it should be performed with conceptual and methodologic freedom. However, all the valuation professional activity is regulated by the *Resolución 620* of 2008, with penal law implications if appraisals are conducive to public finance detriment (in eminent domain cases), private damage (in successions or inheritances), etc. (Trujillo, 2018; Castro, 2014; Giraldo, 2015). In all these cases, the checklist for attorneys and judges begins with the fulfillment of the legal requirements in every appraisal. Therefore, even in private valuation practice, appraisers depart from the logic that they can perform only the actions that the law explicitly attributes them, they act as 'temporary public workers'. The private valuation activity has adopted by analogy, and as a safety mechanism, the practices from valuation for public purposes (Fernandez, 2018)<sup>7</sup>.

Furthermore, *Ley 1673* of 2013 states that only the legislative (the congress) can change regulations relating real estate valuation, due to being a profession with 'social risk'. This assertion blocks any possibility that the *Lonjas* or academic associations can regulate the profession, so that it is better adapted to everyday real estate markets. Such limitation in valuation practice is a problem because in other public policy areas the Latin American political leadership is oriented to economic globalization, including the globalization of real estate (Murray, 2015).

### Urban land economics and the effect of the legal framework on valuation

Valuation practice around the world builds upon two lines of economic theory: Neoclassical and Marxist (Ramsey, 2004). In the Neoclassical tradition, the use of land, its intensity of occupation and values, are determined by location in the form of transportation costs to relevant activities. Using an equalization of profits/utilities, this theory deducts that land rent is a residual after discounting from the built environment price, the transportation costs due to location and the firm's production and households' re-

production costs (Evans, 2004). In the Marxist tradition, the residual land rents are added per source: absolute, at the citywide level, differential per land use (type I), and differential per capital intensity (buildings' height), and they also correspond to a residual from the total value of the built environment (Jaramillo, 2009). In both traditions the corresponding sale (or appraised) value of land is a capitalization (present value) of a potential perpetuity of rents. The reason for this conclusion is that land as such does not contribute to production efforts, it only redistributes (captures) the economic surplus produced elsewhere (Garza, 2019; Jaramillo et al., 2012; Alfonso, 2008).

The theoretical underpinning that land rents form as a residual, and that they are discounted by the interest rate to obtain land values, underlies valuation science. In appraisers' techniques, land values are obtained using the residual method, after discounting the value of construction at appropriately selected depreciation and interest rates (Wyatt, 2013; Lizieri, 2009).

Regarding the way economic theories and their derived standardized valuation techniques have been implemented in the Colombian *Civil Law* system, we have *Resolución 620* of 2008. This resolution clarifies that the valuation method to obtain land prices is the residual method, which follows the international guidelines and is supported in urban land economics theories: the maximum and best use of every square meter of urban land at the existing market (demand), macroeconomic (interest rate) and regulatory (master plan) conditions.

However, Resolution 620 of 2008 exposes appraisers to the above-explained constraining  $\pm 7.5\%$  Coefficient of Variation when choosing observations for comparative analysis. Furthermore, this resolution also requires valuers to use the Coefficient of Asymmetry and its direction, in justifying the mean values in the prices sampled. It however does not clarify why and

how it can be used, specifically stating that such value cannot be higher than the dispersion indicators used in the appraisal. This is a confusing statement, and part of the restrictive nature of the law that forces valuers to change their sampling of comparative observations. This occurs regardless that the law states that the observations must be obtained in the vicinity, neighborhood, or zone, without clarifying what these concepts mean or how are they supposed to be measured.

The fact that the *Resoluciones* cannot foresee every single detail of every valuation process, highlights the limits to the comprehensiveness of *Civil Law* codes when dealing with market-oriented real estate valuation. These codes become checklist requirements for valuation, burdensome in some cases, and openly contradictory in others. Colombian appraisers protect themselves from this conflict by picking comparative observations that produce the required coefficient of variation, regardless of the economic, geographic, and urban regulation soundness of such selections. The Colombian *Civil Law* framework that underlies valuation requires higher hierarchy legal changes, and cannot timely incorporate progress in economics, statistics, and geographic information systems. Such limitations clash with market-oriented reforms since the 1990s, which seemingly try to incorporate features of *Common Law* valuation practices in globalized real estate.

## Conclusions

The two most recognizable legal systems in the western world are the Anglo-Saxon *Common Law* System, and the Continental *Civil Law* Systems. These legal systems differ in their approach to how to organize civil life, explicit codes in the *Civil Law* and accumulation of jurisprudence cases in the *Common Law*. Regardless of being based upon the same urban land economics theoretical background, valuation practice differs under each one of these legal systems. We use Colombia as a case study

of a Latin American country, its planning and valuation legal frameworks embedded in the *Civil Law* legal system. However, Colombia's *Civil Law* approach has been challenged by transformations since the 1990s towards a more globalized and market-oriented management of its economy.

Under the umbrella of the *Civil Law* system, the urban planning and valuation framework in Colombia have tried to adapt to global standards and promote urban development and real estate business, using a series of *Resoluciones* (legal enactments). These *resoluciones* have consolidated the profession of valuation, opening it to private sector providers besides the National Geographic Institute, with a scope including both, valuation for public affairs and for private businesses.

While the *Civil Law* system's codification of instructions provides a structured framework, it also presents limitations. Appraisers in Colombia need to primarily fulfil distortionary legal requirements. And only subsequently, the appraisers can make an attempt at understanding real estate markets and predicting their values. We described how this logic, which might make sense in public affairs, where appraisers operate as 'temporary public workers', has been transferred to private business valuation.

This transference is the result of how the appraisers, as professionals responsible for price information, accommodate the conflicting elements in the relationship between the traditional *Civil Law* legal framework, and the emerging elements that try to adapt the economy to market-oriented globalized real estate activity. Further evidence of this adaptation process, are the creation of the National Confederation of Lonjas, and of their National Judicial Appraisers Academy (*Colegio Nacional de Peritos Judiciales*), which seeks legitimacy by searching international accreditation with institutions like IVSC and RICs, while simultaneously abiding by national regulatory agencies like the

General Attorney (*Fiscalía General de la Nación*) and National Comptroller (*Procuraduría General de la Nación*).

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### References

- Alfonso, O. (2008). ¡No hay suelo gratis! Un aporte desde la economía institucional urbana al desarrollo del principio de reparto equitativo de cargas y beneficios de la urbanización. *Revista de Economía del Caribe*, 2, 130-167.
- Arias, M., & Sanchez, A. (2011). Valuación de activos una mirada desde las Normas Internacionales de Información Financiera, los estándares internacionales de valuación y el contexto actual colombiano. *Cuadernos de Contabilidad*, 12(30), 95-126. <http://www.scielo.org.co/pdf/cuco/v12n30/v12n30a05.pdf>
- Bernal, F. (2008). *Derecho Administrativo. Programa de Administración Pública Territorial*. Bogotá: ESAP.
- Bostic, R. et al. (2008). State and local anti-predatory lending laws: the effect of legal enforcement mechanisms. *Journal of Economics and Business*, 60(1), 47–66. <https://doi.org/10.1016/j.jeconbus.2007.09.003>
- Calem, P. et al. (2020). Appraising home purchase appraisals. *Real Estate Economics*, 49(S1), 134-168. <https://doi.org/10.1111/1540-6229.12326>
- Canosa, U. (2014). Código General del Proceso. Aspectos probatorios. XXVI Congreso Colombiano de Derecho Procesal, Universidad Libre, Bogotá.
- Castro, W. (2014). *De los Avalúos Inmobiliarios en Colombia, un Estudio Sobre la Incongruencia en sus Elementos Orientadores y los Efectos en la Seguridad Jurídica*. Bogotá: Universidad Católica de Colombia.
- Cheshire, P. (2013). Land market regulation: market versus policy failures. *Journal of Property Research*, 30(3), 170-188. <https://doi.org/10.1080/09599916.2013.791339>
- Choi, A., & Talley, E. (2018). Appraising the 'Merger Price' Appraisal Rule. *Journal of Law, Economics & Organization*, 543. <http://dx.doi.org/10.2139/ssrn.2888420>
- Consejo Técnico de Contaduría Pública - CTCP (2011). *Comentarios al Documento: Análisis del Marco Conceptual de las NIIF Versus Principios Contables en Colombia*. Bogotá: CTCP.
- Del Granado, J. & M. Mirow (2008). The future of the economic analysis of law in Latin America: a proposal for model codes. *Chicago-Kent Law Review*, 83(1), 293-325.
- Ding, L. (2014). *The Pattern of Appraisal Bias in the Third District During the Housing Crisis*. The Federal Reserve Bank of Philadelphia.



- Ding, L., & Nakamura, L. (2015). The impact of the home valuation code of conduct on appraisal and mortgage outcomes. *Real Estate Economics*, 44(3), 658-690. <https://doi.org/10.1111/1540-6229.12120>
- Evans, A. (2004). *Economics, Real Estate and the Supply of Land*. Blackwell Publishing, Oxford UK.
- Fernandez, L. (2018). Defectos, mal interpretación y aplicación de las normas valoratorias públicas. El caso del artículo II de la Resolución 620 de 2008. *Revista Mas Valor*, (23), 26-30.
- Garza, N. (2019). Spatial and dynamic features of land value capture: A case study of Bogota, Colombia. *Public Finance Review*, 47(3), 603-622. <https://doi.org/10.1177/1091142117714551>
- Gaviria, M. (2012). El derecho occidental del siglo XXI y el concepto de familia jurídica. *Revista de Derecho – Universidad del Norte*, 39, 30-57.
- Giraldo, J. (2015). Principales modificaciones introducidas al proceso de sucesión por el código general del proceso. *Revista del Instituto Colombiano de Derecho Procesal*, 41, 17-46.
- Gomez, A. (2017). El deber de consulta pública previa a la expedición de reglamentos en el régimen jurídico colombiano. *Revista Derecho del Estado*, 38, 97-125. <https://doi.org/10.18601/01229893.n38.04>
- Guijarro, F. (2017). ¿Es el coeficiente de variación el instrumento adecuado para medir la validez de los avalúos? *Revista Mas valor*, 22, 17-23.
- Haack, S. (2004). Epistemology Legalized: Or, truth, justice, and the American Way. *American Journal of Jurisprudence*, 49, 43-61.
- Haack, S. (2014). *Evidence Matters: Science, Proof, and Truth in The Law*. Cambridge University Press, Cambridge UK. <https://doi.org/10.1017/CBO9781139626866>
- International Valuation Standards – IVSC. (2019). *International Valuation Standards*. <https://www.rics.org/globalassets/rics-website/media/upholding-professional-standards/sector-standards/valuation/international-valuation-standards-rics2.pdf>
- Iregui, P. (2014). Una mirada al papel del precedente judicial y su aplicación por parte de los jueces administrativos y de la administración pública. Estudio del propósito de las sentencias de unificación jurisprudencial consagrados en la Ley 1437 de 2011. Tesis de Maestría. Bogotá: Universidad del Rosario. [https://doi.org/10.48713/10336\\_10504](https://doi.org/10.48713/10336_10504)
- Jacob, R. (2016). ¿Es el *Common Law* el mejor sistema jurídico en el mejor de los mundos globalizados posibles? Libres reflexiones sobre los desarrollos de la teoría del derecho y sus desafíos actuales. *Isonomía*, 46, 11-37.
- Jaramillo, S. (2009). *Hacia una teoría de la renta del suelo urbano*. Bogotá: Ediciones Uniandes – IGAC.
- Jaramillo, S., & Cuervo, N. (2014). *Precios inmobiliarios de vivienda en Bogotá 1970-2013*. Documentos CEDE, Universidad de los Andes, Bogotá.
- Jaramillo, S., Moncayo, V., & Alfonso, O. (2012). *Plusvalías Urbanas: Fundamentos Económicos y Jurídicos*. Serie de Economía Institucional Urbana No 5. Bogotá: Universidad Externado de Colombia.
- Legarre, S., & Rivera, J. (2006). Naturaleza y dimensiones del “stare decisis”. *Revista Chilena de Derecho*, 33(1), 109-124. <http://dx.doi.org/10.4067/S0718-34372006000100007>

- Lizieri, C. (2009). *Towers of Capital*. Wiley-Blackwell, Chichester UK.
- Lluis y Navas, J. (2000). *Los Principios del Derecho en los sistemas romano-germánicos (un estudio comparativo)*. Academia Nacional Argentina de Derecho y C. Sociales, Buenos Aires, Argentina.
- Meneses, C. (2014). Fuentes de prueba y medios de prueba en el proceso civil. *Revista Ius Et Praxis*, 14(2), 43-86. <https://scielo.conicyt.cl/pdf/iusetp/v14n2/art03.pdf>
- Munevar, O. (2016). *La estadística en valoración inmobiliaria y la aplicación de los avalúos en la gestión del suelo*. Bogotá: Universidad Santo Tomas.
- Murray, C. (2015). Social Inequality and Real Estate in Latin America: Approaches in Argentina, Brazil, Chile and Colombia. In: R. Abdulai et al. (eds.), *Real Estate, Construction and Economic Development in Emerging Market Economies* (pp. 256-276). Routledge Taylor & Francis, Abingdon UK.
- Ochoa, F. & Otero, C. (2018). Herramienta extorsiva utilizada por el Estado. *Revista Mas valor*, 24, 34-36.
- Orduz, C. (2010). El principio de legalidad en la ley penal colombiana. *Criterio Jurídico Garantista*, 2(2), 100-107. <https://www.corteidh.or.cr/tablas/r28403.pdf>
- Otero, M., Bonilla, A., & Zubiria, N. (2016). Los decretos autónomos, una posible facultad sui generis del presidente de la República. *Universitas Studentes*, 14, 93-110.
- Pence, K. (2016). Foreclosing on Opportunity: State Laws and Mortgage Credit. *The Review of Economics & Statistics*, 88(1), 177-182. <https://doi.org/10.1162/rest.2006.88.1.177>
- Pennington-Cross, A. & Ho, G. (2006). *Loan servicer heterogeneity and the termination of subprime mortgages*. The Federal Reserve Bank of St. Louis Research Division
- Perez, S, & Galindo, D. (2017). *Manual técnico jurídico para valoración inmobiliaria*. Medellín: Escuela de Derecho – Universidad EAFIT.
- Ploeger, H., & Bounjouh, H. (2017). The Dutch urban ground lease: A valuable tool for land policy? *Land Use Policy*, 63, 78-85. <https://doi.org/10.1016/j.landusepol.2017.01.005>
- Ramsey, R. (2004). The urban land economics tradition: how heterodox economic theory survives in the real estate appraisal profession. In: Samuels, W. (Ed.), *Wisconsin "Government and Business" and the History of Heterodox Economic Thought*. Emerald Group Publishing Limited, Leeds, UK.
- Royal Institution of Chartered Surveyors - RICS. (2017). RICS professional standards, global. London: RICS.
- Ruiz, L. (2015). La prueba pericial y su valoración en el proceso penal colombiano, hacia un régimen procesal holístico. *Revista de la Facultad de Derecho y Ciencias Políticas – UPB*, 481-511.
- Sadayuki, T., Harano, K., & Yamazaki, F. (2019). Market transparency and international real estate investment. *Journal of Property Investment & Finance*, 37(5), 503-518. <https://doi.org/10.1108/JPIF-04-2019-0043>
- Schultz, J. (2009). A Comparative Analysis of the World's Major Valuation Standards. *Second Arab Real Estate & Urban Development Conference*. New York. [www.appraisalfoundation.org](http://www.appraisalfoundation.org)
- Shukla, J. (2021). Compulsory yet fair acquisition of land: assessing procedural fairness of compulsory acquisition process in India. *Journal of Property Research*, 38(3), 238-261. <https://doi.org/10.1080/09599916.2021.1892802>

- Small, G. (2022). Legal principles. In: D. Parker (ed), *Principles and Practice of Property Valuation in Australia*, 3<sup>rd</sup> ed. (pp. 3-14). Routledge Taylor & Francis, Abingdon UK.
- Soba, I. (2015). La incursión en el conocimiento científico a través de la prueba pericial. Su impacto en la decisión judicial. *Revista del Instituto Colombiano de Derecho Procesal*, 40, 227-261. <https://doi.org/10.32853/01232479.v40.n40.2014.12>
- Thorne, C. (2012). Valuation: The professional challenge. *Journal of Property Investment & Finance*, 30(4).
- Trujillo, F. (2018). La prueba pericial en el ordenamiento procesal civil colombiano. *Revista Misión Jurídica*, 11(14), 199-208.
- Wyatt, P. (2013). *Property Valuation*, 2<sup>nd</sup> Ed. Wiley-Blackwell, Chichester UK.
- Yunda, J., & Cuervo, N. (2020). Valor del suelo y vivienda, contención al crecimiento urbano y densificación en Bogotá 1969-2012. *Revista INVI*, 35(99), 177-201. <http://orcid.org/0000-0002-3459-6880>
- Consejo Técnico de Contaduría Pública (CTCP) helped draft the Decretos 2784 y 2706 of 2012, to accomplish that adaptation.
5. We are not arguing that the resulting appraised values are wrong. At an aggregate or metropolitan level these spatial micro biases do not affect the construction of reasonable aggregate data series, useful for both market agents and scholarly research (Jaramillo & Cuervo, 2014; Yunda & Montenegro, 2020)
6. Código General del Proceso (Ley 1564 of 2012), article 226: ‘expert witnesses can be used to verify facts relevant to the process, requiring special scientific, technical or artistic knowledge’.
7. An example of such concerns was the judges’ alignment with private sector activism against some elements of public urbanism enacted in Ley 89 of 1989. Such uncertainty was finally removed by the Supreme Court, which determined that for example, in-kind (land) contributions did not constitute expropriation and were actually land value increase determinants (Alfonso, 2008).

## Notas

1. “Stare decisis et quia non movere” can be interpreted as “to stand by things decided.” (Legarre & Rivera, 2006).
2. In addition, the Leyes and Decretos require an Exequibilidad analysis by the Constitutional Court. Where their feasibility under the constitution is analyzed. Article 241 of the Political Constitution <http://senado.gov.co>
3. In Common Law systems, like the USA, eminent domain processes build upon the idea of fair and just compensation. They can be regulated by State laws like the 5th Amendment of the United States constitution. However, these appraised values are obtained using market-guided methods, defined by professional and/or academic Real Estate associations (Ding, 2014).
4. Another related example is the adaptation to the International Financial Reporting Standards. The National Association of Technical Accounting Rules