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Editorial note

Valuation Studies and the Drama of University Quality

Board of editors

Five decades ago, Albert Hirschman published his *Exit, Voice, and Loyalty* (Hirschman 1970). The book is about quality. It showed how business organizations, political parties, or even states, do not simply remain equally good at what they do, and how diminishing quality triggers situations of *exit* – we might stop buying something we used to consume, we might quit our job, or we might even leave our country – or of *voice* – we might strike against our managers, we might write petitions, organize campaigns, and so on. The book also has a more practical side (Ossandón 2021). It was written in a way that it could help those whose job it is to plan or think better how to manage in a world of voice and exit. For instance, Hirschman points out cases where – against economists' usual advice – increasing competition did not improve things, as it left organizations with too much *exit* and without the benefit of *voice*.

Like *Exit, Voice, and Loyalty* the discussion in the symposium in this issue is also about quality and organizations, and in an area where quality is essential, universities. The starting point however is different. It is not that quality is a poorly studied problem that requires more attention from planners. If anything, it is the opposite. There is plenty of attention to quality and many – too many it could even be said –

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resources, efforts, and systems deployed to its management. This does not mean it is not problematic. It is, but in a different way. Deans that know that their institutions' fluctuations in relative rankings do not reflect their institutions' quality, but also that they have to act to remediate these fluctuations anyway; teaching administrators and lecturers who know that student evaluation surveys do not say much about good or poor teaching, but still have to operate as if this were the case; academics who know that the quality of papers published in a given journal varies greatly, but that they have to behave as if the journal's position in a list was a quality certification for the research it publishes. It is the anxiety (Espeland and Sauder 2016) that is produced with the sense that the university quality management apparatus, with all its effort and resources, might not make quality any better. Or, as Kristian Kreiner provocatively puts it in his contribution to the symposium in this issue, a complicated quality management system built as if it were possible to avoid actually engaging (for instance, reading the papers) with the things whose quality are supposedly assessed and managed.

Research quality has also become an important part of valuation studies. This is work that has demonstrated how university rankings, indicators, and surveys, while not necessarily representing what they claim to represent (Esposito and Stark 2019), dramatize, to use Deleuze's term (2004), research institutions in new ways. One of the contributors in this issue, Christine Musselin, in her previous work showed how deans of European universities are no longer academic peers, researchers with higher authority, but have become business managers, in the sense that their work is assessed in terms of quantified indicators and the relative position of their institutions during their tenure (Musselin 2018). Espeland and Sauder, also contributing to the symposium in this issue, have shown in their *Engines of Anxiety* (2016) how students and applicants of law schools in the US have started to relate to the relative position of their institution in rankings as if it were an indicator of the value of their human capital. If the position decreases, they believe, their investment and future income will be affected too. Some have even sued their universities for drops in their rankings. Ortiz and Muniesa (2018) have also used the language of anxiety to inspect how business schools' inhabitants occupy the hierarchical world of ranked universities. Plenty of good work has been produced in research that, even though it is not necessarily associated with what is now referred to as valuation studies, is concerned with similar problems. For example, historical accounts of the use of rankings in universities (Wilbers and Brankovic 2021); sociological studies of how academics double as managers and researchers (Loveday 2021); educational scholars that inquire into the performativity of the market-based quality management systems (Ball 2003); studies of academics who start to act as though their quality was expressed by their citation rankings (Aboubichr and Conway 2021); critical management pieces on the impact of journal list in the business school (Mingers and Willmott 2013); and a long etc.

The discussion in this issue attempts to take one step further. The university quality management apparatus is not only something that valuation studies scholars may make their object of inquiry. It is certainly a rich area for inspecting "moments of valuations" (Antal et al. 2015), with its own assemblages, devices, and practitioners. It is also, however, an area where those who study valuation are *also* practitioners. Academics – including us, scholars of valuation – do not only suffer the consequences of quality management systems. We also participate in developing and implementing the quality apparatus: we hire and assess, we participate in creating new lists, some even become deans, or directors of important research centers, and this creates a different type of challenge for valuation studies. Not unlike Hirschman's essay, the symposium in this issue asks whether our research can help those involved in the practice of managing research quality in universities. Of course, answering such a question will require much more work, experimentation, and thought. But, we – at *Valuation Studies* – hope we might help open a different type of conversation about studies of valuation. Can valuation studies develop concepts, methods, and tools that do not only describe valuation in practice, but that can also accompany those troubled with valuation practices and help them think about their troubles differently?

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Political Imaginaries of the Weighted Average Cost of Capital: *A Conceptual Analysis*

Horacio Ortiz

Abstract

This article analyzes the formulation of the "weighted average cost of capital" in the manuals of two of the most influential associations of financial analysts. It focuses on the use of the formula as the discount rate to determine the "fundamental value" of listed companies using the "discounted cash flows" method, a cornerstone of the definition of "shareholder value" used in the finance industry worldwide. It shows that the choice of variables and their mathematical relations in the formula mobilize multiple, partly independent and contradictory epistemologies and ontologies. This multiplicity is assembled along political imaginaries concerning the relation between particular notions of the maximizing investor, the efficient markets and the sovereign state. The figure of the investor is considered the only legitimate agent to claim the "free" cash flows of the company, the efficient markets are considered the source of truthful representation of value, and the state is supposed to guarantee both the fair play between investors and a minimum revenue for money owners, to be extracted from the rest of society through the tax system. The formula thus legitimizes and renders self-evident power relations that sustain the global inequalities produced by the finance industry.

Keywords: weighted average cost of capital; discounted cash flows; value; power, market efficiency; investor

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Introduction

This article proposes to highlight some of the political imaginaries present in the formula used to determine the discount rate for valuation of listed companies, called the "weighted average cost of capital" (WACC). The use of discounting as a method of valuation is extremely widespread today in financial valuation and corporate management. This method, called the "discounted cash flows" (DCF) method, consists in assessing future cash flows and discounting them at a discount rate. This procedure yields what is called the "present value" of future cash flows. It is used to compare the relative values of competing investment opportunities within a company. And it is one of the ways to determine what is called the "fundamental value" of an asset, such as a stock. In both cases, the discount rate is established in relation to the return on investment supposedly due to the sources of "capital", i.e. stock owners and bondholders.

Nowadays, the WACC and the DCF are directly connected with the idea of assessing economic activity in order to maximize "shareholder value", considering that the sole purpose of companies is to produce money for their owners (but without forgetting to pay their creditors). This idea grew in importance in the second half of the twentieth century, to become a cornerstone not only of financial valuation, but of corporate management in general (Fligstein 1990; Lazonik and O'Sullivan 2000; Lordon 2000; Ho 2009; Levy 2014). Parker (1968) shows that although some form of DCF method was already used in the sixteenth century, it was not until after World War Two (WWII) that it became widespread, as engineers, economists and accountants increasingly appropriated it, transformed it and applied it to new fields. Miller (1991) shows how part of its extension in the UK in the 1960s is due to the British government's attempt to impose it not only for the management of public companies, but also for private companies, with the hope that this metric would orient investment to activities fostering GDP growth. Since then, the method has been used in management decisions within companies and as a general method to evaluate any asset, from listed stocks to companies in mergers and acquisitions and start-ups (Muniesa et al. 2017: ch. 3; Doganova 2018a). Doganova (2018b) proposes to call the DCF a "political technology", because of its widespread role in organizing collective action to define and rank values, transform social activities into appropriable capital and establish a power relation favoring the present over the future.

Different forms of DCF valuation may use different discount rates. This article will analyze the political imaginaries present in the WACC by following the justifications and explanations of the formula provided in two of the most mainstream manuals of financial analysis. These manuals are produced by the most influential associations of financial analysts in the world, the US-based Chartered Financial

Analysts Association, which delivers the CFA diploma,[1] and the Association of Certified International Investment Analysts, which federates professional associations of financial analysts around the world and delivers the CIIA diploma.[2] The relevance of these manuals is manifold. They are used by tens of thousands of candidates to obtain these diplomas every year, and success in the exams usually helps foster the candidates' careers in the finance industry. But, more importantly, the methods, formulas and lines of reasoning contained in the manuals compound the standardized procedures applied in most of the finance industry globally. This is not because these two organizations would impose their will on the finance industry, but because, as professional associations, they are a social space where the finance industry brings together, showcases and institutionalizes its standards, in order to legitimize its expertise and self-regulation and to influence financial regulation (Coffee 2006: ch. 7). So-called "front-office" employees of the finance industry, such as financial analysts, fund managers, brokers and traders, among others, must be qualified by regulatory authorities to conduct their activities. This qualification is usually obtained by passing examinations where professionals must prove their knowledge of these procedures. The CFA and CIIA diplomas are officially recognized as certifications of professional proficiency by several financial regulatory agencies, in the US, Europe and in many other jurisdictions. In some instances, regulation waives the requirement to pass qualifying examinations for holders of these diplomas. The financial professionals mentioned above must apply these methods in everyday practice in order to comply with their labor contracts and with financial regulation. Failure to do so can lead to being fired and even to legal suits.[3]

This article proposes to analyze the imaginaries that organize the calculations and choices of variables used to obtain the discount rate when the formula is used to value listed companies. In this role, the WACC is part of the institutional setting of the finance industry. Since the 1980s in the US (Krippner 2011), Europe (Abdelal 2007), Brazil (Müller 2006), Japan (Amyx 2004), China (Hertz 1998), India (Reddy 2009) and many other jurisdictions (Blyth 2003), regulatory transformations were aimed explicitly at giving the finance industry a

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[1] *CFA 1*, *Schweser Notes*. 2007. USA: Schweser Kaplan for CFA Level 1 and *CFA 2*, *Schweser Notes*. 2007. USA: Schweser Kaplan, subsequently quoted as CFA, Level 1 and CFA, Level 2, cf. https://www.cfainstitute.org, accessed 8 Apr 2021.

[2] *Course Manual*. 2009. Geneva: International Learning Platform for Investment Professionals, subsequently quoted as CIIA, cf. http://www.aciia.org/, accessed 8 Apr 2021.

[3] See for instance the decision of 8 July 2013 of the Court of the Chancery of the State of Delaware in the case Merion Capital L. P. et alii vs. 3M Congent Inc. (I thank Liliana Doganova for informing me of this example).

central role in the distribution of money. This was done using the theoretical frame of financial economics derived from neoclassical economics.[4] According to this regulatory and conceptual frame, the finance industry is the social space that ensures that “investors” exchange in “efficient markets”, so that the prices they produce reflect all available information about the “value” of the assets and serve as signals for an “optimal” allocation of money in society at large. According to the methods present in manuals like those analyzed here and upheld by financial regulation, it is only when investors apply these methods that their actions will ensue in the market efficiency that the methods themselves presuppose. While the determination of value by “investors” is defined as a technical operation for their individual gain, the theory of market efficiency considers that it has a political role, as it is a precondition for a socially optimal allocation of resources. The definition of the WACC to assess the “value” of listed stocks is thus established by mobilizing these political imaginaries concerning the social role of valuation methods (Ortiz forthcoming).[5]

The determination of the value of a financial asset places this asset in a hierarchy in the access to the money managed by the finance industry, as more valuable assets are supposed to attract more money. Some activities are constituted as assets and ranked, while others are simply excluded from the “investment universe”, deemed not to have any financial value, and hence not worthy of the money managed by the finance industry (Leyshon and Thrift 2007; Fourcade and Healy 2013; Ortiz 2014, 2021; Muniesa et al. 2017). The WACC is part of the procedures carried out in the finance industry that contribute to the production of social hierarchies in the global space of this industry’s operations.

Miller and Rose (1992) have proposed to understand discounted cash flow methods, among other techniques, as ways of organizing power relations that work because they are disseminated in practices well beyond the official reaches of state administration. This follows Foucault’s idea that power is produced in interactions everywhere, which are imbued with “intention” but cannot be attributed to one

[4] Financial and accounting regulation is of course diverse across jurisdictions (see for instance Davies and Green 2011: ch. 5). It is enforced by diverse state agencies with different prerogatives and scopes, and in many cases it is partly carried out by private companies, such as auditing companies (Cooper and Robson 2006). In this article, when I refer to financial regulation in general, I refer to the general imaginaries of neoclassical economics that are used, among others, in the jurisdictions evoked above (see for instance Mayntz 2013 for an assessment of continuity in this respect after 2008 in a variety of jurisdictions).

[5] An initial exploration of the ideas presented here was published in Muniesa et al. (2017: ch. 9). The analysis presented here includes material that was not taken into account in that version, and situates it within a discussion of the political imaginaries of finance.

specific subject or center of decision (1978: 94; see also Escalona Victoria 2016). Miller and Rose thus propose to consider that state agencies, but also states in the global geopolitical arena, must be understood as the result of the stabilization of particular rules of action and procedures, around which different actors, social groups and organizations come together through power struggles and negotiations. Accounting and financial methods shared by all the actors that are part of this stabilization are thus among the "mediating instruments" that allow for these alliances and stabilizations to come about and be sustained (Miller and O'Leary 2007). As accounting and financial methods are used across multiple social settings, they establish a particular geography of power relations that is not limited to the borders or concerns of one particular organization (Mennicken and Miller 2012). This happens as actors attribute different meanings to them, which are technical, but also moral and political. Here I propose to focus on the political meanings of the WACC, which I term political imaginaries.

De Goede (2005) and Langley (2015) have studied financial methods, regulatory frameworks and policy using Foucault's analysis of the role of moral and political categories in the constitution of expert forms of knowledge and practices of social discipline. They show how the concepts of market, investment, credit, speculation and risk used in these methods and regulatory frameworks have multiple, often contradictory, genealogies, which coalesce around moral, political and affective meanings in particular institutional settings. Miller and Rose (1992) highlight that it is important to study methods like the discounted cash flow method by looking at the ontologies, epistemologies and rationales they presuppose. This implies also looking at how these procedures include definitions of the actors that are supposed to apply them (p. 179). Young (2006) shows that accounting standards presuppose specific interests of their users. As these standards become financialized, the figure of the user and his/her relation to the company he/she assesses is transformed, coming closer to the relation of an investor who analyzes investment opportunities and compares them with asset prices in supposedly efficient markets (see also Ravenscroft and Williams 2009; Erb and Pelger 2015). Elsewhere, I have studied how employees of the finance industry who use these methods may mobilize their moral and political meanings in different ways. In particular, they refer to the moral and political meanings of the concepts of investor and efficient market, for instance to legitimize their work in conflicts with colleagues, or to legitimize the global distributive effects of the finance industry (Ortiz 2014). In the cases I studied, employees mobilized the political imaginaries of a world where the optimal allocation of resources ensues from the encounter of independent investors in efficient markets, in order to make sense of the multiple and contradictory ontologies and epistemologies of the financial methods they used in everyday practice. Following this approach, this article proposes to study how the definition of the WACC in the manuals of the CFA and CIIA makes reference to specific political imaginaries about the identity of investors, the characteristics of efficient markets and the roles of the state.

Beckert and Bronk (2018) use the term "imaginary" to distinguish what they consider as uncertain bets in finance from otherwise "calculative reason", so that "imagination" is distinguished from "rational analysis" (p. 4). On the contrary, I consider here that mathematical relations in financial methods are themselves part of political imaginaries. These imaginaries do not just concern a meaning that would be attributed to otherwise politically neutral mathematical formulas and numbers. Vollmer (2007) shows how the possibility of using the same mathematical formula in different social settings allows for it to be connected to different moral and political meanings. But this does not mean that the formula itself would exist in a domain of its own, where these meanings do not exist. On the contrary, as Guyer et al. (2010) remind us, the production of mathematical relations is always marked by moral, political and religious meanings. When formulas circulate among different settings, these meanings can change, but they remain always important for how these relations are produced (see also Guyer 2016: ch. 7).

The political imaginaries I propose to address in this article concern the way in which numbers and mathematical relations are produced in financial methods. Mathematical relations presuppose ontologies and epistemologies concerning the entities that they bring together. Considering different entities as mathematically comparable in order to add them or to establish averages and other statistical relations between them are political acts. They attribute characteristics to these entities and to their worlds that orient normatively what can and cannot be done and, in the case of financial formulas, who should get what and why. Maurer (2002) has shown that probabilities used in financial methods reproduce the presupposition about a stable cosmos governed by mathematical rules, which was explicit in the theological debates where these formulas were first established. De Goede (2005: ch. 4) has shown how this religious imaginary was explicit in the construction and justification of stock indexes at the beginning of the twentieth century. That kind of analysis necessitates a genealogical study that goes beyond the limits of the one proposed here, which is restricted to the analysis of the content of the CFA and CIIA manuals. But that same analytical principle is used here to study the WACC. I propose to analyze the meanings of the numbers and mathematical relations present in the textbook definition of the formula, in order to highlight the ontologies, epistemologies and power relations they imply. This allows for seeing how these ontologies and epistemologies make these power relations appear as necessary and legitimate, excluding other ways in which the social distributive effects of the finance industry could be problematized.

The WACC can be used in very different settings and can therefore have different meanings. Studying its definition in the manuals of the CFA and CIIA allows for seeing one of these settings, which is particularly relevant given the institutional role of these manuals. In them, the formula is defined as the discount rate that "investors" should "require" as the minimum rate of return on their investment. Thereby, like the accounting categories and rationales studied by Young (2006), the formula proposes a specific definition of what an "investor" is. This figure is then put in relation with two other entities: the "markets", which are problematized in terms of their "efficiency", and the "state", problematized in terms of its sovereignty. These problematizations, as Miller and Rose (1992) suggest, establish a limited set of concepts, rationales and controversies that designate the space of what the formula allows for thinking and renders legitimate, and they veil what the formula eschews (Strathern 2000; Williams 2013). In the formula, the markets and the state can be called "abstract" spaces (Mennicken and Miller 2012: 7, 20) that make certain things calculable and certain relations between them and the investor relevant, natural and legitimate. Exploring this financial imagination allows then for showing how the most minute technical operation can actually carry important forms of political legitimation of the conceptual frame of financial regulation, which gives the finance industry a fundamental role in the production of social hierarchies. Studying the political imaginaries of the WACC allows for exposing this imagination and the limits it imposes. This kind of analysis is thus important in providing a critique of the political imaginaries of "value", "investors", "markets" and "states", which are used to legitimize the global hierarchies produced by the application of these methods in the finance industry (Ortiz 2013, forthcoming). In the following pages, I will study the definitions of the figures of the "investor", the "market" and the "state" present in the formula, and then show how they are articulated in a way that gives preeminence to the figure of the investor over the rest of society.

The investor

The concept of investor today refers to various, sometimes very different social relations. Historians show that during the nineteenth century in the US, the social identity of the financial investor shifted dramatically. The concept connected with the image of a person who acted irresponsibly with their money, similar to a gambler. But that shifted towards the end of the century, when it related to the image of a person, preferably white and male, who acted based on science and responded to the moral responsibility of taking care of the well-being of his family (Zelizer 1979: ch. 6; de Goede 2005: chs 3–4; Preda 2005, 2009: ch. 3). After WWII, the concept changed again, and was increasingly used to designate not only individual investors, but also the US middle-classes as a segment of society whose pension plans were invested in financial assets (Montagne 2006: ch. 3). The concept was increasingly defined by making reference to the financial methods found today in manuals like those of the CIIA and the CFA, which were developed in a circulation of people and ideas among financial professionals, regulators and academics (Whitley 1986; MacKenzie 2006).

In most jurisdictions around the world, financial regulation distinguishes the category of "qualified" or "sophisticated" investors, defined by their knowledge of financial theory, and by the concrete means they have to apply it.[6] These conditions describe mainly the employees of the finance industry, whose companies are often referred to as "institutional investors". Worldwide, the overwhelming majority of transactions concerning listed stocks, bonds and other financial assets occur between employees of the finance industry. In this setting, the figure of the investor is produced in a relation of representation: employees of the finance industry are considered investors because they invest money that belongs to their clients, and their clients are considered investors because they entrust their money to these professionals (Clark 2000; Montagne 2006; Erturk et al. 2007; Ortiz 2011, 2014).

The formulas and methods presented in the CIIA and CFA manuals are all established as tools for an investor seeking to maximize returns and reduce risk. The analysis of companies is thus oriented toward the idea of maximization of shareholder value. The "Corporate" section of the CFA manual thus starts with the sentence: "Modern finance theory and practice is based on the basic principle that business managers should act so as to maximise shareholder value, i.e., the value of equity shares of the company".[7] The analysis that I propose below focuses then not on the social images of the investor described above, but on the figure of the investor that is "made up" (Young 2006) in the

[6] This definition also includes the marginal case of very wealthy individuals. The European Securities and Markets Authority (ESMA) uses the expression "professional" investor.

[7] CFA 1, Level 1, Corporate, ch. 1, p. 1.

formula, i.e. the way in which the formula defines what an investor is, what he[8] is supposed to desire and how he is supposed to calculate it.

Different formulas may contain slightly different features defining the figure of the investor. In the case of the WACC, this figure is connected to stocks and bonds, considered as the two sources of financing of the company that is evaluated. In financial valuation of listed companies, the WACC is used to determine what is called the "fundamental value" of the company using the DCF method. This value is defined as the "present" value of the future cash flows that will be available for those investing their money in the company. Concerning the valuation of stocks, CFA and CIIA manuals propose the same method, which is found in almost exact terms in most manuals. The income statement provides the representation of the company organized as a stream of cash flows that are allocated between different components, among which are the shareholders. Seen from the point of view of the figure of the investor, the cash flow that can be allocated to the shareholder becomes the focus of the analysis, as all other components are considered as sources of revenue or cost. Shareholder value is here defined as a relation between the investor and the company that is represented as appropriable cash by accounting categories of the income statement.

The calculation aims at determining future monetary amounts for all the elements of the income statement. This should allow for determining, for each year in the mid-term future (usually between five and fifteen years), the "free cash flows to the firm", calculated as net income plus non-cash expenses (such as depreciation and amortization) plus interest payment minus fixed capital investment and working capital investment.[9] The CFA manual states: "That pile of remaining cash is called free cash flow to the firm (FCFF) because it's "free" to pay out to the company's investors".[10] The "free cash flow to the firm" is then discounted at the weighted average cost of capital, giving as a result the "present value of the firm".

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[8] While in theoretical discourse it is useful to use feminine pronouns to speak about abstract agents, if only to highlight the gendered impositions of language, doing so when talking about finance may give the false impression that these agents are indeed gender-neutral. The fact is that they are not, and that, as in many other settings, there is a strongly gendered distribution of power, with male domination being the norm (cf. Roth 2006; Ho 2009: 79–80; Fisher 2012; Salzinger, 2016; Souleles 2019: ch. 3). I will therefore use masculine pronouns to speak about the figure of the "investor".

[9] CFA, Level 2, Book 4, pp. 169 ff.; CIIA 1, Equity, ch. 4, pp. 7–13.

[10] CFA, Level 2, Book 4, p. 169.

The definition of the formula is as follows:[11]
WACC = K_d . (1 - t) . D / (D + E) + K_e . E / (D + E), where:
D: value of debt
E: value of equity
(D + E): enterprise value
K_d: cost of debt
t: tax rate on earnings at the moment of the calculation
K_e: cost of capital
$K_e = R_f + (R_m - R_f). \beta_e$ (according to the preferred method of the Capital Asset Pricing Model, see below)
K_d = yield to maturity of debt
R_f: risk-free interest rate
R_m: interest rate required or expected by the market
(R_m - R_f): risk premium required or expected by the market for the company or the sector to which it belongs
β_e: equity beta (sensitivity of the price of the stock of the company to the variation of its reference index, calculated statistically using historical data).

In using the WACC to calculate the "present value of the firm", all cash flows that are not "costs" are thus considered to belong to two figures of the investor: bondholders and stock owners. The "present value of debt" is deducted from the "value of the firm", and this gives the "value of equity", which is termed the company's "fundamental",[12] "intrinsic"[13] or even "true"[14] value. This number can then be divided by the number of shares in order to obtain the "fundamental value" of each share. The two types of investor are differentiated by the amount they have invested in the company and by the order of access to the "free cash flows". As we will see below, the discount rate averages the respective weight of debt and stocks in the "value of the firm" by comparing their capitalization, which is measured by multiplying the price of an asset, such as a stock, by the number of existing assets. Following standard legal provisions for bankruptcy, creditors have preeminence over shareholders: the "value of equity" is only obtained after subtracting the "value of debt" from the "value of the firm".

The WACC is thus a mathematical instantiation of the concept of "shareholder value". As several studies have shown, the DCF method, with its discount rate and the comparison of "present values", is used in conflicts within companies that undergo restructuring to increase "shareholder value" (Armstrong 2000; Ezzamel et al. 2008). These

[11] CFA, Level 1, Book 4, p. 35; CIIA Equity, ch. 4, p. 15.

[12] CFA, Level 1, Book 4, p. 178; CIIA, Equity Questions II, p. 4.

[13] CFA, Level 1, Book 4, p. 279; CIIA, Equity Solutions II, p. 8.

[14] CIIA, Equity, ch. 4, p. 35.

methods are used even in the management of public services, transforming their meaning from that of a social right to that of an investment (Toms et al. 2011; Chiapello 2015). In the formula of the WACC, the equality sign that equates a number called the "cost of capital" and an addition of items is premised on that kind of power relation. The only two items that are added are the "required" rates of return of two figures of the investor, weighted by the current monetary value of the investment they own. This equality states that only stock owners and bondholders have the right to "require" a rate of return from the company, the money that is "free" for them to take. Thus, the formula establishes, in the form of a mathematical relation, the power relations between investors and the rest of the participants to the social activities that make up the firm, such as employees, commercial partners or the environment in which the company operates. This figure of the investor is defined in relation to two other entities, efficient markets and the state.

The market

In financial regulation and financial economics, the concept of market is strongly linked to the idea of market efficiency. But even within that genealogy, the concept of market has had different meanings over time. For Adam Smith, free markets had primarily a political importance, which is that they were a site of civil equalization, where each individual could act freely based on his/her own reason. As these free subjects competed with each other, Smith considered that they produced prices that best approached the "natural" price of the objects of exchange, i.e. the one that reflected their labor value (1991 [1776]: 65). Foucault (2008) showed how, for ordo-liberal philosophers, the concept of the market worked as a regulatory idea in the general Kantian sense that it provided an ideal toward which institutions and individual action should be oriented, but which would not necessarily be attained. For them, the political importance of these markets was that they were supposed to be arenas where the social disciplining role of prices would be legitimated as the outcome of free social interactions. As Walter (1996) highlights, after ordo-liberalism, financial economics let go of the idea of a natural value of the objects of exchange that was central in classical economics, to focus on the idea that what prices reflect is the information actors have about these objects. In this case, market efficiency has a political and epistemological legitimacy that is not connected to the idea that objects or activities have a natural value.

Miller and Rose (1990) highlighted how the concept of market is used as part of a program. They show it is deployed in a series of tools, procedures, rules and institutions, with the aim of orienting individual action in the moral and political directions that are close to the ideals of ordo-liberalism. The concept can be appropriated in multiple settings, where it articulates several power relations that are far from the ideal described in its standardized definition. Financial regulation tends to produce rules officially aimed at enhancing or sustaining market efficiency, which is supposedly located in regulated and over-the-counter exchanges that are overwhelmingly composed of finance industry companies. Organizational analyses of this industry have repeatedly shown that it does not operate in any way like Adam Smith's or the ordo-liberals' ideal of an open arena where individuals would freely exchange their own labor and capital. The finance industry is a bureaucratic setting, where most actors are employees applying standardized procedures for a salary. These procedures are used to organize most of their actions of valuation and investment (Clark and Thrift 2005; Zaloom 2006; Ortiz 2014, forthcoming). As Arjaliès et al. (2017: ch. 7) have shown, even in cases where a string of companies aims at changing their investment strategy, they may be prevented from doing so by the "chains" of contracts and legal provisions that bind them to each other and to clients and third parties.

Yet, the concept of market efficiency is pervasive in financial regulation and is a foundation of the methods formalized in manuals like those of the CIIA and the CFA (Whitley 1986; MacKenzie 2006; Polillo 2018). The concept is central in the definition of the WACC, where it is used to give meaning to the prices that are used as numbers in the calculation. Most of the numbers to be used with the formula come from prices found on over-the-counter or regulated exchanges, which the manuals call "markets". The analysis proposed here seeks then to explore what kind of "abstract" space (Mennicken and Miller 2012: 7, 20) is defined with this concept of market in the formula. In particular, I will study how it connects to the political imaginaries of market efficiency described above, in a way that articulates the possibilities, prerogatives and limits of the figure of the investor studied in the previous section.

Prices used in the WACC can be spot prices, i.e. the price used in one transaction at a point in time, or they can ensue from the use of mathematical formulae to treat bundles of prices. Spot prices concern the Equity and Debt items in the formula. The manuals present three main ways to define equity, consisting of book value, target capital structure and market prices, but, when the aim is to establish the value of the firm, they explicitly favor using the market capitalization of the company at the time of valuation.[15] Similarly, the debt is defined by the market capitalization of the company's outstanding bonds, if the company has any. Spot prices are also used for the so-called "risk-free rate of return", which is usually defined by the yield of certain

[15] CFA, Level 2, Book 4, p. 182; CIIA, Corporate, ch. 1, p. 47.

sovereign bonds.[16] The "required rate of return of debt" is defined by the yield-to-maturity of the company's bonds.[17] In all these cases, the prices that are used are those current at the moment of valuation, which means that, like stock and bond prices in general, they change all the time.

Market prices are also present after undergoing statistical reworking. The "required rate of return for equity" is determined by applying statistical analyses to past returns, as expressed by the market price and dividend distribution. To do this, the manuals favor the use of the Capital Asset Pricing Model (CAPM), which measures the relation between the company's returns and that of the "market", for which a market index should be used as representation.[18]

In all these cases, it is important to ask what makes a price a relevant piece of information in calculating a required rate of return for investors and, in turn, calculating the "fundamental value" of a listed company. The status of prices as information depends directly, in the manuals, on the concept of market efficiency. Whether they are constantly changing spot prices taken at a point in time, or whether they are averages thereof, the rationale for considering stock and bond prices as accurate representations of the assets' "value" is founded on the notion of market efficiency.

As many authors studying the genealogy of this concept show, before the notion of market efficiency, financial regulators tended to view prices of financial assets as the result of erratic speculative movements. These movements were considered akin to gambling and were thus often declared illegal (de Goede 2005: ch. 3; Preda 2009: ch. 3). In the liberal and neoliberal definition of free markets evoked at the beginning of this section, this representative character is based on free exchanges between participants, who seek information about the assets, so that their interactions result in a collective knowledge that supersedes the knowledge of each individual. In line with this form of reasoning, the CFA refers to one of the most prominent figures of financial economics, Eugene Fama, and states:

> Under these assumptions [of market efficiency] the competitive behavior of this large group of market participants should cause rapid price adjustments in response to any newly released information. The new price will reflect investors'

[16] CFA, Level 2, Book 4, p. 124; CIIA, Corporate, ch. 5, p. 11.

[17] In the case where a company has no bonds, manuals propose using outstanding loans or, when that information is not available, to use standard market prices and "capital structures" calculated as averages of the whole "market". CFA, Level 2, Book 4, p. 101; CIIA, Corporate, ch. 1, p. 44.

[18] CFA, Level 2, Book 4, p. 101; CIIA, Corporate, ch. 1, p. 37.

> new estimates of the investment's value and riskiness. Should these assumptions not hold (as in emerging markets), abnormal returns may be possible.[19]

In the same line, the CIIA states that "EMH [Efficient Market Hypothesis] implies that market price always reflects the true value of the asset"[20] and "in an informationally efficient market, the price of the traded securities equals their value".[21]

But this type of truth has also benefited, in financial methods in general and including the WACC, from a concomitant epistemology derived from the positivist understanding, in the nineteenth century, concerning the relation between natural laws and their mathematical formulation. Since prices were considered to represent the true value of companies, i.e. the present value of their future cash flows, the evolution of prices was considered to represent economic processes. The presupposition of a link between economic activity and natural cycles was at the basis of the creation of the first stock indexes at the end of the nineteenth century (de Goede 2005: 103). MacKenzie (2006) shows that after WWII, the use of statistical tools to treat stock prices was extended. Like natural data, prices and returns on stocks among other financial data were considered discrete events with equal weight with a normal distribution, and therefore liable to statistical treatment in which averages, standard deviations, correlations and other mathematical relations were expected to say something meaningful. This process led to two main theoretical constructions, whose authors obtained Nobel prizes in Economics, and the use of which have led to a widespread change in the way in which valuation and investment have been understood and produced by the finance industry since the 1970s. Harry Markovitz is credited with proving mathematically the old saying that one should not put all the eggs in the same basket. Since prices are supposed to reflect information that is yet unfathomable and answers to no particular rule, they are considered to vary "randomly", an assertion attributed to Eugene Fama. By construction, then, the standard deviation of the prices of a single asset is higher than that of a bundle of assets. This implies that the investor should buy the whole market in order to minimize the standard deviation of returns, also called "volatility". It also implies, as William Sharpe and others developed later in the CAPM, that, statistically, each stock's returns can be analyzed as varying partly in relation to the market's variation and partly independently.[22] This

[19] CFA, Level 1, Book 4, p. 178.

[20] CIIA, Portfolio Management, ch. 1, p. 37.

[21] CIIA, Corporate, ch. 4, p. 2.

[22] The Sveriges Riksbank Prize in Economic Sciences in Memory of Alfred Nobel was awarded to Harry Markovitz and William Sharpe in 1990 and to Eugene Fama in 2013.

allows for comparing the variation of the stock and that of the market, a relation measured by the β(beta) coefficient. Debates concerning the use of CAPM and beta concentrate on the fact that using different market prices and time series, the results are different. The question is the accuracy of the method to reproduce a truth of market prices, but the existence of this truth is nevertheless an epistemological precondition for the methodological debate to make sense at all.[23]

Efficient markets are thus supposed to have an epistemological authority based on their capacity to produce prices that reflect all available information and hence the best approximation of the asset's value. The manuals assert that this epistemological authority also gives them the political legitimacy derived from their role in orienting investment in a way that is optimal for society. Both CFA and CIIA manuals devote a whole section to the definition of the concept of market efficiency and to its importance for valuation, investment and the social allocation of resources. Thus they bring together "shareholder value" and a supposedly politically desired economic order. The CFA refers to Nozick and utilitarianism as the only two possible ways to understand this and states:

> When markets are functioning well, competition and allocation by price lead to an efficient allocation of resources, so that the marginal benefit to society just equals the marginal cost for the "last" unit of each good and service produced.[24]

According to the CIIA, the aim to maximize shareholder value benefits not only the company, its customers and employees:

> another rationale for using shareholder value maximisation as the primary objective for businesses is that such an objective leads to efficient allocation of capital. If the markets are efficient, those businesses which operate in the most efficient manner will experience ever-increasing share prices and therefore will be able to obtain the capital needed for growth at lower costs of funds. On the other hand, businesses, which are not successful, will see their share prices dropping, their cost of funds will be higher and consequently these businesses will not grow.[25]

This political and epistemological authority then enters into a tense, partly contradictory relation with the authority of the investor described in the previous section. This is because, according to the manuals, when markets are efficient, the individual investor cannot by himself reach a valuation that represents all available information better than the actual price. He must simply accept this price as a signal for the allocation of his money:

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[23] CFA, Level 1, Book 4, p. 44; CIIA, Portfolio Management, ch. 1, p. 62.

[24] CIIA, Corporate, ch. 1, p. 2.

[25] CFA, Level 1, Book 2, p. 21.

> The semistrong form of the EMH holds that security prices rapidly adjust to the arrival of all new public information. As such, current security prices fully reflect all publicly available information. The semistrong form says security prices include all security market and nonmarket information available to the public. The conclusion is that an investor cannot achieve abnormal returns using fundamental analysis […] If semistrong form efficiency holds, neither technical nor fundamental analysis has any value in stock selection and portfolio construction.[26]

The market, as an external source of the truth of value, overrides the subjective capacity of the investor to assess value that is implied in the use of the WACC. Statistical treatment of market prices implies that this truth is indeed realized by the market; otherwise prices would not represent anything and should not be used as data. But it also gives this truth a new layer of reliability, that of the regularity of probabilities, since if this was not implied, the statistical analysis would itself be meaningless. This implies a certain contradiction. If the WACC is to be used at all, it is because the figure of the investor presupposes that the market price is not a correct representation of the fundamental value of his assets. Using the WACC, he asserts his freedom as an individual by deploying his personal cognitive capacities; but using market prices as representative of this value implies that they express a truth that imposes itself, objectively, on every individual. The contradiction is blatant in the WACC, since stock prices are used as a correct representation of the value of equity, but in order to conduct a fundamental valuation that will produce another price for the same equity. Thus, the formula implies, at the same time, that stock markets are and are not efficient. When they address this, the manuals do not consider this a contradiction, but a case of

[26] CFA, Level 1, Book 4, pp. 179, 187. Cf. CIIA, Portfolio Management, ch. 1, p. 42: "If the market is semistrong-form efficient, fundamental analysis does not permit [the investor] to achieve superior performances since all publicly available information is already reflected in prices".

"circularity", to be solved by using mathematically constructed variables that must be based on "market values".[27]

The WACC mobilizes different definitions of the "market". On the one hand, the market is defined according to the liberal and neoliberal imaginaries evoked at the beginning of this section, considering free markets where individual investors exchange and gather all relevant information about assets. On the other hand, markets are defined by considering their prices as discrete and equally weighted events that behave according to the laws of probabilities. Muniesa (2000, 2007) shows that these conceptual tensions articulate the institutional underpinning of the existence of the prices themselves. Studying the debates concerning the automation of Euronext in the late twentieth century, he shows how the representative character of prices was at the center of the conflicts between the actors influencing the process. Stock prices were taken to represent different things. As social or natural phenomena, they could be taken to say something about a relation between buyers and sellers, about the individual story of a company, or about some law or rule of thumb that could be drawn from the past into the future. In financial regulation, the concept of market efficiency can be used with these different definitions, for instance when there is a drive to enhance transparency (see for example Underhill and Blom 2013), or in the debates about the expansion of algorithmic trading based on the probabilistic approach (see for instance Lange et al. 2016). But both logics reassert the authority of market efficiency as the source of an accurate representation of the value of companies' stocks and bonds in prices. The manuals thus reproduce the discourse taken up by financial regulation, according to which the finance industry would contribute to an optimal allocation of resources by fostering efficient financial markets. The WACC turns this political doctrine into a self-evident epistemology that shapes the gaze of the investor. The state is the other source of data in the formula.

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[27] CIIA, Equity, ch. 4, p. 15: "It is important to note that the weights (D stands for Debt, E stands for Equity) should correspond to market values of debt and equity. The market value of debt can usually be approximated with its book value. The book value of equity, on the other hand, is typically much different from its market value. Here, we run into a problem of circularity. We need a market value based WACC as the discount rate to estimate the market value itself. This is not only an EVA [Economic Value Added] problem but it's the same circularity if you value firms with the DCF approach (Discounted Cash Flow approach). The typical solution to that is to use a target capital structure for the weights (still, the target has to be expressed in market value terms)". Yet, this is not what the manual proposes in the initial definition of the formula. This leads, for instance, Fernandez (2010) to state that the two values for equity, i.e. that determined to give the different weights to the costs of equity and debt, and that obtained by discounted cash flows with the WACC, should be obtained by iteration.

The state

Foucault considered that the state should not be studied as a center from which power emanates, but as a "crystallization" of power relations (1978: 93; see also Escalona Victoria 2016). Many analyses have highlighted that the state is the effect, multiple and shifting, of the articulation of varied actors, programs, ideas and practices (Miller and Rose 1992). In this analysis, the state is not only produced by its official agents, such as state employees, but also by practices that take the state into account or presuppose it, and thereby produce its effects (Das and Poole 2004; Abélès 2005 [1990]; Sharma and Gupta 2006). This section applies this insight to the way in which the state is formulated in the elaboration of the WACC. Like the efficient markets, the state is also an "abstract" space produced by the formula (Mennicken and Miller 2012: 7, 20). My analysis is thus oriented to see how the formulation of the WACC produces imaginaries about what the state can and cannot do in relation to the efficient markets and the figure of the investor that I explored in previous sections.

As a source of data, the state appears in three forms in the formula. The first is as the guarantor and producer of accounting data. For instance, when the debt of the company is not composed solely of exchanged bonds, the cost of debt needs to be evaluated using the liabilities officially reported by the company. More generally, the market data used in the formula is stabilized by regulatory authorities that oversee financial activities and reporting. Second, the state also appears as a collector of tax, in the form of t. The discussions here concern the capacity of the valuating gaze to determine the right tax rate for the company. Finally, the state appears as the source of the risk-free interest rate, which is usually defined by the yield-to-maturity of the sovereign bonds of the richest states in the world, deemed default-free.[28] The difference between this risk-free rate and the statistically produced market return gives the "risk premium", found in CAPM and used to calculate the rate of return of equity.

These three sources of data refer to different state activities and are considered true or accurate in different ways. They also define different roles of the state in the production of the cash flows supposed to be "free" for investors and in the determination of the discount rate.

On the one hand, the data used in the formula implies that the state guarantee about accounting and financial reporting is reliable. Although accounting and reporting standards are today produced partly by non-state professional organizations, states remain the authority that validates these choices and enforces them. The importance of accounting for tax definition and collection is of course a fundamental factor in the process. This is often problematized in financial practice, for instance, by considering that some states and the

[28] CFA, Level 2, Book 4, p. 124; CIIA, Corporate, ch. 5, p. 11.

data they oversee are more reliable than others. In this case, the state does not impact the amount of "free" cash flow supposedly available for the investor, but it guarantees its visibility and calculability.

On the other hand, the tax rate is determined by the state directly. In Austin's terminology, it is a performative act: the tax rate is true as soon as the relevant state agencies make it official (Austin 1976). As tax collector the state has a direct influence on the cash flows requested by investors in two ways. First, since taxes that are paid will not be available for investors, it is understood that declared earnings can be very low due to an accounting strategy aiming at increasing the cash that the firm can reinvest without it being taxed. This explains why discounting is not made on earnings, but on free cash-flows to the firm, adding, among other things, depreciation and amortization, i.e. sources of cash available for the company that will not be taxed. Second, the fact that the state will not tax the part of revenues that is used to pay interest on debt implies that debt may be a more profitable source of funding than equity. Manuals thus explain that taxes actually play a role in the structure of the sources of financing of the company, and therefore in the way its future cash flows are to be discounted.[29]

Finally, the risk-free interest rate relates to yet another epistemology. On the one hand, it depends on the existence of government debt, and on its qualification as "risk-free". This qualification often depends on rating agencies, which establish a ranking among states, with the top ranking given to the rich states that are usually the ones considered risk-free in the manuals (Sinclair 2005; Fourcade 2017). But it also implies the evaluation of the efficient market, since the risk-free rate is the spot market rate of the supposedly risk-free sovereign debt. Yet, the most crucial element of this data is the notion of sovereignty that it implies. What makes this rate "risk-free" is the assumption that the state will always honor its debts. This implies that the state's capacity to pay its debt is beyond the grasp of probabilities, otherwise, some "risk" would be measurable.[30] This infinity is continuous: for there not to be any "risk", the guarantee of payment must always hold. This absolute character of state sovereignty makes the risk-free rate of return operate as a universal standard of value that allows for establishing a relation of forces among the social activities attempting to attract investors' money. Activities that are not "risk-free" and that cannot propose returns higher than the "risk-free" rate are simply excluded from the "investment universe" and do not exist as objects of investment. Thus, the state founds the distinction between those who can and those who cannot be objects of the gaze of the investor

[29] CFA, Level 2, Book 2, p. 169; CIIA, Corporate, ch. 1, p. 40.

[30] Pradier (2006) shows how the notion of "risk" in economic theory is unstable and multifarious. The notion of "risk-free" is yet one more variation of this ambiguous concept.

(Sinclair 2005; Boy 2015; Ortiz forthcoming). The standard of value established by the state is thus imposed both on the social activities that vie for investors' money, and on the investor' list of investment possibilities.

Different definitions of the state in the WACC establish different relations between the state, the investor and the markets. As a guarantor of the quality of accounting and financial information, and as a general tax collector, the state that is presupposed in the sources of data of the WACC seems aligned with the theory of market efficiency analyzed above. The state ensures the rules of the market, in particular the crucial issue of there being commonly shared and transparent information, and this service, among others, implies a certain level of taxation. In this frame, the sovereignty of the state is there to sustain the existence of investors and efficient markets.

But the notion of "risk-free" introduces several features that depart from this picture. It is striking that, although there could be other notions of "risk-free", and although calculations could be made using sovereign bonds of rich states without calling them "risk-free", these bonds are used systematically with this expression in the formulae, in a way that counters liberal discourse. Indeed, this notion seems to establish a guaranteed rent for anyone owning money. This is particularly important because it is the foundation of the "freedom" of the valuating investor: if an object of investment does not provide enough yield for its "risk", the investor is always guaranteed to have a minimal return by purchasing government debt. In this frame, this minimum revenue guarantee can only be based on taxes, since in the long run, printing money would mean inflation and a decrease of money's purchasing power.[31] This sheds another light on the presence of the state as tax collector. On the one hand, manuals consider that taxes are not desirable. CFA and CIIA manuals call the tax rebate a "subsidy",[32] and the CFA considers that a "perfect world" is tax-free.[33] On the other hand the notion of "risk-free" implies that the state will stay indebted forever, and will do all it can to honor its debts, putting investors' claims on public budget above the claims of any other member of the polity.

The three definitions of the state in the formula establish different relations between the state, the investor and the market. But in all three cases, the formulation of the WACC gives priority to the investor over the rest of society, and makes claims for the state to support this

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[31] Both manuals thus distinguish the "real risk-free rate" from the "nominal risk-free rate", as the latter includes inflation, cf. CFA, Level 1, Book 1, pp. 97–98 and CIIA, Portfolio Management, ch. 1, p. 1.

[32] CFA, Level 2, Book 4, p. 271; CIIA, Corporate, ch. 4, p. 7.

[33] CFA, Level 2, Book 2, p. 169.

power relation. The following section analyzes how the power relations described for these three entities are articulated in the WACC.

A political assemblage

As described above, the WACC brings together different epistemologies and ontologies, concerning time and the definitions of the figure of the investor, the efficient market and the state. Like the "mediating instruments" described by Miller and O'Leary (2007, see also Wise 1988), this formula thus allows for the articulation of multiple imaginaries into a common program, that of the definition of the "fundamental value" of listed companies. The concept of "assemblage" proposed by Deleuze and Guattari (1987) is useful in describing a specificity of this articulation (see also Mennicken and Miller 2012). The different imaginaries in the formula are partly independent, in the sense that they can be thought without the others. And some are contradictory, as we saw concerning the assumptions about market efficiency. Yet, the way in which they are brought together in the formula in the case of the manuals studied here brings about a new set of possibilities, an "assemblage", in which something like the "present value" of future cash flows, and hence the "fundamental value" of a listed company, is thought not only as possible, but also as "true" and "fair" (Muniesa 2011; Ortiz 2013, forthcoming). This section analyzes how the political imagination concerning the relation between investors, markets and states is a crucial set of connections keeping this assemblage together (Ortiz 2011, forthcoming).

The formula brings together different methods to determine the accuracy, representative character, or legitimacy of the numbers that are put in relation to each other. The formula is defined as the deed of an investor attempting to evaluate stocks because he considers that the current market price does not reflect their fundamental value accurately enough. The WACC is thus conceived as the best representation of the individual interest and cognitive equipment of the investor, i.e. the return he "requires" from his investment. This is connected to a specific temporality. Since the formula uses the constantly changing spot prices of financial assets, its application inevitably produces different discount rates every time. The discount rate is thus determined only for the time being and will be superseded by any future calculation. The validity of the number produced by the formula thus corresponds to the temporality of the individual gaze that it presupposes: it is only valid in the present moment when that gaze is enacted.

On the other hand, the formula presupposes that markets are efficient, including the determination of the fundamental value of the company under valuation, as we saw in the case of the definition of the relative weight of debt and equity. This efficiency refers to two different ways to produce an accurate representation of value. One understanding implies that this truth obtains from the interaction of free participants seeking to maximize returns, so that the accuracy is the product of a social institution. The probabilistic understanding, on the other hand, considers that this truth corresponds to probabilistic rules about averages, standard deviations and correlations, among others. The social production of prices depends on the recurrent exchange of investors, with the promise that these exchanges will continue in the future, according to the rhythm of activity of free individual actors. In the case of probabilities, the temporality is that of an infinite occurrence of equally weighted events, which behave according to mathematical relations and not to the workings of a social institution in a specific time and place.

Finally, the state appears as a source of accurate data in three different ways. The state is partly a performative source of data that determines the tax rate according to the temporality of the production of the law and the changes in government and policy. It is partly an authority that guarantees the respect of truthful declaration of data by other organizations, such as accounting data and financial reports, according to the yearly and quarterly cycles of reporting and the occasional changes in reporting methods and standards. And it is partly an entity that guarantees a minimum “risk-free” rate of return to money owners, which stands outside the temporality of probabilities by virtue of its power over taxpayers. In this capacity, the state also sets an absolute standard of financial value to which all other assets are compared in order to exist and be ranked. The promise of infinite continuity of the state repayment guarantee is different from the promise of the market. The latter concerns future interactions in individual transactions, which are discrete and supposed to occur according to irregular free-arbiter decisions. It is also different from the infinity supposed in the calculation of probabilities, which implies discrete natural events that are regularly distributed and have equal weights.

In the manuals, the presentation of the formula is not accompanied by an attempt to render these different temporalities and epistemologies compatible in their own terms. On the other hand, the recurrent references that make this multiplicity cohesive are: the figure of the investor who seeks to maximize returns; the authority of markets that elicit a representation of “true” value in prices; and the duty of states to guarantee the fairness of the rules for all investors, and a minimum rate of return for investors, due to their status of money owners, which must be paid by taxpayers. This political narrative has two tensions that it is important to highlight, because they connect with the broader and more fundamental question of the legitimacy of the role that financial regulation tends to give the finance industry in the distribution of social resources.

The first tension concerns the role that formulas like the WACC play in the relative authority of the investor and the markets. In the definition of market efficiency, there is interdependence between the freedom of investors to look for information and evaluate assets and the authority of market prices once markets are efficient. Theoretically, in order to be efficient, markets need investors who think they are not efficient and look for information. But market efficiency derives its legitimacy from the idea that economic actors believe in it, and hence use prices as signals for the allocation of money, leading to a socially optimal situation. According to this view, in this process, the financial methods compounded in the manuals of the CIIA and the CFA, which are found with almost exactly the same formulation in most manuals of financial analysis and investment, play a crucial role. It is supposed that it is only when investors use these methods that they can assess value correctly and contribute to the efficiency of markets. Thus, the supposed freedom of the investor and efficiency of markets are based on the supposed epistemological correctness of these financial methods. This rationale underpins the upholding of these methods by financial regulation as an element that would guarantee that the finance industry, as the site where "qualified investors" would be enacted, would be the social institution most contributing to an optimal allocation of money globally. This dynamic relation between the figure of the investor, the efficiency of markets and the role of financial methods encloses within the finance industry any possibility to produce a socially optimal allocation of money, effectively erasing from the space of possibilities all other social actors that could claim a right to participate.

The second tension concerns the role of the state. On the one hand, the state is defined as a guarantor of the fairness of rules for all investors, in line with the general liberal ideal of what states should do to sustain free markets leading to a socially optimal allocation of resources. On the other hand, if the ranking of states according to their "risk-free" status expresses the hierarchies of a postcolonial order, the state is also defined along a somewhat feudal understanding that considers that some members of society, due to their status – in this case as money owners – are entitled to a minimal revenue paid to them by the rest of the polity through the tax system, i.e. in a way that is theoretically enforced by the state's monopoly of physical violence. This tension was already highlighted in the early critiques of liberalism, for instance by Marx, who shows that in a situation where ownership is very unevenly distributed, the supposed fairness of market rules and freedom of economic actors only works for a minority, which imposes its power to concentrate resources on the rest of society (1977 [1869]). This issue is also central in contemporary power relations. Financial regulation in most jurisdictions is premised on the existence of "safe" or "risk-free" assets, which constitute a core, required investment for large financial institutions. And this double role of states, as guarantors of supposedly fair market rules, and as guarantors of the reproduction of inequalities, can be found for instance in the structural reforms imposed by the International Monetary Fund (IMF) on poor countries, in programs of privatization of social services worldwide, and in the accumulation of money in financial assets owned by a small minority of people, observable since these assets were established centuries ago. This double role of states thus stands at the core of contemporary analyses of the role of the finance industry and private property in the production of inequalities (Piketty 2014).

These political imaginaries do not just concern the WACC. They constitute a crucial scaffolding for the multiple temporalities, epistemologies and ontologies presupposed in the many financial formulas, methods and rationales contained in these manuals. As such, these imaginaries are mobilized to attempt to bridge the supposed technical and political legitimacy of financial methods and the concrete distributive effects that their application has worldwide.

Conclusion

This article has proposed conducting a conceptual analysis of a single formula, the weighted average cost of capital, as it is defined and explained in the manuals of the CFA and the CIIA for its use in evaluating listed companies. The analysis highlights that the formula implies multiple epistemologies and ontologies that are independent from each other and that at some points even contradict each other. This multiplicity is assembled through a political imagination to which all these elements refer, giving preeminence to the notions of investor and markets for the definition of value and the socially optimal allocation of resources. The language in the manuals considers that the financial methods they propose are the necessary component for this optimality to be attained. It also asserts that the role of the state is to guarantee both the fairness of market rules for participants, and minimal revenue for money owners, to be obtained from the rest of society through the tax system.

These political imaginaries are not only present in the WACC: they are present in all the financial methods found in these manuals. The manuals regularly refer to some influential authors of financial economics; but the methods and rationales compounded in the manuals are not the result of a single theoretical endeavor. As the historians of finance quoted above highlight, they have complex genealogies. The interest in looking at their combination in the manuals of the CIIA and the CFA is that, as content of professional textbooks, these concepts, methods and rationales, with their political imaginaries, circulate beyond the academic spaces of neoclassical economics and financial economics. They produce a territoriality of their own, with its own capacities to become legitimate, and its own fragilities and limits.

The history of the appropriation of neoclassical economics in financial regulation goes beyond the scope of this article. This appropriation can be extremely diverse, so that it was used to justify privatization of the finance industry in some places (Stiglitz 2006) and to enhance the control of state-owned financial companies by the Chinese government, for instance (Wang 2015; Petry 2020). But in all these cases, as these authors show, regulation takes up the political imaginaries concerning an optimal resource allocation that would result from efficient markets. The political imaginaries I analyzed in the WACC are also mobilized in financial regulation to give legitimacy to the inequalities produced by the finance industry globally.

The power relations described in the WACC remain narrative as long as we only look at them in textbooks. For those relations to be effective, broader social institutions must be enacted every day, such as the finance industry, property rights and the global hierarchy of states that the notion of risk-free refers to. Studying the way in which value is defined in the finance industry matters because valuation is a fundamental part of the process whereby the finance industry distributes money worldwide. This kind of analysis presupposes that "value" is not something that exists by itself, but that there are practices where the word and those associated to it (values, valuation, valorization, evaluation, etc.), defined in several ways, are used to establish particular social relations (Muniesa 2011; Helgesson and Muniesa 2013; Ortiz 2013; Kornberger et al. 2015). Asserting that there is something called value, that it can be assessed technically and that it has a truth that is both the result of methodological accuracy and political fairness, is part of how the distributive effects of the finance industry are produced and legitimized. Looking at the political imagination that underpins financial methods is a way to contribute to a critique of the social institutions that sustain the relevance of these methods and the unequal distributive effects of their application.

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A 'Rule of Thumb' and the Return on Investment: The role of valuation devices in the financialization of Northern Australian pastoral land

Alexandra Langford

Abstract

Northern Australian pastoral land prices have become higher and more volatile over the last twenty years, raising concerns about the potential implications of the financialization of the industry. These prices are not inevitable results of market forces, but mediated and co-constructed by a range of actors using two valuation devices: the 'Beast Area Value', a 'rule of thumb' which emerged during the early development of the industry, and the 'Return on Investment', a tool widely used to compare financial ventures. The Beast Area Value treats land as a commodity whose value is derived from its physical characteristics, while the Return on Investment treats land as an asset whose value is based on its future income generation potential. This article describes how some pastoral companies are strategically combining these devices to earn capital gains through 'speculative development' of properties in ways that do not necessarily increase their productivity. It argues that pastoral land is often developed in ways more reflective of the valuation devices used in the region than of the realities of station management, representing a shift from competing in the sphere of production to competing in the sphere of valuation and implicating these devices in the financialization of Northern Australian land.

Keywords: assetization, commensuration; financialization; Northern Australia; pastoral land

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Introduction

In Northern Australia, the increasingly high and volatile prices of pastoral land have raised concerns around the potential implications of the 'financialization' of the industry. Financialization is broadly conceived as the 'increasing importance of financial markets, financial motives, financial institutions, and financial elites in the operation of the economy and its governing institutions' (Epstein 2001: 2) such that profit making increasingly occurs through financial rather than productive activities (Krippner 2005). Agri-food scholars have raised concerns around the effects of financialization, such as a reorientation of agri-food industries to conform to the needs of financial shareholders (Williams 2000; Isakson 2014, Kuns et al. 2016; Clapp and Isakson 2018); concentration of power in supply chains (Burch and Lawrence 2013); rising farmland prices (Magnan and Sunley 2017); increasing food system governance by financial actors (Langford et al. 2020); and declining viability of family farms (Alston 2004; Weller et al. 2013). Combined with literature highlighting a global 'land rush' (Scoones et al. 2013) and food regime restructuring (McMichael 2012), these studies have raised substantial concerns about the role of financial investment in food production.

However, there is increasing recognition of the need to go beyond meta-narratives of financialization to examine its more nuanced, geographically situated and culturally embedded construction (Ouma 2015; Henry and Prince 2018: 990; Sippel 2018). Financial investment in land and agribusiness do not follow a clear and predictable path (Ducastel and Anseeuw 2017; Muniesa et al. 2017; Langford 2020) but is mediated by a range of professionals who negotiate demand and supply (Bessy and Chauvin 2013; Ducastel and Anseeuw 2017) and draw on different calculative devices (Henry 2017). Understanding the movement of finance and its outcomes requires opening the 'black box' of various processes of financial work (Ouma 2015) to investigate how multiple stakeholders come together to 'negotiate the shape, features, aims and means of capitalization work' (Muniesa et al. 2017: 55). A focus on valuation as a process contributes an understanding of how things are *made* valuable (Kornberger et al. 2015), both by financial entities creating investment products (Ducastel and Anseeuw 2017; Visser 2017; Langford et al. 2021a) and professional intermediaries who, 'beyond their apparent specific function (providing services of buying and selling, matching, advising and evaluating), are all engaged in activities of valuation that shape the market' (Bessy and Chauvin 2013: 84).

The value of land is an obvious but crucial driver of investment. Land is '[l]ike gold with yield' (Fairbairn 2014: 589), the yield being profits from agricultural production and the gold being the land itself. This framing captures two ways of valuing land: as a commodity with inherent value related to its qualities and as an asset whose value is related to the future income it returns. These divergent ways of valuing land are based on different understandings of its value. Commodities are valued in markets through a process of 'qualification' in which they are described according to a set of characteristics and ranked relative to each other (Beckert and Musselin 2013: 1). By contrast, assets are valued through a process of capitalization, or more narrowly defined, assetization: a 'form of valuation that propels a consideration of return on investment' (Muniesa et al. 2017: 11). An asset is not designed to be broken up into its component parts, but to generate sustainable and ongoing income. As Birch and Muniesa (2020: 2) observe, '[a]ssets can be bought and sold, yes. But the point is to get a durable economic rent from them, not to sell them in the market today'.

Birch and Muniesa (2020) consider the shift from commodification to assetization to be a key feature of techno-scientific capitalism, and associate this with a shift from the logic of market speculation to that of capital investment. Associated with this is a shift in 'critical analytical attention away from a focus on commodification and price speculation and towards concerns with the appropriation of value and extraction of rent through capital investment' (Langley et al. 2021: 510). However, as Braun (2020) cautions, the asset–commodity dichotomy is more fluid in practice and some goods – including land – are treated as commodities and assets by different people at different times. The pragmatic approach of Muniesa (2012) offers one way to explore land value assemblages by presupposing that land has no inherent value as either a commodity or an asset, but is made valuable through varied processes of valuation undertaken by various actors at different times. Exploring how a diverse range of actors assemble the value of land through contingent and contested valuation processes reveals how land values – which drive investment in land and underpin the financial viability of cattle properties – are generated in practice.

In Northern Australia, land has typically been valued using the Beast Area Value (BAV), a 'rule of thumb' (Vail 2014: 32) for commensuration of diverse landholdings based on a simplified set of characteristics. In this valuation process, a pastoral station's value is derived from the sum of the land value, the cattle value, and the value of any infrastructure developments made to it. The land is valued as a commodity in a process of *valuation-qua-marketization* (see Muniesa et al. 2017: 130). However, financial investment in pastoralism in the region is seeing properties increasingly valued using the Return on Investment (ROI), a measure commonly used by investors to estimate the value of an investment based on its expected future income streams in a process of *valuation-qua-capitalization* (Muniesa et al. 2017: 130).

These different valuation devices often produce divergent land prices based on different understandings of value. Examining how value is constructed by different actors using competing valuation devices reveals the 'disputability and multiplicity of value regimes' (Arjaliès in Kjellberg et al. 2013: 19), and how the increasing presence of financial sector actors is shifting the way that value is constructed in the Northern Australian pastoral industry. It allows us to move beyond a view of financialization as simply 'a vague notion of "the (increased) contemporary importance of finance"' (Christophers 2015: 184) to examine ways in which new financial actors in agriculture interact with local people and established calculative devices to produce assets in particular ways (see Goldman 2020). This serves to 'expand the cast of actors, human and nonhuman, that participate, or are made to participate in the drawing together of generally fragile assemblages' (Henry 2017: 102). It can offer a more nuanced understanding of how negative effects often associated with financialization – such as land price volatility – are generated in practice. This can allow for more targeted policies that differentiate between different types of financial investment to improve outcomes for the industry.

This research is part of a project exploring the financialization of land and agribusiness in Australia, for which over 100 semi-structured interviews were undertaken between 2016 and 2019. This article draws on a subset of 40 of these interviews focusing specifically on financial intermediaries to land and agribusiness in Northern Australia, including land valuation professionals, investors, farmers, rural lenders and government actors. Interviews ranged in duration from 40 minutes to over three hours, with an average duration of 1 hour 13 minutes. This article begins by describing the process for valuing land using BAV, revealing how value is negotiated by farmers and valuation professionals. I then discuss how the ROI is driving assetization processes in which pastoral stations are increasingly organized as assets, and how this appears to reduce the capacity for speculation on land as a commodity by treating it as an asset from which durable economic rent should be derived. I then show how ROI and BAV are being strategically combined in ways that incentivize development activities that do not necessarily improve station profitability. Through these studies I argue that pastoral land is being assetized and developed in ways that are more reflective of the valuation devices that are influential in the region than of the realities of station management.

Valuing land as a commodity using the Beast Area Value

Beef pastoral land in Northern Australia is typically low rainfall, remote land, mostly held on long-term leases administered by the Commonwealth government. The leased land provides the government with rental payments and can be bought and sold in land markets. Properties tend to be very large and sold at costs that are low on an area basis; even relatively small properties are typically several thousand square kilometres in area. This apparently low-cost land, coupled with investment reports emphasizing 'market fundamentals' such as growing middle-class populations and shrinking resource bases, have bolstered expectation of future land value rises and have fuelled financial investment. Over the past 20 years, with increasing transactions in Australian beef pastoral land (Rural Bank 2017), land prices have risen considerably and become substantially more volatile (Figure 1). This effect has been concentrated on the largest, corporately owned stations, although family enterprises have also experienced appreciation as a result. This has occurred without an equivalent increase in farm income. Indeed, the financial viability of this pastoral investment is underpinned by gains on land value rises, which historically have made up more than half of return on investment (MLA 2021).

Figure 1 Land value of Australian pastoral zone beef farms by ownership type 1990–2020, showing the increasingly high and volatile land prices of corporately owned properties in particular.

Source: Data from MLA (2021), expressed in $AU 2020–21.

Prior to 1970, pastoral properties in Northern Australia had relatively little market value, and governments historically struggled to encourage people to occupy and use the land (Hartwig 1965; Powell 2009 [1982]). Apart from a few major corporate holdings, properties were typically unfenced, with very little infrastructural development (Powell 2009 [1982]). Most properties were held on leasehold, and the land itself had very little capital value, due to the very large amount of land available and the difficulty in profiting from it. Scarcity, a key condition for assetization (Visser 2017) was not a key feature of the land market. Stations were typically sold on the basis of an estimate of the number of cattle that were living on them – it was the cattle, not the land, which had the most value (see Figure 2).

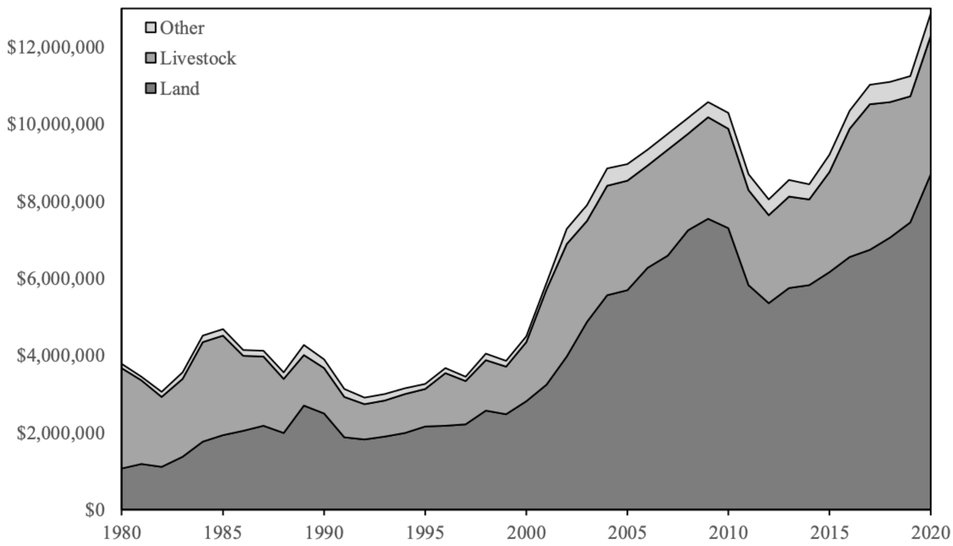

Figure 2 Capital value of beef farms in Australia's pastoral zones 1980–2020, showing a dramatic increase in the value of the land relative to that of livestock and other capitaAcknowledgment: Thanks to Giselinde Kuipers and to Frédéric Vandberghe for their helpful comments on a previous version of this article.

Source: Data from MLA 2021 ($AU 2020–21).

During these early years of the pastoral industry, BAV emerged as a basic industry 'rule of thumb' (Vail 2014) to enable the buying and selling of different pastoral properties. These properties were very large and contained a variety of different land types with differing suitability for grazing. A simple tool was required to facilitate the description of these diverse landholdings according to a common metric, a process that Espeland and Stevens (1998) describe as 'commensuration' (1998: 315). The metric settled upon was the 'best area' or 'carrying capacity' of the property. Rather than selling a property based on its area, pastoralists would make a transaction based on the number of cattle who could live on it sustainably. This enabled buyers and sellers in markets to quickly assess the approximate size of pastoral businesses which varied greatly in size and land types.

Beckert and Musselin (2013) describe how goods are organized in markets through qualification, 'a collective process in which products become seen as *possessing certain traits* and *occupying a specific position* in relation to other products in the product space' (2013: 1, emphasis added). This two-step process aligns with the process for valuing pastoral land using BAV, which involves first, describing the property according to its physical characteristics and deriving from these a single figure for the number of cattle the property can support; and second, ranking the property relative to other properties, which may vary by remoteness, infrastructure developments, seasonality and other relevant factors. This process is highly complex in practice, requiring specialist skill sets held primarily by professional land valuation specialists. It is worth exploring here how these professionals undertake this valuation process.

In valuing land using BAV, land valuers first seek to describe the land according to a limited number of its physical characteristics – a process that 'flattens' (Kornberger 2017) land's diverse 'affordances' (Li 2014: 589) into a subset of features deemed valuable. These features – such as area, rainfall, vegetation type, degradation and availability of permanent water sources – are used to estimate the number of cattle that can sustainably live on the property in the long term. Assessing these qualities is not a trivial matter. Properties cover vast areas and often contain land that varies substantially by soil type, vegetation, topography, and water availability, and in many parts of Northern Australia, there is limited availability of environmental mapping data. In addition, the features of land vary substantially with weather cycles and with intensity of cattle stocking, and so vary from season to season, year to year, and between decades. They are highly vulnerable to overgrazing and invasion of unwanted vegetation species, which can substantially erode the health of the land and cause permanent damage. In addition, improvements made by pastoralists (such as water developments or supplemental feeding) can be included and subtracted from valuations in different ways. As such, the number of cattle currently living on the property rarely aligns with the long-term sustainable average number of cattle that can live on it, and it is this long-term average that forms the basis of BAV.

As such, professional pastoral valuers need a skill set that is specialized to the cattle grazing industry and to their particular region of Northern Australia. They must combine an ability to assess environmental features of many types of pastoral land, an understanding of the behaviour of grazing cattle, and an ability to assess other important features of the land that affect cattle grazing patterns. This leads to highly specialized and spatialized valuation skill sets that are not transferable across regions. As one professional valuer described,

> when we value a property we have to base a lot of it on our own experience of what we know country [land] type in that certain region can do … I certainly wouldn't go outside of my borders and pretend I could value [elsewhere] … I understand how tricky it is to understand a region up here, and there's so many nuances of our particular region that you would not know if you just flew in for a week.

The professional valuer estimates the sustainable carrying capacity through a combination of environmental observation, review of business records and interviews with local informants. They fly over and/or drive around a property to observe its environmental features and the interaction of cattle with the land. These observations last several days, depending on the size of the property, but due to the vast areas of properties the observations that can be made in this time are relatively limited. As a result, the pastoralist owner or manager of a property features heavily as a key informant in the valuation process, to point out important features of the land. As one professional valuer put it:

> You always want to drive round it or be on the inspection with someone who knows the property pretty well, 'cos you obviously want them to point out [important features]. They might have been there for twenty years, so you want to pull in everything you can off them.

The pastoralist's role as informant is to indicate important features of the land to the professional valuer, as well as to provide information on the business management which helps valuers to interpret their observations. Some features are likely to increase valuation, such as natural water sources, while others will reduce it, such as the encroachment of an undesirable weed. These features can be difficult to notice and require long-term detailed observation of the property, which are often exclusively obtained by the pastoral station owner/manager, creating a key role for them in the valuation process. One pastoralist described that in their experience, professionally determined carrying capacities were not '"instructed", but "negotiated" … to a mutual agreement' (Armstrong and Armstrong 2017: 2). Indeed, one government commissioned valuation was overturned because the professional valuer had been 'insufficiently influenced by the estimates of the well-experienced owners' (Keough & Wirth v Department of Natural Resources and Mines 2004: 15), who had advised the professional valuer on the limitations of the property. Pastoralists thus feature as central informants in a valuation process – while simultaneously being directly affected by its outcome. This is reminiscent of a capitalization story described by Muniesa et al. (2017: 71), who noted that 'figures are neither blindly accepted nor completely disregarded, but are discussed, corrected and revised throughout the discussions between entrepreneurs and potential investors'. This occurs primarily between valuation professionals and pastoralists, but others are also involved at times. One rural agri-finance specialist described their role in property valuations in the following terms: '[W]e do property inspections, so we will drive around looking at a property … I take photos so that someone external to me can put a value on the property'. Valuation specialists emphasize their role in interpreting reports from various sources 'to make sure that the property is *correctly* described' (emphasis added) – that is, as objectively assessed as possible given the constraints on information.

Once the valuer has assigned the property a carrying capacity – effectively a descriptive measure of its size – the property is ranked relative to other properties for which sale prices are available. This 'requires decisions to be made about which properties are superior to others and vice versa. They effectively need to be "ranked" in order from best to worst' (Peacocke 2017: 2). As the influential professional valuer Frank Peacocke[1] put it, 'it is the valuer's skills, I guess, to look at that one and say, "It is definitely two-thirds better than that one, or 90% as good as that one"' (EPSC 2018a: 17). Assigning BAV in this way requires robust data on recent sales and detailed knowledge of the local market – as one professional valuer explained, each valuer is 'just *constantly* monitoring the market in [their] area of expertise'. This ranking requires accounting for 'qualitative factors' (Peacocke 2017: 2) such as location, development potential and market risks. Frank Peacocke described the difficulty in obtaining these skills, stating that 'it has taken me 10 years just to get my head around the relativities. That is how long it takes' (EPSC 2018a: 17).

These rankings are compared against recent sale data to estimate the value of a property. However, this task is not as simple as using market price directly, since price fluctuations in the region are often extreme and vary with weather and financial cycles. Rather, valuers attempt to differentiate between sale price and what they describe as the 'true value' *Brewarrana Pty Ltd v Commissioner of Highways (No. 1)* (1973: 197–80) of a property. They are tasked not with assessing what purchasers *are* paying, but with predicting what they refer to as a 'rational purchaser' *would* pay for any given parcel of land. Valuations are therefore not reflective of current land markets, but of what 'rational' buyers in a hypothetical future land market could be expected to pay. As Wells J described in *Brewarrana Pty Ltd v Commissioner of Highways (No. 1)* (1973: 197–180, emphasis added), 'the sale price of any given piece of land is not necessarily the price at which it *ought* to have been sold, or the same thing as its *true value*'. In a context where land sales substantially above market prices are

[1] Frank Peacocke is the director of valuation firm Herron Todd White in the Northern Territory, and the valuer chosen to undertake valuations for all Northern Territory properties for the government's 2015 assessments.

relatively common,[2] these sales must be excluded since they do not represent predictable behaviour of this hypothetical rational purchaser.

Professional valuers therefore do not use all past sales equally as evidence of market activity but assess the *quality* of the sale in deciding how much weight to give it in predicting future behaviour. One professional valuer highlighted the need to 'keep bringing it back to the hard evidence, culling out the bad evidence', and lamented sales that they believed to be excessively above market prices, noting that

> when [the valuer] analyses the sale, [they] need … to find out who bought it, why, and how much due diligence they did, and also who else was in the running for the property, and how far behind were they, and how much do they know. If you get one where the agent will say 'These folks really did their due diligence', then you say that's good evidence from a well-informed purchaser in this market, so that's *good* evidence (emphasis added).

Valuers assess whether buyers carried out their due diligence by comparing the price paid with an estimate of the value of the land as calculated using ROI – treating the land as an asset. This is a contemporary development which has altered the process for valuing land using BAV and suggests that they consider the 'true value' of the land to be that produced by valuing the land as an asset, and by extension, that the true form of the land is that of an asset. This reflects the market for professional land valuations, which are used by non-specialist investors to guide their purchasing decisions, by banks as an assessment of the value of pastoralists' assets in making decisions about how much finance to extend, and by governments as the basis of lease rates payable. These actors value the land not as a home or as something with inherent environmental, cultural or social value, but as an asset with a definable financial value.

This reveals that BAV valuations are assembled by a host of geographically situated human and non-human actors, from pastoralists and land valuation professionals to government lease policies and bank lending ratios. The resulting land market reflects the work of these diverse actors undertaking valuation processes, and the interactions between them. Although this historical device nominally treats land as a commodity, it is increasingly influenced by a view of land as an asset that should return a stream of future income which

[2] One response to the high and volatile property prices has arisen in the Northern Territory, which is moving away from a market-based system of valuation to determine lease payments, in a highly controversial move which will assign property values using not market rankings, but a general 'regional index'. The amendment was justified by the government on the grounds that "its benefits, such as its simplicity and lack of volatility, outweigh its imperfections" (EPSC 2018b: 19). Although it reduces the impact of market volatility on prices, it does not conceptually change the process of valuing land using the BAV.

affects the advice that valuation professionals offer in their reports. The next section explores the process for valuing land using the ROI.

Valuing land as an asset using the Return on Investment

ROI is calculated as the sum of returns from farm income and returns from capital gains, as shown below (adapted from Beattie 2021).

$$ROI = ROI_{income} + ROI_{capital\ gains}$$

where

$$ROI_{income} = \text{Total profit over life of investment / Property purchase price}$$

$$ROI_{capital\ gains} = \text{(Property sale price – Property purchase price) / Property purchase price}$$

The projected ROI can be difficult to estimate due to the large size of properties, their remoteness and a lack of information on farm performance, seasonal conditions and commodity prices, which make it difficult to assess future income. As valuer Tim Lane (2017, n. p.) notes, these features make it 'quite challenging to apply capitalization rate for investors and give them indicators that are utilized commonly in the corporate investment world'. This means that ROI from farm income and ROI from capital appreciation are calculated using existing data, making station records an increasingly important component of farm value, and driving corporatization processes in which family farm businesses increasingly need to mirror investment reporting standards (see Langford 2019 for an account of this process).

ROI from capital gains is based on the increasing land prices in the region (Figure 3b) which are higher and more volatile than those from farm income (Figure 3a). There are substantial differences between properties with corporate ownership and between the larger and smaller family farmers. While since the year 2000 all properties have appreciated at an average rate of 3.8–3.9% per annum, corporate properties have earned an average ROI from farm incomes of 3.3%, the largest family farmers of 2.6%, and the remaining family farmers of -0.3% (see Figures 3a and 3b). The smaller family farmers typically make a loss if their enterprises are assessed as an asset, which interviewees suggested to be a result of factors such as their operation of properties for non-financial reasons and management of properties in ways designed to reduce tax liabilities rather than increase profit. It also implies that these properties are overvalued relative to returns generated from them, suggesting that for these farmers, ROI does not capture the value of the property. In the Gulf country of Queensland, Martin (2019: 131) contrasts the family operator's 'commitment to the land' with 'an understanding of property as fungible, and essentially interchangeable with any other financial asset'. He quotes one long-term Gulf resident describing the station on which he grew up as 'the deepest root' (Martin 2019: 134) and emphasizes their connection to the land and the region. From this perspective, the 'true value' of a property lies in its materiality, and a diverse range of affordances not captured by ROI.

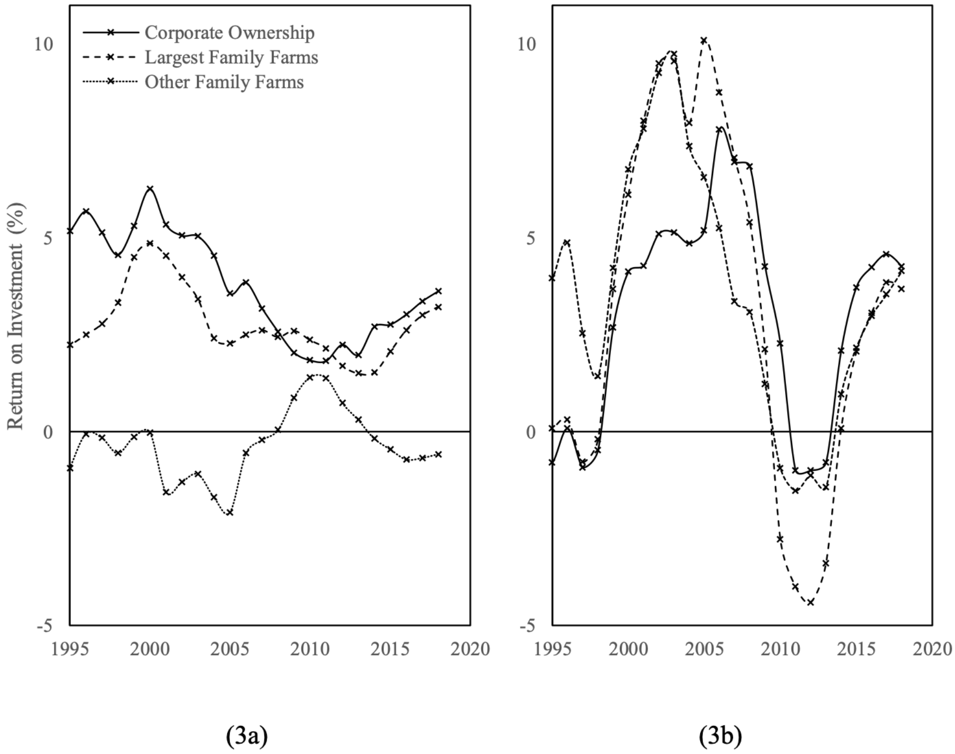

Figure 3 Rate of return from Australian pastoral zone beef farms (5-year simple moving average) from (a) farm income and (b) capital appreciation, showing low and stable returns from income and fluctuating returns from capital gains.

Source: Data from MLA (2021).

Despite this, the practice of assessing property value using ROI-based measures is becoming more widespread with the increasing influence of actors who view land as a financial asset. Pastoralists often need access to finance, and sources of both debt and equity finance increasingly requires stations to be organized in a way that makes ROI calculable. While pastoralists are often accustomed to viewing station value as derived from the characteristics of the land, livestock and development (as a commodity), investors and bankers view the property as a stream of future income (as an asset), and encourage farmers to develop reporting systems that enable ROI-based valuations. Although this seems obvious, many family-owned properties in remote Northern Australia either do not keep, or do not wish to disclose, records of their business income, and as a result, bankers in the region maintain very close relationships with their clients in order to assess their asset value and ability to service debt (see Langford et al. 2021b). In this context, bankers exert pressure on farmers to develop certain reporting systems in order to access finance – a process of valuation driven by a view of the land as an asset. One banker described the tension between these different views of station value – his own need to know the financial details of the property, and a pastoralist's assertion that the value of the property can be assessed by consideration of its physical features and cattle stocking rate:

> In the Northern Territory we sell a cattle station as a walk-in walk-out business, but if I'm selling it to you, I'm not going to show you my books. You name me another business that can be sold on a walk-in walk-out basis without the books. Without three- or five-years' financial records. What they say to you is, 'I've got twenty thousand head of cattle, this is my herd break-up, I've got so many cows; work out what you think it's worth. *You do the math*'. If, as an investor, you are looking to invest in these businesses, you're not going to invest in something like that. You want to know what the EBITDA[3] is. No different to me as a banker as with financing. I need to know what your earnings before interest and tax and depreciation are, so I can work out what you can service. But that is the traditional method of selling stations

An alternative approach to accessing finance is to seek an equity investor in the pastoral business, a popular but somewhat elusive alternative to bank finance. Pastoralists who reorganize their business reporting systems in order to attract investors are engaged in an act of valuation in the sense that they both demonstrate the value of the business by recording those features needed to calculate ROI, and create value for investors by making it possible to measure the business value, monitor it from afar and organize its place in a portfolio (for a case study exploring the experience of a cattle farmer undertaking a capitalization process, see Langford 2019, and for a discussion of these two understandings of valuation processes, see Vatin 2013). This shows how valuation devices influence the activities of pastoral station managers as they develop reporting systems that are compatible with ROI (for a related discussion see Ducastel and Anseeuw 2017). The needs of the investor that farmers respond to – such as the need for a system recording business management in a way that enables an investor to calculate investment returns – are devices which shape the assetization of the business.

This section has described ROI-based valuations which develop assessments of station value based on farm income. However, ROI also includes consideration of the future sale price of the property, in which

[3] Earnings Before Interest, Tax, Depreciation, and Amortization (EBITDA)

the BAV – as the valuation device used by professional land valuers – features, as the next section discusses.

Speculative development and the strategic combination of valuation devices

In choosing how to develop stations, the calculative device used to value stations *matters*. Developments undertaken targeting farm income-based measures must weigh up the cost of building and maintaining infrastructure against the increased income they expect to gain from it – developments must 'pay for themselves' over a certain lifespan through the increased income they generate. Conversely, developments targeting increased capital gains on an imminent sale do not need to justify themselves against increases in income if they can capture an increase in property value greater than the cost of development.

This creates space for a strategic combination of ROI and BAV to realize higher returns on investment. As Kornberger (2017) notes, valuation devices influence not only what we buy, on the consumption side, but also what is sold, on the production side, since businesses can change what they produce to better fit valuation devices. In this sense, there is a shift from competing in productive spheres to competing in valuation spheres, in which different actors may exert strategic agency to improve the way their product performs according to different valuation devices. In Northern Australia, producers develop pastoral stations through use of fencing and watering points to increase utilization of the station's vegetation, and by extension the number of cattle they can support. This approach increases the carrying capacity of the property, leading to a direct increase in the property price as measured by BAV. This increase in station value is often greater than the cost of development, as one corporate pastoral company described:

> One thing that we would look at if we were to buy a property is what sort of future potential does it hold in terms of value of that property. We would look at how much utilisation it currently has and how much scope there is to develop additional land there, and by that I mean by putting on more watering points, which then allows you to run more cattle on that property, and by putting those additional water points, when the properties get independently valued each year, those valuers look at the land on a carrying capacity basis, so how much in an average season can this property hold in terms of cattle numbers. So that means any development that we do is increasing the value of that property, and what we're finding is that we can develop the property at a cheaper rate per hectare than what that hectare can end up being worth, so we make that margin, if you like, on the development activities.

This productive investment in station development is directly targeting the BAV valuation device in order to realize higher ROI from capital gains. Unlike property development undertaken targeting farm incomes, which must weigh up the cost of building and maintaining infrastructure against the increased income they expect to gain from it, developments targeting BAV in anticipation of capital gains on an imminent sale do not need to justify themselves productively, but only against increases in property value as calculated using BAV. Thus investors may be able to earn substantial capital gains through property development that targets carrying capacity, even if the costs of maintaining additional cattle and infrastructure on marginal lands lead farm profits to remain the same or even decrease.[4] Development could paradoxically reduce farm incomes while increasing farm values. Because business records are not publicly disclosed, it is not possible to tell whether recent pastoral development investment is justified by an increase in returns, and there is the potential for this speculative approach to development to compromise the sustainability of the industry.

Similarly, it remains to be seen how professional valuers – who are responsible for verifying these increases in value – will respond to such development, given the contested nature of BAV as a measure of value. One professional valuer described such a case in which they had refused to value the property at the BAV-informed higher rate without being provided with business records (to enable an assessment of the value using ROI), saying that 'it's up to the person that developed it to prove that it works'. In this case, the valuer and the property developer expressed conflicting understandings of land value informed by differing moral reasoning: the developer located their morality in their development expenditure (for related discussions see Kish and Fairbairn 2018; Sippel 2018; Ouma 2020) and the valuer in their concern for the stability of the industry. In a context where volatile land prices have had severe negative impact on many pastoralists in the region due to some unsustainable bank financing practices[5] and the changing lease payments[6] they cause, some valuation specialists see a role for their advice in reducing overpayments for properties and therefore in moderating land markets. As one professional valuer stated:

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[4] Cattle health is a major driver of station profitability, as it is not the number of cattle itself that drives farm income, but the number of calves they produce (for breeding properties). Unsustainable stocking rates can therefore actually decrease the number of calves that are produced if food is not sufficient for cattle to reach conception weight.

[5] Including overextending debt due to both incompetence (Weller and Argent 2018) and intentional manipulation of land valuations (e.g. Ludlow 2018, Neales 2018).

[6] For example increases of up to 441% in the Northern Territory in 2009 (EPSC 2018a).

> as valuers, you want to make sure that fires are [contained]. In the end that makes our job easier, you go 'That's a well-informed purchaser. That's a good sale. *The market's not getting out of whack*' (emphasis added).

This sentiment positions the valuer as not merely reflecting the market, but regulating it, by preventing above-market sales from escalating into unsustainable land value increases. These negotiations highlight the ways that various actors exploit and contest valuation processes in pursuit of different outcomes.

Discussion: Assembling value

The valuation practices described here shape the way in which pastoral land is organized, used and traded in Northern Australia. BAV treats land as a commodity in a process of valuation-qua-marketization (see Muniesa et al. 2017: 130) in which the pastoral property is described and ranked according to its physical characteristics. The station's value is not totally disconnected from its earning power, as the feature by which it is defined – the carrying capacity – is a rough measure of its earning potential. However, it is an indirect and approximate indication of earning potential, where the station is valued as the sum of its parts (such as the land, buildings, cattle and fencing), rather than as a stream of future income. The increasing use of ROI, by contrast, represents a process of valuation-qua-capitalization in which the pastoral station is viewed as a stream of future revenue. ROI translates the diverse array of land's characteristics 'into something that makes sense in terms if future cash flows' (Muniesa et al. 2017: 21), a process that sees the nature and temporality of a business's value redefined according to the expectations of investors.

What are the implications of treating land as a commodity or asset in this way? First, treating land as a commodity increases its availability to speculation, and BAV is widely viewed as contributing to high and volatile land prices in the region as a result of the potential disconnect between the BAV price and the income of the property. Purchasing a property without station records requires buyers to have in-depth specialist knowledge of station management to interpret BAV land valuations and estimate the profitability of the investment. Professional land valuers provide some assistance to purchasers by supplementing their valuations with in-depth comments around the basis of the valuation and cautions for its use. Yet it remains that station prices can often diverge substantially from their long-term profitability as a result of financial and weather cycles, and this introduces volatility into land markets which can be challenging for producers in the region. Even pastoralists who are not interested in buying or selling properties are affected by shifting land prices through changes to their lease payments, the financing they are offered by banks, and cattle prices.

Contrarily, valuing land as an asset by standardizing value against the income it generates is viewed favourably by local government actors and industry professionals in the region as it is seen to reduce this speculative behaviour through a focus on business financial sustainability – as Muniesa et al (2017: 51) write, assetization is 'what you do in order to protect something from the vagaries of commodification'. Bankers and investors seeking equity partnerships drive processes in which pastoral properties are assetized to provide clear reporting on key features of interest to investors seeking to calculate ROI. This often involves increased data collection and improved management of station financial records. This is not a new process and is not driven exclusively by financial investors, but often by farmers as they seek to access finance (see Langford 2019). In addition, professional land valuers are increasingly producing land valuations which while nominally based on BAV calculations, draw in some part on ROI to inform their interpretation of the price data on which BAV valuations are based.

However, assets are also subject to speculation, and as Kornberger (2017) notes, it is possible to compete outside the sphere of production, in the sphere of valuation, by designing goods and assets in ways that target valuation devices rather than seeking to maximize profitability. This is occurring in Northern Australia where pastoral companies – typically those backed by large institutional investors with the capacity to expend substantial funds on trading and developing properties – are undertaking station development programmes designed to increase the station's 'best area', and therefore its value. This is profitable for investors, who make a capital gain on such developments regardless of whether they increase or decrease station profitability. For example, adding infrastructure such as fences and watering points to remote parts of a property would increase the number of cattle that could live on the property, and therefore its BAV valuation – regardless of whether the costs of maintaining these improvements and mustering the cattle from a remote area outweigh the increased income. This type of speculative development 'reflects the assessment of future earnings that accrue to the owner, rather than rising productivity' (Birch and Muniesa 2020: 7).

These divergent, overlapping and competing approaches to valuation are implicated in the financialization of the industry in unexpected ways. If financialization is considered to be increased profit-making from financial rather than productive channels (Krippner 2005), the financialization of the Northern Australian cattle industry could be located in the speculative trading of properties for capital gains rather than their long-term productive operation. This process is facilitated and resisted by actors using BAV and ROI valuation processes in different ways. Professional valuers increasingly use ROI to connect station value to its productive uses to reduce the potential for speculation; yet pastoral companies simultaneously combine ROI and BAV in an attempt to generate capital gains through speculative development. This suggests that although the industry appears to suffer from financialization as evident in its high and volatile land prices, it is not simply the entrance of financial investors who drive this process, but their engagement with local actors and calculative devices across unique and varied geographies.

Conclusion

The financialization of Northern Australian pastoral land has been associated with high and volatile land prices in the region, which have been attributed to speculative behaviour by non-specialist investors. However, closer attention to the processes of valuation through which these land prices are made reveals that a range of local and non-local, human and non-human actors contribute to the assemblage of these values through diverse, sometimes competing and sometimes complementary, work. Valuation professionals use BAV to construct valuations of land based on their physical characteristics, yet supplement these assessments with detailed comments warning that the 'true value' of the land is better estimated using ROI. Pastoralists develop reporting systems to enable bankers, investors and professional valuers to measure their station value using ROI, while simultaneously asserting non-financial connections to the land. Investors buy properties based on ROI-based calculations, and then seek to sell them using BAV-based valuations, strategically using these competing valuation processes selectively to profit from speculative development activities. This reveals that valuation devices play a key role in the financialization of Northern Australian land, but not in a clearly reducible way: rather, land values are assembled by the interactions of a diverse range of actors undertaking unique valuation processes in pursuit of individual goals.

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Symposium contribution

(University) Management after Valuation Studies: Carving a practice between the offended native, the anxious scholar, and the useless practitioner

José Ossandón

Abstract
This text introduces this issues' symposium: "A correspondence on (University) Management after Valuation Studies". The text has two parts. The first introduces the dilemma, the question of whether valuation studies could, besides studying valuation in practice, inform better practices of valuation, and the method of the correspondence, to use situations in which researchers of valuation are also practitioners, namely, the management of quality in higher education, as the starting point to think the correspondence's problem. In the second part, the author reflects on his own experience in a situation of valuation at work, and proposes three different personae for the student of valuation: the offended native, the anxious scholar, and the useless practitioner.

Keywords: valuation; rankings; higher education; management; judgment

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Valuation studies is a productive academic movement developed after scholars in areas such as sociology (e.g. Antal et al. 2015, Beckert and Aspers 2011, Beckert and Musselin 2013); organization theory and strategy (e.g. Kornberger 2017, Kornberger et al. 2015); and science and technology studies (e.g. Dussauge et al. 2015) realized that there was plenty to learn from valuation situations and practices. This correspondence reflects upon whether or not this exchange may be reciprocal. Can practitioners – those involved in the everyday work of running organizations that are affected by new and powerful forms of valuation – *learn from* valuation studies? To think through this problem, participants in this correspondence discuss whether recent studies of valuation can help those involved in the practice of managing a type of organization in which we are also practitioners: does the knowledge produced in valuation studies have something to say to those involved in managing universities?

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What recent studies of valuation have done is to make valuing, and valuation tools and practices, objects of social scientific inquiry.[1] Most contributions in the area have been either descriptive and critical – research that on the basis of ethnographic work inspects the inner logic or vernaculars of 'valuation devices' (Muniesa and Doganova 2020) or explicative – research that aims at uncovering mechanisms – for instance, reactivity (Espeland and Sauder 2007) – that explain how valuation devices affect the practices of those who interact with them. Studies of valuation have been written and produced from the perspective of the scholar who inspects new objects of inquiry. The point of this conversation is to explore the possible gains of shifting the angle and using valuation studies to deal with the problems of valuation in practice.

Of course, the point is not to confuse the positions of the scholar and the practitioner. The researcher's perspective is naturally more abstract and detached, and it is up to actual practitioners to figure out whether they can productively use whatever is produced in recent academic research.[2] There is also no point in denying the obvious,

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[1] Of course, there is a much larger history of academic interest in valuation and valuing in other specialized academic areas, for instance, financial accounting (Mennicken and Sjögren 2015) and pedagogy. The particularity of valuation studies is making these processes problems of social science inquiry more broadly.

[2] As James March put it: "If a manager asks an academic consultant what to do and that consultant answers, then the consultant should be fired. No academic has the experience to know the context of a managerial problem well enough to give specific advice about a specific situation" (in Coutu [2006]).

most academic developments are only academically relevant. They are important as they create new objects and methods of research but not –necessarily – new ways of practicing. However, it is worth asking whether – after ten or more years and besides equipping us, academic researchers, with productive new concepts and methods to do our work – studies of valuation can help in some way to make the situation of contemporary organizations and practitioners better. Does the knowledge produced in valuation studies have something to say to those involved in the management of organizations?

How to speak to practitioners *after* valuation studies? Studies of valuation impose difficult constraints! If studies of valuation have shown something, it is that researchers should respect the craft and art of valuing. Issues regarding valuing cannot be solved in general theoretical terms. To speak about the practice of management after valuation studies, accordingly, we had to devise a trick. The inspiration for the format comes from a debate Christine Musselin and Catherine Paradeise (2005) published in *Sociologies du Travail*. This special section, likewise, does not collect papers, it hosts a dialogue. We call it a "correspondence", like in an epistolary exchange. A difference, though, is that participants in this section were not invited to present and contrast their theories about a common issue. It is a different type of conversation. With the inspiration of similar exercises in science and technology studies, we started from the specific experience of the contributors in an area in which we are all *practitioners*.[3] Like a self-therapeutic experiment, rather than beginning by giving advice to others of how they could use insights coming from studies of valuation, we ask can we use what the field has taught us for ourselves?

It is in universities where we conduct valuations, we are valued, and we manage valuation practices. To think about the possible impact of studies of valuation in management, the contributions in this correspondence discuss whether recent studies of valuation can help, not only to better explain the current situation that characterizes the valuation ecology of universities, but also to provide relevant insights to those involved in the practice of managing universities.

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[3] See for instance the pieces included in the special issue "Unpacking 'Intervention' in Science and Technology Studies" Zuiderent-Jerak and Bruun Jensen (2007) edited in *Science as Culture*; and, even closer, the thematic collection "Implicated in the Indicator Game? An Experimental Debate" Fochler and de Rijcke edited in *Engaging Science, Technology, and Society* (e.g. Fochler and de Rijcke 2017). In terms of the format, another source of inspiration is the journal *Sociologica*, which has made its speciality the art of developing productive debates. See, among many examples, the symposium on academic publications that in fact also features contributions by Espeland (2019), Kreiner (2019), and Musselin (2019). For another and related example use of provocation pieces to trigger an academic-professional debate see Woolgar et al (2009).

Four contributions make this correspondence. The first is this introduction including the short note that follows, in which I use my experience with a very mundane task of research organization, the elaboration of a new publication list in the department where I work, as a provocation to initiate a debate on valuation studies and valuation in practice. In her response, Christine Musselin uses concepts from recent studies to inspect her own experience assessing researchers. In the third text, Kristian Kreiner uses the publication strategy I discuss, which is also about the department where Kreiner is an emeritus professor, to critically reflect on the expectations and functions of rankings in the management of quality in research institutions. The fourth and final text is a conversation with Wendy Espeland and Michael Sauder, where they discuss and reflect the possible uses of their very influential work on the sociology of rankings in managing universities.

The anxious scholar, the useless practitioner, and the offended native

What follows is a note sharing my reflections after an experience with a mundane situation of quality management at work. This note, it should be said, should not be read as an ethnographic inquiry or a fully developed case study. This would require that I both knew much more than I know about the particularities of the Danish institutional framework and its history, and that I had developed a method of research for the occasion. I share this note, nevertheless, because it has a different purpose. It is to present the thoughts which the situation I describe triggered about the roles or personae valuation scholars might play in practice, which, in turn, worked as a provocation to initiate the dialogue in this symposium.

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As is normally the case with this type of situation, this story began when I raised my hand at the wrong meeting.

The meeting was to discuss a new publication strategy for the department where I work. The instruction that we needed a new strategy was a requirement of the boss of our boss, the dean of research. The instruction was that each department should deliver an updated publication strategy. The strategy should include: the department's view on publication quality and the outlets to which they expect to give priority; the department's publication patterns over the past five years; the goals for publications for the next five years; and a plan for activities to follow up the implementation of the strategy. During the meeting it was decided that a task force would be formed and that the *force* would be in charge of collecting the views posed in plenary and preparing a document to be submitted to the dean. Five researchers, three associate professors (including me), and two full professors volunteered. The head of department also joined and formally led the task force.

Here some contextual information might help. Copenhagen Business School (CBS) is a large school with departments with very different styles of research. The term used locally is of 'business university' in order to stress that the institution does not only host research and education in traditional business areas (e.g. accounting, marketing, finance), but also in social sciences and humanities (such as business history and philosophy, economic sociology, or critical management studies). Deans of research have dealt with this multiplicity in different ways. Some, in the past, tried to engage with the different styles of reasoning and attempted to understand how different departments do research. Others assumed that it was not up to them to assess the different areas and gave departments more autonomy. The current dean seems to take a third stance. The following quotation from an interview he gave to the university's online news outlet express this positional neatly:

> The h-index isn't an important indicator to me […] As a dean, I'm more interested in a candidate's best work. In economics, for instance, there are only five top journals, and if you manage to get a scientific paper in one of those, it indicates that the research is of truly high quality […] In that sense, we do count the number of articles, but only the really good ones. And we certainly also look at impact when we consider hiring a researcher. Having impact outside academia is clearly important for a business school.[4]

High quality seems to mean to this dean research published in highly ranked journals. The dean likes competitive goals and expects researchers (and departments) to set high targets for themselves. But it is for each department to define their own highly ranked journals. Locally, at least for the work developing this strategy, this was translated into a rule of thumb (I don't know if it is actually what the dean thinks, but it is how he seems to be interpreted at least): senior management will recognize as high quality, publications that appear in outlets that have a high position (at least in tier 3, but preferably in tiers 4 or 4*) in the so-called "ABS List".

Of course, and as in many other countries (e.g. Musselin 2018), this state of affairs does not only respond to the different deans' various styles of reasoning. This responds also to changes in the institutional environment; particularly how the governance of Danish universities is increasingly "performance-based". Publication targets like the list discussed here respond to the development contract between Danish universities and the Ministry of Higher Education and

[4] https://cbswire.dk/dean-of-research-unread-research-is-not-a-waste/ (last accessed December 9, 2021).

Science. An important instrument in this context is the "Danish Bibliometric Research Indicator". As an official guideline explains:

> The Bibliometric Research Indicator (BFI) is an element of the performance-based model for distribution of new block grants for research to universities. The BFI is used to allocate funding based on the production of research publications that are peer-reviewed and published in a channel included on the BFI lists. It is based on the universities' registration of publications in the Pure current research information system (CRIS). Publications are counted once a year and, subsequently, awarded points in the BFI system[5]

At CBS, the BFI list coexists with the "ABS List", the performance instrument produced and maintained by the Chartered Association of Business in the UK. Colleagues that have more experience in higher instances of CBS's decision making say that the fact that, in CBS the ABS list is actually more powerful than the Danish official BFI list, responds at least partially to pressure from sectors of the local academic population that consider this list more relevant.

The discussion in the task force was not simple, as it tended to involve many layers. One discussion was about the number of items to include in the list. The head of department suggested that, unlike a previous attempt to construct a publication guide in our department, we should avoid making a too large list of outlets. (There was a previous list which had 50 journals and did not consider metrics or rankings, and included those publications which researchers in the department had found relevant in the past). In the end, the task force assumed that the main task was to select a list of 15 journals and that these journals should be highly ranked, either on the ABS list or in other relevant rankings. The task force also agreed that the list should include two types of publications. Some 'generalist' journals that are relevant to most in the Department of Organization (the list ended up including outlets like *Organization Studies*, *Organization and Organization Science*) while others had to be more specific, journals relevant to some of the main areas of research currently conducted in the department (for instance, political economy or public governance). In order to collect information on those journals that people at the

[5] https://ufm.dk/forskning-og-innovation/statistik-og-analyser/den-bibliometriske-forskningsindikator/BFIs-regler/guidelines_for_registering_research_for_the_danish_bibliometric_research_indicator.pdf (last accessed November 22, 2021).

department considered important, the task force prepared and distributed an internal informal survey.[6]

Another discussion was about the type of outlets, particularly, how to accommodate books. In the end, it was agreed to state as a principle that books – and not only journal articles – are to be seen as relevant in the department strategy. The final document stated:

> [W]e aim to publish books with renowned international publishing houses in addition to publishing in leading international journals [and] [w]e emphasize two ambitions: – Books and edited volumes with distinguished publishing houses will comprise a notable share of the department's publications. – We aim that our rate of publication within the IOA15-list will accelerate from the 2018 baseline. [7]

Yet a different layer regarded the potential uses of the strategy. Will this document only be used in the interaction between the dean and the head of department? Will these set collective assessment criteria – those expected of the department as a whole – be used to assess individuals? Will the strategy affect salaries, bonuses, and hiring decisions? In the end, the task force decided to add some guidance on how the list is expected to be used. For example, the document says: "The list is not meant to exclude, but to guide and inspire faculty, as well as inform stakeholders interested in the composite research profile of the department". Finally, a great deal of time was used in discussing how to carefully phrase the document, for instance, how to make measurable goals seem both ambitious and practically realistic.

While I participated in this process, I experienced ambivalent sensations. The situation provoked reactions in the different personae that I normally enact but that normally I try to keep separate. I call them the native, the scholar, and the practitioner.

The first reaction was that of an *offended native*. This reaction was not so different from other professionals who feel that external valuation mechanisms are ignorant in relation to the values of what they really do. It is a bit like the musicians Howard Becker (1951) studied many years ago who were offended by those who assessed their work without understanding the details of their craft. In my case, I felt that the ABS list did not represent quality: lists like this are instruments made for those who cannot understand what good

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[6] The final list included: *Academy of Management Journal*, *Academy of Management Review*, *Accounting, Organizations and Society*, *Human Relations*, *Journal of Management Studies*, *New Political Economy*, *Organization*, *Organization Science*, *Organization Studies*, *Public Administration: An International Quarterly*, *Public Management Review*, *Research Policy*, *Review of International Political Economy*, *Socio-Economic Review*, and *Sociological Review*.

[7] This and the following quotations come from the official document, "IOA Publication Strategy", available in the local intranet: https://cbsshare.cbs.dk/teams/afdelinger/ioa/Politikker/Forms/AllItems.aspx (last accessed November 23, 2021).

research is, for instance professional managers that might need a number to assess their work or to help librarians to select journal subscriptions,[8] and it does not make sense as an instrument to use among academics. It was frustrating to see that the university where I work is spending a great deal of energy and time thinking about something that is at the core of what we do – to produce better quality research – in the wrong way. The exercise had nothing to do with thinking how we can better organize ourselves – as organization and department – so we do research that is actually better. The exercise assumed that the production of quality is a black box and that the energy should be oriented to set the right targets and incentives. The exercise, I felt, would in no way produce a department that is better equipped to produce more interesting or original research. And, at the same time it might produce the sensation, to the deanery for instance, that we are actually confronting the key problem, but without really doing much about it.

The second sensation was of an *anxious valuation scholar.* During the whole process I felt, largely thanks to the previous work of the contributors to this correspondence and by others, that I had the tools to understand the process in which I took part. I knew that a key issue today is that universities – like other professional organizations – are increasingly pushed to compete among themselves. Universities and the different actors that inhabit them (deans, departments, faculties, students) are managed through competition (Musselin 2018). Of course, competitive struggles have existed for longer, but what is relatively new is university governance that uses competition as an instrument of management, and that – especially in the European university system – competition is not about prices or attracting customers, it is about quality (Musellin 2018). We are in an economy of quality, and academic quality – as in many other areas, for example, cuisine, architecture, or art – is often contested and difficult to assess. The pressure for competition has become a fertile soil for the proliferation of "judgment devices" (Karpik 2010), tools like rankings, lists, internet forums, etc., that help the different actors involved in the university field (funders, managers, prospective students, researchers) to assess and manage academic quality. These devices, in turn, have greatly transformed the whole field. Today, increasingly, managers at different levels (deans, heads of departments, those in charge of admission) are assessed in terms of their institution's relative position on different lists. Deans are not simply researchers that double as administrators (Espeland and Sauder 2016). Deans are increasingly professional managers that govern by producing internal competition,

[8] For instance, as explained in the San Francisco Declaration on Research Assessment (DORA), "The Journal Impact Factor, as calculated by Thomson Reuters*, was originally created as a tool to help librarians identify journals to purchase, not as a measure of the scientific quality of research in an article" https://sfdora.org/read/

and accordingly orienting incentives – like bonuses and promotions – directly to goals such as improving the institution's relative position in rankings (Musselin 2018). In this context, universities work more and more on competitive strategies and on producing statistics to assess their success.

This sensation was not emotionally neutral. It was, maybe because at the same time I was reading *Engines of Anxiety* (Espeland and Sauder 2016), anxious. What recent research shows is not only a transformed landscape, but also a scary picture. Therefore, while I was doing all this, I kept thinking what if we were not going through one strategy exercise among many without practical consequences? We do that all the time anyway, but what if this time, we were about to finally turn into the dystopian world our colleagues in the UK often describe? What if this strategy changes how the department is assessed in the future? Could this affect the current perception that we work in a department that is internationally recognized as good and original, and change it into a department that is seen as failed because it cannot publish in the journals set as targets? Shouldn't we listen to the message that when rankings become targets they turn into dangerous devices? Are we not only setting goals that are out of our hands (that papers are or not published depends on many external factors) but also – as most of us will try to publish in a more focused list of places – actually reducing the chance of the strategy's success? Can we trust our top managers to keep on having a reflexive and more or less cynical attitude in relation to publication metrics in the future?

The last sensation was that of a *useless practitioner*. In the end, I became very disappointed with my participation in the whole affair. I spent a great deal of energy trying to put all these issues on the table, but, somehow, nothing I said was very controversial. Whatever I said could not really change how to think about the situation. This is not, I cannot stress this enough, to blame my colleagues in the task force. I know they acted pragmatically and carefully. It is to blame me. I realized that valuation studies provided me with good concepts to describe a situation like the one I encountered, but that it did not necessarily help me to produce tools that could manage the problem differently. I became the complaining anxious valuation scholar in the room. I felt that I had much to say and many concepts to describe what was going on, but that these did not translate into insights of how to act better. In the end, the only thing I did was to help writing warning sentences – (for instance, the strategy stated:

> For us, even though they are important, leading journals cannot always be reduced to a matter of ranking as innovative contributions are often also published in new journals or sector specific journals that encourage new avenues of thinking and exploring.)

But the overall sensation is that I didn't really provide any insight on how to manage this situation in a way that, instead of adding well intended sentences that would be like footnotes which, while cleaning my conscience, would simply be forgotten as the list is used, could help in thinking about a policy that could avoid journal lists and performance based tools as *the* instrument of our department research strategy.

It is primarily this troubled sensation of uselessness that motivated me to initiate this correspondence. Can the concepts and findings of valuation studies become useful in organizing and managing academic research quality better? To think through this difficult problem, I decided to turn to those with much more knowledge and experience. Not only those who know a lot about valuation from a scholarly perspective, but also those with much more practical experience in the organization and management of universities.

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Symposium contribution

Evaluation and Merit-Based Increase in Academia:A Case Study in the First Person

Christine Musselin

Abstract
This article provides a reflexive account of the process of defining and implementing a mechanism to evaluate a group of academics in a French higher education institution. The situation is a rather unusual case for France, as the assessed academics are not civil servants but are employed by their university and this evaluation leads to merit-based salary increases. To improve and implement this strategy was one of the author's tasks, when she was vice-president for research at the institution in this case. The article looks at this experience retrospectively, emphasizing three issues of particular relevance in the context of discussions about valuation studies and management proposed in this symposium: (1) the decision to distinguish between different types of profiles and thus categorize, or to apply the same criteria to all; (2) the concrete forms of commensuration to be developed in order to be able to evaluate and rank individuals from different disciplines; (3) the quantification of qualitative appreciation, i.e. their transformation into merit-based salary increases.

Keywords: evaluation, commensuration, quantification, merit-based processes, academics

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Introduction

In this article, I build on my own experience (between 2013 and 2018) as vice-president for research at the institution where I work, Sciences Po. It is a reflexive analysis of an experience of 'valuation in practice'.

In France, the position of vice-president is held by academics who generally have previously been a research group leader, or department chair for a number of deans, but are not trained in leadership or management; they generally go back and work in their previous post after their mandate as administrator ends. This applies to me. The difference is that my academic training was in the sociology of organizations and my main field of study is higher education institutions and academic labour markets.

In particular, I have led a study on academic recruitment, where we inspected two disciplines (history and mathematic) and three countries (France, Germany, United States), and paid attention to the construction of judgement in hiring committees, as well as to the setting of the price (i.e. the mix of salary, starting funds and personal benefits) of the recruited academic (Musselin 2009 [2005]). In this study, I also collected information about the acquisition of tenure, the promotion processes to associate and full professorship, as well as on the yearly evaluation process and merit-based salary increases happening in US institutions where I studied private not-for profit universities. I had also led a study on access to professorships for female *maîtres de conférences* in France and a collaborative project funded by the ANR (French national research council) on the trajectories of French academics in physics, history and management sciences who had a first permanent position in the mid-1970s, 1980s, 1990s and 2000s, in order to identify what had changed in academic trajectories in terms of access and development (Musselin et al. 2015). Not only have I had personal experience as a member of hiring committees and diverse evaluation bodies, but I am also a researcher who has tried to understand valuation practices in different academic labour markets. In this article, I have tried to use the knowledge and concepts from my field of research to reflect on a situation in which I worked as a practitioner. Besides my own work, I rely in this on studies of valuation on commensuration and rankings, in particular by Espeland and Sauder (2007, 2016; see also the interview in this issue, Ossandón et al. 2021) and on the work on academic evaluations by Lamont (2009). The evaluation committee I had to manage was closer to the evaluation panels assessing research projects that Lamont studied than to the hiring committees in my own research as it is multidisciplinary and has to deal with different scientific registers.

The situation: assessing academics

Of the many valuation situations I encountered as vice-president of Sciences-Po, the most challenging was the evaluation of the academics directly employed by my institution.

Along with the civil service positions of academics employed either by the CNRS (National Center for Scientific Research) or by the Ministry for Higher Education and Research (the university professors), which can traditionally be found in French universities, the institution where I work employs about 70 academics hired with long-term private contracts. Academics in this position have their own career development and promotion schemes, even if, in order to maintain as much proximity as possible in the treatment of all these different populations, we try to keep the latter close to the regulations applied to civil servants.

In 2008, Sciences Po decided to organize recurrent evaluation for this group of academics[1] and to base the allocation of merit-based salary increases on the results of this evaluation, which deals with four different domains: scientific production, teaching, institutional and discipline-based involvement, and impact. It took place every two years (now it is every three), and each academic has to write a report on his/her activity during the relevant years. The result of the evaluation is transformed into grades for each of the evaluated domains and different coefficients are applied to these grades (more for research than for teaching, more for teaching than for institutional and discipline-based involvement, and more for institutional and discipline-based involvement than for impact). The final grade is based on a ranking on which the allocation of merit-based salary increases (from 0 to 10 per cent max) will be decided, coming on top of the annual basic salary increase allocated to every academic and non-academic employee who is not a public servant. The amount dedicated to merit-based salary increases was set before the process began and could not be increased.

When I took over the position of vice-president, two evaluation processes of locally contracted academics had already been running under my predecessor's aegis and I had to organize a third one immediately after my entry. I remember I looked at the procedures already in place and identified potential problems but did not have time to negotiate any transformation at that point. The complicated election of a new president after the sudden death of his predecessor had already delayed the setting of the evaluation committee for six months and it was not possible to delay it any longer.

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[1] Civil service academics have their own evaluation processes. They are run at the national level for researchers of the CNRS and partly by a national body for university professors.

Nevertheless, organizing this evaluation with the existing rules was a fruitful experience as it gave me the opportunity to observe some of the structural weaknesses of the process. Three in particular struck me. The first two were related to the composition of the committee: formal aspects do matter. First, the presence of directors of the different labs (groups of researchers, equivalent to departments elsewhere) on the committee, which encouraged them to defend their own staff and try to persuade everyone that they only had exceptional scholars. This of course is linked to the competition among them for internal resources and the opportunity the committee gave them to campaign in favour of their own lab. But is also related to the fact they knew that any lack of support for one of their colleagues would immediately be known and diffused: they therefore preferred entertaining social peace and being nice to everyone. The second weakness came from the very low number of external reviewers and the room it left for internal games. The third was of a different nature. I was concerned by the poverty of many of the reviews prepared by members of the committee and by the lack of consensus on what should be taken into account for each of the four domains. Part of it came from the fact that the committee was rather ad-hoc and made up of individuals coming from different disciplines and not used to making joint decisions – which complicates the development of routines – and had to learn to work together. But I attributed it also to another rather classical issue in quality assessment (Musselin and Paradeise 2005 [2002]; Beckert and Musselin 2013): uncertainty is not only about evaluating the level of quality itself but also about identifying and agreeing upon the dimensions that define the quality of an activity and which have to be taken into account in the evaluation process.

This convinced me that the evaluation process should evolve: in terms of the composition of the committee and in setting rules about conflicts of interest and how to deal with them. I built on what I had learnt from my research on hiring committees and on my participation in other evaluation bodies to change the composition and to suggest rules of conduct; but this is not the topic of this paper. I will therefore rather concentrate on the aspects that are more directly connected to valuation practices and focus on categories, commensuration, evaluation and valuation, and quantification.

Categorizing

Two issues arose in terms of categorization. The first is linked to the fact that this group of academics was not any longer homogeneous. These 'home-made' academics were created in the 1950s and built on the model of the CNRS researcher: they could of course teach but did not do much of that until the 2000s, and then always on a voluntary basis, as they only had research duties. But in 2009, it was decided that the newly recruited academics would have both teaching and research duties and would be called professors.[2] Those who had been recruited as researchers were offered the opportunity to 'converge' (an exact colloquial translation of the term we used) and to join the new status of professor with a rather substantial increase in their salary, but also with regular teaching duties. The conversion was nevertheless not automatic and a specific procedure was deployed in order to examine the applications: some of them had been refused either because the applicant had too little teaching experience or because his or her research records were not considered as sufficiently satisfactory. I must add that the first three evaluation rounds, including the one I led when I just arrived, only concerned the 'researcher group' because the procedure for organizing the evaluation of the professors was still to be written. I therefore engaged in a reform process and set up a working group of academics of different status (including some CNRS researchers and university professors) and from different disciplines in order to extend the evaluation to the professors, both those recently recruited and researchers who had become professors.

The first decision to make in terms of categorizing, was thus to deal with the recognition (or not) of a distinction between professors and researchers. Should we have only one evaluation scheme and one merit-based allocation framework for all? This was important because it was a way of acknowledging reality but also a way to bring together and therefore bring closer the two groups which might have been considered as very different. It was clear that not distinguishing between the two groups was a way of sending a signal to the researcher group that they should aim for the new status, and that otherwise they would always be exposed to receiving an 'unsatisfactory' grade regarding teaching, thus getting less chance to be at the top of the pile for the merit-based increases. But, as mentioned above, some of the applications to shift status were refused and it could be expected that some would never be accepted: there was a kind of contradiction in both inciting to 'converge' while restricting access to the new status. Another point was that a number of the researchers were giving some classes even if they were not obliged to, and sometimes as much as (or more than) those with teaching duties, and nobody wanted to discourage them from doing so.

Thus, categorizing is also compromising between different logics and constraints. This led the working group to opt for maintaining a distinction between two categories that do not exactly follow the researcher/professor divide. The first category regrouped researchers as those having given fewer than two classes per year in the last three years – the so-called pure researchers – and the second included all

[2] They could be assistant, associate or full professors, as a tenure track system was introduced at the same time for this category of academics.

professors and researchers having taught more than two classes per year over the last three years. By recognizing that some of the researchers are also teachers, although they do not teach as much as professors, or do teach as much but do not want to become professors,[3] the institution recognized their involvement in teaching and encouraged them to continue it – while there are very high teaching needs – by including this activity in their evaluation and by considering them as 'equivalent' to professors.

The second decision in terms of categorization concerned the identification of the domains to be evaluated. We wanted to make clear what is expected of the reviewers as well as for those under review. This formalization is a trend that can be observed in many evaluation bodies nowadays: they depart from more impressionist views and develop templates that applicants on the one hand and reviewers on the other have to fulfil. Efforts are thus led to identifying what is expected and what is not. Those expectations of course reflect what is important, what is deemed worthy by the evaluation organizers.

As mentioned above, the first two evaluation committees and the documents regulating them suggested that four types of activities should be assessed, i.e. are expected to be achieved: research production, teaching, institutional and discipline-based involvement, and impact. There has been no discussion within the group about changing the four domains, but effort has been made to better define which activities belong to which, i.e. which elements will be assessed or what are the components of quality for each domain. Reciprocally, of course, this led to ignoring some other elements or even to deliberately excluding them: for instance, nobody claimed that book reviews should be included in the publication records, or that being a member of a professional association was a relevant indicator of involvement in a discipline. This phase, however, was not only about selecting indicators and leaving others behind; it also meant attributing activities to domains. For instance, it was decided that being an editor of a journal relates to the third domain rather than to the first one, while obtaining grants belongs to the first rather than to the third. This resulted from discussions in the working group. Then, assessing each of the elements that constitute quality and integrating them into a synthetic evaluation is another issue that can only happen in action, or in interaction within the committee.

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[3] This might seem curious as what they get in terms of revenue for their teaching was clearly less interesting than what they could get in salary increase by becoming professors, but with the new status they became obliged to respect the teaching duties every year and had less freedom in terms of choosing what to teach, as professors have at least one class at the bachelor level and one in the regional campus. Their freedom to organize seems to them more valuable than the increase in revenue they could achieve

It should be said that all this work of formal definition, of what will be taken into account and evaluated, is important for both the reviewers and for those will be evaluated. The latter know what is evaluated and can develop their activity report accordingly, while reviewers are aware of what they should look for when reviewing. The choice of items is not technical but axiological and practitioners should be aware of the implicit values embedded in what seems to be a neutral instrument. This objectification is always biased, in the sense that it implicitly favours some profiles over others. In the activity report's template, for instance, we ask for a description of research projects overseen in the last three years as well as publications over the same period. This kind of demand is not favourable to those who work on long-term fieldwork, or to those who prioritize books over papers. Applying for grants can also be detrimental to those who do not need a huge amount of resource for their research. Illness or pregnancy is also difficult to take into account, because such templates tend to be biased toward linear productivity.

Categorization in the four domains led to the construction of evaluation frameworks fixing the weight of each dimension in the final assessment. The constitution of two categories of evaluated scholars already discussed led to the construction of two evaluation frameworks. Researchers with none or few teaching activities are evaluated only for research, institutional and discipline-based involvement, and impact, while professors and teaching researchers are evaluated for the same activities plus teaching. The next step was to then set the parameters to be applied to each domain. The question behind this was of course what priority should be given to some activities over others. Even if the four dimensions for the new status and the three for the 'pure researchers' are all things that are expected to be achieved by each and every one, none is worth the same weight in the evaluation.

I expected that the problem of how to weight the different dimensions would provoke much discussion and some negotiation between different representations of the desired profiles – i.e. what each member of the working group considers as an 'ideal' repartition of the expected activities. But this was not the case. Actually, nobody claimed that research was not the more important task or that people should not first be rewarded for their academic production. Weighing research as half of the evaluation was quickly agreed, probably because 50 per cent worked as a magic number. As a kind of counterpoint, nobody pleaded for a higher coefficient than 5 per cent for impact. This clearly reflected a shared representation among academics in the working group about their role – they first of all find their justification in research and fundamental research – and the kind of institution they want to be associated to – a research university caring about impact but first rewarding scientific results per se.

Valuation was also therefore a way to symbolically defend a definition of one's job; some impact but first of all research.

The decision that 'pure researchers' should not be expected to be more engaged in impact and institutional and discipline-based involvement furthermore reflects the idea that the time they save by not teaching should not be devoted to these activities, but that higher research requirements will be expected from them. This at the same time increased expectations about their research achievement and, in the end, the effects of poor research results counts for 80 per cent of their evaluation. Some members of the group explicitly expressed this consideration and supported this expectation.

Commensuration: the crucial role of a committee chair under control

Categorizing the types of scholars and weighing the criteria to apply to differently evaluated domains informed what is expected but not how to evaluate and how to come to a judgement on each domain. In order to come to this, each individual activity report was sent to two reviewers, one internal, one from a different university. They would have to return their reviews before the career committee (which is made up of all reviewers, half of them external and half from the institution) could meet. They also had access to all activity reports. The committee was multidisciplinary and there were representatives from the five main disciplines covered in Sciences Po: law, history, sociology, political science, and economics. The attribution of reviewers generally closely respected the discipline of those whose work was assessed, and if that was not possible, at least one of the two reviewers would belong to the main discipline and the other would be from a different area.

For each review, on each domain, we asked for a grade and a written assessment that clearly documented the chosen grade. Four possibilities were given: A for outstanding, B for excellent, C for satisfactory and D for unsatisfactory. The reviewers met for about two days and each case was discussed in succession.

Because of the tight schedule,[4] it was not possible to open up the floor to each reviewer, followed by general discussion. We decided to keep the same process that had been used previously – where the vice-president for research chairs the committee and presents, for each researcher a brief summary of the two reports, domain after domain. So, for instance, I summarized the reviewers' written arguments on Mrs Clare's scientific production, and said that one awarded a B and the other an A, and that I would propose to consider Mrs Clare's work as 'excellent' (i.e. to give her a B, as both reviewers in their comments outlined the high quality of the work achieved but none of them made

[4] It was very difficult to ask external reviewers to stay longer than two days, especially, because they were not paid remunerated for this task.

a case for outstanding results). The rationale behind this particular procedure – which hands the chair of the committee a very important role but is quite usual, as I observed in studies of committees I have conducted elsewhere – was that the presence of the two reviewers prevented me from (voluntarily or not) misunderstanding what they wrote, as they could intervene if I forgot or I over- or under-stated something. More globally, all reviews were also available to all: anyone – with the exception of those with a conflict of interest – could interfere if they thought a reviewer forgot or over- or under-stated relevant information. The publicity of the reviews and of the synthesis I produced guaranteed some legitimacy to the final decision and made it, by definition, collective. Therefore, if neither of the two reviewers protested against my proposal or wanted to add something, and if none of the other members of the committee intervened, the assessment of Mrs Clare's scientific production (to continue with the example) was declared as 'excellent'. Otherwise, a discussion began, and either we slowly came to a general agreement which I again suggested myself after having heard the different positions, or they would vote (I did not) on 'outstanding', 'excellent', 'correct ', 'not sufficient' and the assessment with the larger majority prevailed. In practice, it was rare that there was a vote, which in this case I believe was preferable because the procedure of secret ballot voting that we would use might risk allowing voting for personal revenge or unfriendly votes that cannot be publicly expressed when there is only oral intervention.

Chairing the committee, therefore, plays quite an important role in the evaluation procedure, and is a quite challenging task because of interpretation of the reviews and of the related grades I had to propose during sessions. Building on what was said on the teaching records, the teaching responsibility, the creation of new programmes or the introduction of innovative pedagogy – I had to commensurate all these aspects and produce a synthetic assessment. On top of that, deciding on so many dossiers within two days meant that time was very constrained and long discussions had to be avoided. In order to be as efficient as possible, I spent the whole weekend before the meeting carefully reading all the reviews, looking at the activity reports, and checking the information taken into account by reviewers in their argumentation. Despite the guidelines we sent them, many for instance forgot that only publications published during the period considered for the evaluation were to be taken into account, and sometimes overstated research achievements of those assessed; or they considered papers published in non-peer-reviewed journals as research production while they should be included in the impact domain.

Reading all the dossiers together also revealed some relevant biases. I could detect some reviewers' attitude, especially those finding everything 'outstanding' or, on the contrary those who were never satisfied. I looked more carefully at the dossiers on which two reviewers had very different views. Of course, I could not pay such attention to everything, but this preparatory work was important to identify those dossiers that might lead to more discussion or controversy. It also gave me an overview of the panel as a whole.

It was always striking to note that reviewers of some disciplines were very generous and others much more critical. The unanimity among economists was especially visible: they all praised the same kind of work and were very laudatory in their comments and arguments. This came from the fact that they had been recruited on very similar basis and all belong to mainstream economics, and that the external members we invited to the committee belonged to the same community – which we were obliged to do if we wanted our economists to be respectful of their reviews – so that they all praised the same kind of research and highly rated all other activities that they don't think are so very important. Political science was at the other extreme of the continuum, as all members of the department do have the same view on what is valuable research and do not agree on a single publication strategy, some being very attached to books while others prioritize papers in peer-reviewed journals. The judgement I prepared for each dossier therefore quite heavily relied on what Karpik (2010) labelled as a personal judgement. I read the arguments with my own knowledge of the tensions and preferences of each discipline, but also with a personal knowledge of the reviewers when I knew them, which was the case for most of them.

When the meeting started, I was able to make a succinct summary of the arguments and a proposed judgement for all domains for all the dossiers. We always worked discipline by discipline in order to try to be discipline-coherent. From this point of view the first dossiers to be evaluated were very important because they set the tone: the level of expectation for the first discipline would then be transferred to the next. This did not mean that the criteria should be exactly the same (impossible to judge dossiers of historians with the same criteria as the economists' dossiers) but that it should be as difficult to be qualified as outstanding in history as in law. So, the first dossiers set the tone but also stabilized the way the committee worked. I became very aware of that after a session where we started with the evaluation of very active professors but who published only papers (in a discipline where books are more than welcome) and reviewers who themselves disagreed on that point. This led to a rather long discussion about the evolution of the discipline and whether the committee should be aware of this trend or fight against it and consider the absence of books as a weakness in the dossier. After that, we were careful to avoid complicated dossiers at the beginning of sessions.

Even if the elements to take into account in the assessment had been defined more precisely, their relative weight in the commensuration process was still open and often not convergent among committee members. For some, the originality of ongoing research and the complexity of its operationalization should be taken into account and seen to be as valuable as a book while others put more emphasis on publications. The same tension could occur between strong involvement in the institution and strong involvement in the management of international networks, both expected in the third domain but differently valued by committee members.

Trying to avoid such tensions is impossible, unless each and every activity and attribute is codified with a coefficient. No committee would then be needed! As chair, I have to accept that each committee might come to views that are not exactly the same, but at the same time, to be careful of preventing too different criteria across committees, considering that one of the aims was to send rather clear messages to those whose work was evaluated. The memory of what happened during previous committees is therefore important; during the committee itself, one crucial point was to try to be coherent during the two days and to treat the first dossier like the twentieth or the final one. This is the most difficult thing to do. Some of the staff members under my direction assisted me with this task and warned me of potential drift. I also encouraged members of the committee to be aware and tell me if they saw something like that happen. But it did, nevertheless, happen sometimes, quite inevitably.

Quantification of qualitative assessments

This evaluation process is a curious one. It relies mostly on qualitative information, but this information has to be converted into a qualification that becomes a grade, in order to produce a ranking. Three remarks follow about this quantification process.

First, grades lead to overstatement. As described earlier, discussion aimed to reach consensus on the grade to be given to each of the dimensions in the evaluation. But during the last round of evaluations I chaired (the second with the new status and the third since I was vice-president), we decided not to use grades but qualifications ('outstanding', 'excellent' 'satisfactory' and 'unsatisfactory'). We had noted that relying on the A, B, C, D scale led to many As, because, implicitly reviewers considered a B as not valuable enough, or too depreciative. But what we wanted was that an A should be given only for exceptional achievement, and the use of the adjective-scale improved on this. The difference between 'outstanding' and 'excellent', of course, is not straightforward and because what is expected from the work of a colleague may vary from one reviewer to another, qualifications did not prevent divergent views on the same scientific production or on the same teaching involvement. But it nevertheless helped to reach agreement and made for a less skewed distribution, as opting for 'excellent' was no longer considered as disregarding the work achieved.

Second, it is sometimes difficult to resist the temptation of counting especially about the scientific production. Although the evaluated academics were asked to provide links to their publications, I doubt the reviewers took the time to read them and the written arguments were often such as: 'one edited book, three papers in peer-reviewed journals and four chapters'. The contribution these publications added to the field, their originality or innovative character was rarely mentioned or even argued. I tried to ask for more qualitative assessments or at least ask what was outstanding and not only excellent in the research activity.

Third, the beauty of the thing is that the final qualification was immediately transformed into a number in the computer by one of the staff members under my direction, as 'outstanding' gave 3 points, 'excellent' 2 points and 'satisfactory' 1 point and this excel sheet also directly calculated the final grade once all four domains (three for the researcher-only) had been qualified, with research counting for 50 per cent (80 per cent for researcher only), teaching for 30 percent, institutional and discipline-based engagement for 15 per cent and impact for 5 per cent. This final ranking was therefore progressively computed. It was kept secret, i.e. it was not shared with members of the committee. They could of course use their own excel sheet if they wanted, but I did not see anyone doing something like that. Keeping the final ranking secret was first of all a way of not stigmatizing those at the end of the list or on the contrary valorizing those at the top.

Formative evaluation and merit-based valuation

Development and implementation of this valuation process had two objectives. One of them was what I would call the 'formative evaluation of researchers and professors'. This regular assessment of their activities within the last two or three last years is a way of providing them with an idea of how their work is appreciated, what should be improved, what is expected from them and not there yet. This is the reason why we not only provided grades but I carefully wrote a general assessment of their activity in each domain when we sent them their evaluation. I also expressed recommendations that members of the committee might have formulated. From this point of view, the valuation process is also a policing instrument as it sets the norm of what is considered good or not so good and what should be done. For instance it led some groups to clearly state that this or that journal cannot be considered as peer-reviewed, or to maintain that publishing only in French is not enough, etc. This of course did not immediately lead to a transformation of publishing practices but nevertheless influenced the behaviour of some of those who had been assessed. The publicity of the process (a committee of around 20 internal and external members looking at all the files) probably also affects those who do not want to get 'bad' reviews in front of their colleagues. I also accentuated this formative aspect of the evaluation by inviting those who were assessed poorly for an interview: not to admonish them but to understand the eventual difficulties they met and see how to help them to overcome them. And it worked rather well in some cases. But of course, some resisted and refused to invest in collective services, or still publish in non-peer reviewed journals as the individual cost of the process is rather reasonable.[5]

This evaluation process has, however, another objective, as it is related to performance and remuneration. This means that the result– i.e. the assessment of the quality of X – leads to a valuation process, in the sense that this quality result is converted into a salary increase, something quite different from what I observed for hiring decisions in the US universities in which I conducted interviews;[6] with the process in place in my institution, the highest ranked academics should get a higher salary increase. But as I mentioned before, the budget allocated to the merit-based increase was fixed and limited to fixed percentages of the overall payroll of the evaluated academics. Therefore, from my point of view this valuation phase (how much to increase considering the ranking of each) was the more political moment. Because of the confidentiality of this issue, the decision how to distribute an increase on merit was confined to a small group consisting of a member of my team, one member of the human resources department and myself, and we had to decide how to 'evaluate' the results.

My predecessor's policy was to concentrate this allocation on the very best and to apply the possibility of reaching a 10 per cent increase in salary for only those at the top of the pile, which automatically negatively impacted the potential increase for others as the budget to be distributed was not extensive. As those who are 'outstanding' generally remain 'outstanding' from one evaluation to another, they successively received high increase rates compared with all the others during the evaluation processes that occurred before my own term. Merton's (1968) Matthew effect worked very well. But it meant that those with excellent but not outstanding evaluation were treated like

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[5] Actually, I did not feel that my colleagues were very anxious about this evaluation, especially if I compare them with colleagues who are on tenure-track, for whom the mid-term evaluation and the tenure process produced much more anxiety as they faced face an in or out decision.

[6] For the recruitment of assistant professors, I observed that quality as assessed by the hiring committee did not play a direct role in the way the price was set afterwards by negotiation between the department chair and the dean. The price of the market (i.e. what is offered by universities considered as equivalent to the recruiting one) was more important than the intrinsic value of the candidate (Musselin 2009 [2005]).

those with lower achievement and received no increase. Thus 'excellent' and 'unsatisfactory' were valuated the same.

In order to avoid the Matthew effect and this absence of discrimination between the less and the better performing, each time our small group discussed what is a 'fair' distribution and where to put the cursor between on the one hand the same increase for all and on the other hand the concentration of a maximum rate on some happy few. What trade-off should there be between expected quality and extreme meritocracy? We opted for a repartition, applying different rates according to the ranking but allowing some kind of increase to more than half the population. We thought it was difficult for someone who received a B (i.e. excellent) on average not to be rewarded and that the highest grades among the 'satisfactory' should also not be completely left out. In other words, the idea was to allocate some rewards to all those who 'seriously' contributed and to smooth the curve. In order to respect the budget, it meant than the highest rate should not exceed 7 per cent. We constructed a first scale with a maximum of 7 per cent for the top of the ranking, 6 per cent for those coming next, 5 per cent etc. But we also took seniority into account: in order to encourage those on the first stage of their career, we retrieved 1 per cent of the given rate for those at the second stage. This means that allocation of merit-based increases did not strictly respect the ranking obtained after the evaluation.

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Assessing academics, providing evaluations and transforming them into grades leading to a ranking and determining a merit-based salary is therefore a technical activity; but first and foremost it is judgement in action and a political process.

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Christine Musselin is a French sociologist of organizations. She leads comparative studies on university governance, higher education policies, and academic labour markets. She has been a DAAD fellow in 1984-85 and a Fulbright and Harvard fellow in 1998-99. She has led the CSO from 2007 to 2013 and has been the Vice-president for Research of Sciences Po from June 2013 to November 2018. She is the author of *The long March of French Universities*, New York, Routledge (2005) *and The markets for academics*, New York, Routledge (2009). Her last book *La grande course des universités* was published by the Presses de Sciences Po in 2017.

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Symposium contribution

"Islands of Qualities in an Ocean of Quantification": A Conversation with Wendy Espeland and Michael Sauder

José Ossandón, Wendy Espeland and Michael Sauder

Abstract
In this interview, Wendy Espeland and Michael Sauder both reflect on their work on rankings, reactivity and commensuration, and think about the implication their sociological work could have on the practices of those dealing with rankings and their reactive effects.

Keywords: valuation; rankings; reactivity; higher education; management; commensuration

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Introduction

José Ossandón: First, let me briefly introduce the problem that motivates this interview and this correspondence more generally.

Valuation studies can be characterized in terms of a productive heuristic. Social researchers do not only study the *values* behind valuation – ideologies, culture – they can study *valuation practices* – the techniques, knowledge and devices, and how these practices and devices impact organizations and other social processes (e.g. Stark 2011). What the vast amount of studies in the area – including the many papers in the journal *Valuation Studies* – demonstrated is that there were so much social researchers could learn from valuation practices. This conversation expects to reflect upon whether there is a possibility of reciprocity in this exchange. Can practitioners – those involved in the everyday work of running organizations that are affected by new or old powerful forms of valuation – learn from valuation studies?

To do that, I proposed to you and the other participants a kind of scenario. We will not discuss valuation and management in general. We will discuss an area that we all know very well, namely, the management and organization of research institutions, in particular universities. This is in fact very important. What your work demonstrates so well it is that valuation infrastructures – such as rankings – matter greatly. They can radically transform how universities are managed and in the end what counts as quality. We also know that these are not unidirectional processes, and that how institutions deal with rankings changes so much in different contexts and in different organizations or even across departments in the same institution.

The overall question is: Does the knowledge produced in valuation studies have something to say to those involved in managing research quality in universities?

I know – and you have been very clear in our previous communication about this – that this is not something you have already researched, and that this conversation takes you (and the others too) into tentative territory. I should clarify though that the goal here is not a fully fledged management theory. In fact, a key part of the problem does not seem to be a lack of management theories in universities but rather an excess. The conversation aims to be humbler and more concrete. A way to formulate what we are trying to do here is not to assume that we should tell people how to do their job, but, that, perhaps, we could think about how our research could help those that are already troubled to think about their troubles differently.

That's the general framework. More practically, what we have done so far is that I wrote a short text as provocation; we then received responses from Kristian Kreiner and Christine Musselin, and then the last contribution in the correspondence is this conversation. I have prepared six questions or topics on which to talk to you. The first and second are more about contextualization; they are about your work on rankings more generally, and the questions afterward are more directed at addressing the problem of the conversation.

Sociologists of quantification

How did you realize that you could make rankings – and university rankings in particular – an object of sociological study? How did you become sociologists of rankings?

Wendy Espeland: I had been interested in quantification for a long time based on prior work. I was looking for a new object, and I was talking to a colleague who was talking to me about that he happened to be a former dean of a law school. He was mentioning how much rankings were affecting law schools. That struck me as a really interesting example; partly because at that point rankings were relatively new, so it might be possible to capture the before and after effect by talking to people who had long tenure. So that seemed like another appealing aspect of rankings. But really it was sort of just conversations with colleagues that helped me to latch on to this particular object.

Michael Sauder: Wendy had this long-term interest in commensuration, and rankings are this clear example of commensuration. I was studying status processes and hierarchies. Rankings were this nice example of the formal status structure that had taken the place of an informal status structure. So, it really resonated with me as soon as we started talking about rankings. Then, once we started to study rankings, it really took on a life of its own. I think because of the surprising effects that rankings have on institutions and the breadth of those effects, then the richness of all these social processes intersecting became very clear. There are so many things going on at once.

José Ossandón: Today, we take for granted that what you study counts as sociology. But, was that what you had to fight for to be accepted by your colleagues and in journals? Was it obvious that rankings could be a sociological object of analysis?

Wendy Espeland: When I first became interested in quantification most people in sociology were interested in how to do it better rather than examining it as a social phenomenon or object. Within sociology, there weren't very many people who were thinking in those terms. There was some early work on official statistics that was interesting, but I mostly found colleagues were outside of my discipline in either the history of science, or in accounting, and science studies. Now, I think that there is an emerging field called sociology of quantification that I think makes it a less unusual topic to investigate. But I think initially, it took some work to convince people that quantification in general could be an object of study. But because people experienced rankings so directly as academics, it wasn't very hard to convince them that this was interesting. What was challenging was to convince them to let us study them [laughing] because they were very anxious about the effects of being studied. So, there were a number of people that we approached who told us that "oh, this is fantastic work, but no, you can't study our law school". The challenge was less, later on, how to convince people that this was an interesting object rather than to let us study them, which I suppose isn't surprising [laughing].

Michael Sauder: I agree that the study of rankings was something that people found interesting because they were affected by them. Everybody thought it was a very compelling topic from the beginning. Although, I do remember us having a lot of trouble with the first paper, the reactivity paper, in terms of finding out how to frame it for a general sociological audience.

Wendy Espeland: That's right.

Michael Sauder: We had all these different ideas, but were struggling between the sociology and science, and organizations, and even some interactional theoretical ideas. How should we frame this to communicate all this great data we have to this audience in a way that they will see it as sociology, or whatever type of sociology it is? We struggled with that. I think we worked it out in the end. I feel lucky, because I feel like we could have probably gone in a different direction and it would not have been as effective. It would be much easier now because there's a quantification literature that we could speak to, which did not exist in sociology at that point.

Rankings and reactivity

José Ossandón: For many readers, the first encounter with your co-authored work was through your "Rankings and Reactivity" paper published in the *American Journal of Sociology* in 2007. There you inspect the impact of a specific ranking, the U.S. News and World

Report ranking of law schools, on the way law schools are actually managed. You proposed a theoretical model based on one key concept, "reactivity" and two main mechanisms "self-fulfilling prophecies" and "commensuration". *The second question is what would you say is the current status of this model, do you still use it, have you added further mechanisms or new ways of thinking these processes in your more recent work? How do you see this quite well established paper and model thinking about the reactivity of rankings today?*

Wendy Espeland: I can suggest one observation, which is that I think the reactivity model is still effective and capturing kind of the interactive effects. But I think it underplays the role that quantification takes in the constitutive effects of numbers and helping to produce the object that is being measured. I think maybe that aspect should be incorporated into the model more clearly, i.e., the way that numbers produce certain kinds of relationships that then become objects of measurements.

Michael Sauder: It is interesting to use the word model. In a way, I don't think of it as a model. I think of these as concepts. You have me thinking back to when we started. There were a lot of directions it could go. We were trying to find a way to talk about it and to find the most powerful mechanisms that we saw that were emerging from the data. To me these concepts still work well in new situations, but it does not mean that there aren't more concepts or other directions to go. I have been thinking more lately about the institutionalization of rankings, so almost like the second stage of this. We were documenting a case that was toward the beginning of when rankings were introduced and showing how people were reacting and adjusting to this new system. It is worth asking, now that rankings are part of the educational field, how have their effects been written into organizations after all this time? How do people become accustomed to them? Are they so powerfully institutionalized that they are hard to question at this point? There is a lot of new work being done in this direction. Assuming that rankings are here to stay, what are the relationships between the rankers and the people being ranked? And how are internal dynamics changed because of this?

Can sociologists of ranking give advice to university managers?

José Ossandón: Your book *Engines of Anxiety* (Espeland and Sauder 2016) narrates how a ranking impacted on all the different layers of the law schools in the US. You have chapters on prospective students, admissions, career services, and the deans. In relation to our conversation here, a key chapter is the one about the deans. What we as readers get through your description is a picture of the deans you interviewed as being very troubled with the situation in which they found themselves. As Christine Musselin (2018), in her previous work on European universities shows, there seems to be an important professional transition, from the dean as an academic peer with more authority, to deans as professionalized managers. In this new context, the success and quality of the dean's job seems to be increasingly seen in terms of the relative position of the institution they manage in competitive and relative rankings.

In your case, everyone seems to care a lot. Students care about the position of their institution; you narrate these very strange situations where students will even sue institutions if rankings go down, as if their investment in human capital were at stake. You show also how donors care, and that even faculty seems to care, for instance, when choosing their jobs. The deans however seem to have a clear picture of the paradoxical situation in which they find themselves. They know there is a basic tension between the ranking position and what the ranking is supposed to measure – the quality of their institution. I found that was very interesting because you show them as reflexive actors that seem to be quite troubled with the situation in which they find themselves. So, on the one hand, they seem to understand that their school's position is not about its quality. There is discordance between the ranking and what it is supposed to measure. However, they seem to assume too that the power of the ranking is something they cannot fight against, and that they have to act as if this were the actual measure and target of their task. It is a dramatic position. *The question is: what do you tell the deans? Have you presented your work to them? What do you say when they tell you: "you describe perfectly our troubles, but what should we do about them now?"?*

Wendy Espeland: That is, of course, the million-dollar question, so thank you so much [All laughing]. The deans did initially try resisting in various ways and those were very ineffective. The reason they were ineffective is because they could not be gatekeepers over who is applying and who is deciding where to go to law school. What we found was this weird reversal of power where in some ways the least powerful people, who are the applicants and the potential students, their decisions become consequential over time because they affect the rankings. Then the deans are forced to pay attention to that. They have always paid attention to that, but it has never been quite as consequential as when this becomes a part of the ranking machinery. So, what we tell deans is that at this point, we don't see any signs of the rankings being disrupted in any meaningful way. At some point, that might happen and the whole thing will collapse under the weight of incessant evaluation. At that point, we think that they will have to live with that for a long time. Their job is to do the best they can with the rankings, while trying to continue to point out the flaws and how they are being evaluated.

Michael Sauder: One thing that comes to mind is that the paradox of being trapped by and understanding the limitations of the rankings, but being forced to do something about them is real. I think when we talked to people afterwards – and there could be a selection problem here – people really thought that this was accurate. I do wonder, and I am curious now if that kind of caught in-between feeling has diminished over time because of the acceptance of rankings. A portion of the deans we talked to when we did the interviews for the study knew or were familiar with the world both before rankings and after rankings. They were kind of adjusting to this. Now, I think when deans are hired, they just know that rankings are an important part of that world. They may be more pragmatic about this as something they have to deal with. They may not question the rankings as much. That is an empirical question to ask.

José Ossandón: Is that what you meant before with "institutionalization"? How it has changed in this very short period; that it has become more taken for granted.

Michael Sauder: We saw this more with the associate deans, I think, during our study, where a lot of them experienced the pressure of producing numbers at that time because they actually had to gather the career services data and gather the admissions data. They knew colleagues who had been fired because their numbers weren't high enough. At that point, we could really see in that job that people who were good at managing the numbers were taking over these positions. You could glimpse that transition, that institutionalization at that point. I wonder if that institutionalization just increased over time. Numbers are just taken for granted now. We don't even imagine what the alternative would be.

Wendy Espeland: One thing that we were told by a number of people is that when deans are being interviewed for the job, they are all asked what they will do either explicitly about the rankings or implicitly about the reputation of the law school. So, most people who come into the job understand that this is a part of it. They were asked to have a plan for that when they were being interviewed. That also suggests further institutionalization. There may be less angst now in terms of how naturalized the numbers have become. I still suspect that people generally feel that these are not the best measures. A lot of energy is going into producing the material to be ranked. I think sometimes that people feel that it is time they should be spending on other things that are more valuable to the institution. So that is a different form of angst.

José Ossandón: What would you do if you were a dean of a law school? *[All laughing].*

Michael Sauder: I don't know how to answer that question. I really appreciate the difficulty of their position. I would understand the limitations of these numbers, but it would probably depend on the particular situation you were in. How much you had to tailor your responses to numbers as opposed to the other concerns that are going on. So, it might be how much pressure you are getting from the outside. I guess I would try to convince my constituency about the limitations of the numbers and try to teach them how to understand the numbers. Like a change in one rank isn't meaningful. Like a change in ten ranks may be meaningful. So, maybe take the focus off the precise distinctions of the numbers. Try to take that message to all of your constituents. If they don't believe that, then you are in the same situation as the deans were in before. I mean, you are stuck between … you probably should not take that job [all laughing].

José Ossandón: You use this word anxiety. Reading your book again made me think about Karpik's book (2010). He really stresses the particularities of what he calls singularities, unique goods, and how with singularities, people can use devices that help to make them comparable, but that this shouldn't be confused with calculation. When I was reading the deans' chapter again, I was thinking that they feel that anxiety. They seem to feel that it is not only that their work will be assessed in terms of this going up or down, but that, in the end, the ranking has very little to do with whether their law school is any good. There seems to be an anxiety about whether this has taken them in a completely wrong direction, in a way. Do you think that anxiety has to do with that?

Wendy Espeland: Yes, I think that is true. One source – there are multiple sources of anxiety – is your sense of professional judgment being compromised. You have the sense that you might know what is best for the school, but you can't do it because you are forced to be accountable to this algorithm that you didn't construct. That is one source of anxiety. Another huge source of anxiety is the sort of competition that emerges as a result of these devices that make everyone in a very precise relationship with everyone else. Even if you are doing well, if other people around you are doing something differently, including maybe something you may not think appropriate, if it makes them look better at the rankings, then you are being punished. It is the zero-sum quality of the relationship, and the anxiety about "fear of falling", that you don't really control what is happening to your institution in the ranking. You do the best you can, but it all depends on the relationship with all these other schools. That is another prominent source of anxiety; that extends to being anxious about what kinds of practices are being incentivized that you may think are inappropriate or even morally repugnant.

Michael Sauder: Your question also makes me think about something I don't think we have written directly about, but from our interviews you can see how deans and other administrators are frustrated by the idea that they know the strengths of their institution; they know all of these great things their school does, the richness of their activities. But it is very frustrating to have all of that richness reduced to a single number, and have people focus on that single number. I like the comparison with Karpik (2010) because there is a tension there … they actually want people to value universities in different ways, and to understand that there are different ways to value universities. But they really do feel like their hands are tied and that this one form of evaluation has drawn all of the attention from a lot of different audiences. And it limits their ability to convincingly argue about what is unique and special about their institution. They all had a lot to say about what was unique and special about their institution.

Assessing researchers

José Ossandón: My next question is about the case Christine Musselin (2021) shared with us. Christine's text is quite unique, I think. It is a first-person testimony of her practice of assessing quality as her institution's vice-president. This is less about assessing a full institution (like in your research) but assessing individual researchers. What we get from her description is a sense of valuing as a series of discrete moments, with many decisions and conflicts that could go in many different directions. She uses some of your concepts, like "commensuration", to name these moments. Valuation appears like a process where each moment can go in so many directions. *How do you relate to her description and how do you navigate your own role in decisions regarding the assessments of researchers, hiring and colleagues?*

Wendy Espeland: One of the things that I really appreciated about Christine's essay was the emphasis that she placed on categorization. How one of the fundamental decisions that had to be made were what are the categories you have to use and what are the domains you are going to incorporate? If I remember, one of the categorizations had to do with professors versus researchers, and they decided to create a kind of blending of those. I see a direct parallel in the ranking research in the sense that when USN created the algorithm there were a number of different kinds of law schools but the decision was made to use one algorithm to evaluate everyone. Instead of selecting out law schools that had different missions, like, for example law scholars that were oriented toward public service or that were oriented toward including people entering into the profession who had been marginalized in the past. Those distinctive missions weren't incorporated into the algorithm, so they were punished for doing a good job in what they intended to do. For me that is highlighted as a parallel with Musselin's emphasis on the role that categorization plays. So, what is a law school? What does it mean to be a professor or a researcher? This is really important, the kind of distinctions that were made. So, the categorization effect is really, really important.

Michael Sauder: I agree. Who is in and who is out? Who counts and who doesn't? These are great questions that the piece raises. I was thinking about the second half of your question about, you know, what happens when you participate in these projects? That's an interesting question. I really did like your offended native, anxious scholars, and useless practitioners (Ossandón 2021). I could relate to all of those. One of the things that these two pieces – your case and Christine's piece – made me think about was the pressure to be pragmatic in all of these stages of evaluation. Because when I've been asked by someone, not very often, at my university about the rankings, you could tell that there is a lot of pressure to make this decision efficiently. I should say that this applies to almost any evaluation or any time we use numbers. But I feel that pressure too. Like I could open up boxes for them and say "look, this is a problem, this is a problem, and this is a problem", but nobody wants that because nothing would get done [all laughing]. You feel pressure in the room to be pragmatic and say these are the rules of the game, and within these rules here's the best that we can do. But you can also tell that the pressure extends outward and upward; because everyone is very busy and wants to get this done. One of the striking things is how numbers are such a great vehicle for this pragmatism. I mean, you can say: "look, we just want to know about this number", and the whole conversation is just about that number now. We don't open up the box to see all the little parts that constitute that number. I think one of the things that rankings and other sources of quantitative evaluations do is that they create this kind of momentum of how to make decisions, and what the rules of the decisions should be. Unless you have a lot of time and extra resources you are not going to question how these things are made. You are just going to orient the questions in certain ways. You are going to feel that pressure to go along with those rules as they were set.

José Ossandón: Do you find any difference across disciplines? You work in departments of sociology. Are sociology departments, in your experience, more reflexive when managing themselves, for example, about identifying limits or situations that cannot be quantified, or of reintroducing these kinds of issues at the moment of managing researchers?

Wendy Espeland: One place where you do see more attention to qualitative dimensions that may be a resistance to simplifying through numbers is in two really big decisions. One is hiring, and the other is tenure. In the United States, tenure is this very fateful decision and institutions and departments invest a lot of resources in that. So, there is a lot of deliberation that goes on. There's a lot of talk and there's readings of articles that goes on. So, when people are in the conversations in a department, you talk about quality of the work as well as the volume of the work. When someone's decision is going up the chain, inside the university you also send for outside letters. The outside letters that interpret the record for you, those are very fateful. So, tenure strikes me as a kind of decision that is recognized as being crucial for someone's career. There is an effort to include qualitative as well as quantitative information. Even though they may require you to include citation counts, for example, or you may have to refer to the *h*-index, which evaluates your productivity, there is still room for deliberation about the quality of the work.

That happens too when hiring. In Kristian's piece (Kreiner 2021), I was really taken with this piece, about how sometimes the justification is what is important rather than the actual decision. You make a decision and you justify it afterwards. That can happen in hiring decisions: "I like someone, therefore I am going to make a good argument for them", or "I don't want someone to work here, so can I find a rationale?". There is still room for deliberation and trying to convince your colleagues to think differently about something. That's a place where I feel more hopeful about the effort to kind of include other arguments about quality in addition to just the numbers.

José Ossandón: Does it change with different disciplines? For instance, it is quite new that here we at Copenhagen Business School (CBS) use tenure-track, and we have very different systems depending on the departments. In the more economics-oriented departments, decision is much more automatic, algorithmic like (e.g., if you publish in these X journals you will be qualified). In our department (after many discussions, I could have written about this process too for this correspondence!), we decided to have a less algorithmic type of decision. In your experience, do you see what you are describing for hiring as a more general practice, or is it a disciplinary issue? For example, it is more qualitative in sociology departments whereas in other departments it is a more algorithmic process.

Wendy Espeland: It may well be different in different disciplines. I have heard from administrators that economics again seems to be a discipline that has a clear sense of quality. You know, there is a shared theoretical paradigm, shared sense of understanding of what are the good journals. Perhaps it is more automatic in those fields. But, even among the deliberation there is still the importance of the status of the journal or where the article was published. That certainly plays into how people evaluate work. But you could also make an argument about why something in an obscure journal is still good. It may not carry the day, but at least there is a potential. I am not sure how that varies across disciplines as Michel Lamont (2009) has shown.

Michael Sauder: I think it is a great conversation. I love the points that are being made. It strikes me that it has great potential for empirical investigation. It is an empirical question at this point. I like how Wendy is describing what I see as these kinds of islands of qualitative evaluation in this process. So, I think those spaces may be bigger in some locations than others, but I have to imagine that they take place even in the economics department that is driven by the numbers. At some point, people are discussing the weight of this, finding it is so big that it should count more than a level 3 article or something. You would have to empirically study how and where that qualitative evaluation takes place. Then, what would be interesting to study would be the translation process that goes on. Your department has this discussion about the qualitative merits of a person's tenure record. You use your judgment and make a decision, but then how is that decision translated into the next level of hierarchy? Do you have to use numbers then somehow to take your case to the next level of judgment, or how do you translate your expertise or decision to that next level? I think that would be a great thing to study at the university.

Managing quality

José Ossandón: The other example we have is the example here at CBS. This is a different type of situation in which we as researchers participate in the management of quality in universities. In my short text in this correspondence, I tell the story of my participation in the task force to implement a list of preferred journals in the department where I work (Ossandón 2021). The situation has different aspects. The need comes from the dean of research, the boss of our head of department. We assume that to him quality equals research published in journals assessed high in the Academic Journal Guide published by the UK's Chartered Association of Business Schools.

What I describe in my notes is my experience. I felt that because of the work you and others have developed, I had tools to describe what was going on and the possible consequences. For example, lists do not describe quality, they are devices useful to those who have to decide without knowing enough to assess specific pieces of research; for instance, librarians or deans who come from different disciplines, but, once implemented, they can change how quality is accounted for. For example, we might face a future where the quality of our work will be equated with the tier of the journal in which they are published without caring about the papers themselves. Judgment is externalized. At the same time, I felt that I was not very useful. I was complaining a lot and everyone got tired of me complaining about it.

In his response, Kreiner (2021) expands on the implications of the assumption that quality is what is published in journals with high rankings. As he puts it, this creates the illusion that we can know the quality of someone's work without reading it. He also decided to use a particular tone – to those that work with him, we could call it the Kreiner tone – that is, he writes his contribution as a polemic addressed to our managers and oriented to affect their view on the processes.

How do you react to this case? How would you deal with the confusion between journal quality and the quality of research output? What would you do in the situation of our head of department? Actually, something I have always found amazing when I talk with colleagues that practice sociology in the US is how much they trust in two journals, AJS and ASR. It is not a list, like in the example, but there seems to be a common assumption that good sociology is what is published in these two journals, and if it appears elsewhere in the world is it likely less good? The question is how do you deal with this *tension, the quality of the work and the quality of the output, and what would you do in my head of department's situation?*

Michael Sauder: I don't know. That is a hard question [all laughing]. One thing that comes to mind is just how self-reinforcing this process can be. Once it starts and you start associating quality with journals then that becomes institutionalized. I don't know how you get out of that cycle. I am sorry, it is a hard question. I was on a university committee looking not only at social sciences, but also at humanities and natural sciences and evaluating these cases against each other. All I could think about was – aside from journal quality – if I am assessing a mathematician or a biologist, it is hard to do. I can't assess the quality of the work except from the descriptions given by their department chairs. The quality of the journals – the farther away you get, the harder it gets to understand and compare those qualities. In one way, I am stuck. I am not sure how to get out of this. It makes me think about the translation issue again. If you are in a position to make a qualitative judgment and say that this article which was published in a small journal is of high quality and of high impact, how do you translate that to audiences who don't have expertise in that area?

Wendy Espeland: That is a place for letters or for other assessments of quality that could help make the case. Someone could say this is published in this obscure journal, but it is a really breathtaking or original piece of work that is gaining lots of attention by specialists, or something like that. But I agree with Kristian Kreiner that this circularity of these processes is the most insidious in the sense that if everyone treats it as so, it becomes so. Then we are stuck with the so [laughing]. But I suppose we could make a pledge to have leading scholars try to publish in other locations as a way to establish the legitimacy of doing so.

José Ossandón: I was thinking in terms of what Michael was saying. I don't know if you have read Daniel Beunza's recent book (2019). It is ethnography of management in finance and the impact of risk-based modelling in this context. One of the things I took from his book is that how elevated you can get in the hierarchy to decide about someone else's quality is also a managerial decision. The farther you go, the more abstract your decision is, and the farther you are from the actual work. Beunza advocates what he calls "proximate control". Maybe, it is not that different in institutions like universities. Maybe, at a place like CBS the dean is simply too far in the organization to assess research quality produced in the departments. A possible answer could be to delegate this decision to managers a level below in the organization, those who are closer and can actually understand the work that is assessed. How to deal with this decision is a management problem.

Wendy Espeland: The [Peter] Miller and [Nikolas] Rose concept of governing at a distance (Miller and Rose 1990) – that is what quantification makes possible – governing from a distance. Maybe you are right. We should limit the distance at which someone is allowed to govern. So many things go back to James G. March and Johan P. Olsen (2010). The idea of uncertainty absorption and the sort of complexity of evaluation in all of the decisions that Christine Musselin is talking about become more obscure as decisions move up the hierarchy. Things look much more factual and much more certain the further they are away from those who produce them. That would be another argument for sort of limiting the distance at which people judge, but of course the overwhelming problem with that is that those are not the people who are going to give up discretion. They are not going to say: "You are right, I am too far away as a dean to make this decision, so I am going to let you do it." There are hazards with that too.

Michael Sauder: That makes me think about another question. I wonder if people further up the hierarchy now have more confidence in their decision because of numbers. They actually think they have more access to quality than they used to think. Maybe they used to say: "well, that is up to the department". Now, they have a rubric that the numbers provide where they can feel more confident that they are actually seeing into those decisions. Again, that is an empirical question. The language of quantification is very interesting. In some cases, we have learned to speak in numbers. As departments, sometimes you have to use numbers even if your decisions are based on qualitative factors. When you write up why you want to make a decision, you use numbers to justify the qualitative judgment that you made even if that wasn't the basis of it. You know that those numbers communicate well up the ladder. So, if you can find numbers to justify your decision, it is better. The language of quantification is probably stronger than it ever has been before – part of this process that we have been talking about.

José Ossandón: Kreiner put it nicely in the sense that it is a kind of illusion of management. My sense is that the institution I work for has solved this traditionally, like a federal system in which each department keeps the right to define their own sense of quality. The current dean of research, I think, believes he is keeping this principle. To him, as far as I understand, each department can perfectly define their own criteria of quality, as long as they choose journals that are high in the rankings. The assumption is that while each discipline might have different journals, all disciplines must arrange journals in competitive rankings or lists.

What would you tell to future practitioners?

José Ossandón: The last question is basically another way of asking the same question that I have asked you several times. I have used your *American Journal of Sociology* paper many times in teaching. Here, students will learn that a tool like a ranking does not only more or less accurately measure what it is supposed to measure. They learn that rankings impact organizations, and in their exams, students will be expected to explain how your mechanisms of self-fulfilling prophecies and commensuration work. I think I have managed to explain it, and those students that get it manage to explain it back in the exams – so far so good. But, with your paper, and more generally when I teach sociological things to students of management, I always end up with a sense that what we do is create a split world for these poor students. On the one hand, it is what they learn in traditional management classes; where they learn about quantitative tools that will supposedly help them to successful attain business goals. Then, the social scientists, tell them, sorry, your tools don't measure what they are supposed to measure, and, even if they do, they create all sorts of new problems. But, in a way, what no one tells them is how to navigate the tension between these two messages which will probably be a crucial problem in their future careers.

I think, what we learn from your deans is that these are management tensions. One the one hand, tools that promise to manage more than they can, and on the other hand that these tools create all sorts of side effects. They work in this world and with knowledge of the tensions, but probably without the tools to integrate these two dimensions. The question is, then, *what would you tell students of management? What could they or what would you like them to learn from your studies on the impact of rankings?*

Michael Sauder: I guess the two things that come to mind are always at least an attempt to take a step back and be reflexive about what you are using the number for, or what the limitations of the number are. So, you have that sort of moment of "let's think about this" and not take it for granted. That would be a great thing. What is the number designed for? Am I using it in a way that is consistent with its design? Just to be reflexive and reflective about the numbers you use. The second point would be this idea that there are multiple ways of valuing things. One of our concerns, I think, about numbers is that they become the dominant way of evaluating things. To have people understand … they are going to use numbers because they are so efficient and practical, but to at least try to think of other ways to value things and assess processes to complement the numbers that you have.

Wendy Espeland: One question that we raised in another context is something that managers can ask themselves, which is: what is important that is not being measured here? What are crucial aspects of management that we are not measuring? The term that gets used a lot in management is organizational culture. People talk about how difficult it is to change organizational culture, but how fundamental it is. So, one question you can ask is, okay, if organizational culture is so important to you, why is that not measured? Maybe you can measure it using some kind of survey. But what are the crucial aspects of the organization that you are directing that are not lending themselves to the numbers that are being circulated? So, morale … there are many important values inside organizations that are not necessarily captured by numbers. So, reminding managers that they also need to attend to those, I think is one valuable thing to do.

José Ossandón: You would push them to be more like qualitative sociologists? [all laughing]

Wendy Espeland: At least to consider being mindful of, as Michael is suggesting, the limitations and not just the measures, but the limitations of what lends themselves to easily being measured, and how that compares with other things that are really important.

José Ossandón: Well, these were my questions. Last thing, are you planning to study things in relation to management in universities? What are you thinking to do, if I can ask?

Wendy Espeland: One thing that I am interested in is that we have departments in universities in the US that do what is called "institutional research". They are in charge of producing all the numbers, basically, that universities use. A lot of the numbers that they use have to do with surveys and student feedback. They also produce the numbers and overlook the numbers that are used for ranking purposes. So, I think that would be an interesting thing to research if one were allowed access to these kinds of departments.

José Ossandón: Are you developing this further, Mike?

Michael Sauder: I have a graduate student from South Korea, and he is very interested in studying rankings in South Korea. That has me thinking about these institutionalization processes that we have discussed. The numbers there are really taken for granted, and not questioned anymore. It moves to this new stage of what does it mean for quantification … once quantification is kind of taking over, how do people manage that? How has it changed the power relations within the organization? How does it change how the university relies on the resource dependence situation with other institutions in the field?

José Ossandón: By the way, I could add that ended up in another taskforce, and it is about the CBS student evaluation system. This is another of these powerful numbers in universities. And I think it is quite interesting to me to follow the ways in which those who participate in this process think about these numbers, and how people who work in teaching and learning, they seem to be very reflexive about these things – maybe because people with a pedagogical background know a lot about the limitations and side effects of assessment systems. Well, but this is not to be developed now. Anything else that you want to say before we close?

Wendy Espeland: The main thing I want to say is thank you for allowing us to be part of this conversation.

Michael Sauder: Yes, thank you.

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Symposium contribution

Valuation Ecologies and Academic Governance

Kristian Kreiner

Abstract

University managers are forced to assume responsibility for more and more aspects of academic life. This essay focuses on academic publishing and how deans and department heads attempt to manage the volume and quality of publications at their university because others, including politicians and scholars, rate the quality and effectiveness of the university on their publication output. How managers assume and practice this responsibility for academic publishing may seem self-evident but proves to hide both paradoxes and loopholes. Reflections build on an empirical illustration derived from the adoption of a conventional publication strategy. The implementation of this strategy is fueled by a large dose of strategic expediency. However, such expediency incurs costs related to impression management when managers need to show a sense of command in response to a disappointing performance. Both material costs (time and money) and symbolic costs (demonstrating allegiance to an embarrassingly naive conception of academia) are incurred. Exactly because management is exercised on the premise of an embarrassingly naive conception of academia, the presumed coercive forces are exceedingly loose and ineffective. The room for value judgment at all levels of the university organization is not closed but rather enshrined (for good or bad) behind a façade of objectivity and factuality.

Keywords: strategic expediency; value judgment; governance; publication strategy; useless arithmetic

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Valuation ecologies in universities

We all live in multiple ecologies of valuation. In academia, "we conduct valuations, we are valued, and we manage valuation practices" (José Ossandón 2021). Moments of valuation are pervasive and fundamental to academic work. Often, such moments are complicated by an awareness of the fact that any act of valuation will be, directly or indirectly, valued by others. Thus, editors rank reviewers, university managers rate teachers' grading of student performance (Alvesson and Szkudlarek 2021), and authors judge the competence of their peer reviewers (Tsang 2013; Willmott forthcoming). Of special interest here, valuation at one level translates into new moments of valuation at aggregate levels of an organization. When the publication performance of individual scholars, departments, universities, and nation-states is made an object of valuation, these performances inevitably end up on the agenda of university managers and politicians. Since we collectively hold managers and politicians accountable for the outcomes of such valuation, they are forced to act in ways that appear to enhance underlying performance. Such managerial and political action has implications for individual scholars as well as for universities, but not necessarily in any intended manner.

The field of valuation studies has traced the important consequences of the dispersed ecologies of valuation in academia. Supposedly, immediate success and one's career depend on scoring well in the eyes of removed and impersonal rating agents – a supposition that empowers extrinsic perspectives on academic virtues and the role of universities. Both teaching curricula and research agendas will predictably give sway to the criteria on which ratings and rankings are based, not because of trust in the valuation methods and the fairness of their results but because of strategic expediency.

To illustrate such strategic expediency, I will focus on the publication strategy that my university has adopted. At face value, this publication strategy seems innocent, but managerially it harbors a foul irony that I will expose below. I will turn this publication strategy into an illustration of the absurdities of management in modern society since simple and useless arithmetic (see Pilkey and Pilkey-Jarvis (2007) and Baum (2011)) seems to rule institutions and organizations. In short, I claim that we suffer from the ecologies of valuation because we live in a society of governance that rests and depends on all kinds of valuation heuristics, ratings, and rankings.

Naturally, there are explicit and implicit costs (including opportunity costs) in governing universities in this way. Many such costs are derived from the need to ceremonially pledge allegiance to this notion of governance, despite its rather obvious limits and pretentious nature. However, I will conclude by arguing that such falseness also leaves room for experimentation and maneuvering in search of meaning and success.

Empirical illustration: the publication strategy

The Department of Organization (IOA) at Copenhagen Business School (CBS) adopted the IOA Publication Strategy 2019, which is posted on the CBS intranet[1]. In a preamble to the strategy document, the department reconfirms the purpose of publishing and the priority of quality over quantity. The dramatic changes taking place in the publishing world are also recognized. Then, the document continues:

> … in a response to a recent request [by the Dean of Research], and to give an indication of our shared research interests, we have assembled a list of key journals, the "IOA15 journal list."[2] The list is not meant to exclude, but to guide and inspire faculty, as well as inform stakeholders interested in the composite research profile of the department.

The aim is to accelerate the rate of publication within the IOA15 journal list, which is why annual statistics will be collected to monitor the progress. The implementation of the strategy will include holding:

> "… regular publishing seminars for faculty, including publication options for junior faculty, focusing on publishing in selected journals and at distinguished publishing houses. Among other things, this includes the invitation of editors from the IOA15 list for 'tips and clues' and [the] exchange of ideas."

At first, the codification of an IOA15 journal list seems to be a banal choice with little strategic import. The department had recently merged with another department, and the number of relevant journals on the list for organizational scholars was ten at best. Five of these are rated 4*, three rated 4, and two received a 3 in the Academic Journal Guide (AJG) 2018. The aim of the IOA15 list is to indicate the shared research interests of the faculty and to inform others about the composite research profile of the department, but it is not a list of the journals in which the faculty currently publishes. Thus, it represents an ambition for the future and a promise that faculty members will enter

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[1] https://cbsshare.cbs.dk/teams/afdelinger/ioa/Politikker/Forms/AllItems.aspx, accessed January 7, 2020.

[2] The list includes: *Academy of Management Journal*, *Academy of Management Review*, *Accounting, Organizations and Society*, *Human Relations*, *Journal of Management Studies*, *New Political Economy*, *Organization*, *Organization Science*, *Organization Studies*, *Public Administration: An International Quarterly*, *Public Management Review*, *Research Policy*, *Review of International Political Economy*, *Socio-Economic Review*, and *Sociological Review*.

the worldwide competition for publishing in the most prestigious journals in our field.[3]

Much of the supplementary text in the strategy document indicates awareness that this kind of strategy where publication efforts are aimed at a select group of journals is mainly a matter of impression management. It even promises to keep track of publications in all AJG journals, ensuring that there will be something to count. In the eyes of the dean (and most others), however, the template for a publication strategy includes such a shortlist. It is a sine qua non for appearing institutionally legitimate when the aspiration is to publish in the world's most prestigious journals. To support such aspirations, the department promises to teach its faculty how to get published in those journals, e.g., by holding seminars with the editors of these journals.

Empowering management

This trite publication strategy grows out of the fundamental presumption in modern society that everything important and valuable must be managed and organized. Before being manageable and able to be organized, it must be construed in such a way that allows it to be evaluated (at minimum, as good or bad), as management promises to make things better. My hunch is that nobody wondered why there was no collective publication strategy until the dean decided that publication was too important to be left to its own devices. At the same time, it is commonly acknowledged that academic publishing rests on a highly uncertain technology – akin to a lottery (Willmott 2021) – that severs any direct link between one's effort and the eventual outcome. Therefore, individual publication strategies are often of a hidden nature and primarily rationalized from past performance (Kreiner 2019) but, when explicated, they must assume a more prescriptive than descriptive stance.

The request to draw up an explicit publication strategy expresses a desire to manage, which also implies taking some responsibility for future publication practices. Such responsibility creates the need to develop some link between the available managerial buttons that managers press and performances of the managed faculty members. By and large, managers manage by allocating scarce resources in terms of money, career, and status. Thus, the dean may want to be able to reward departments with successful publishing performance with more money, more positions, more career opportunities, presuming that this will create an incentive for publishing more and better research. The challenge is to know who is performing well so that rewards are distributed fairly and rationally.

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[3] For data on the global article factory, see Angus Laing et al. (2021), "A New Future for Research". https://www.aacsb.edu/publications/link, accessed September 3, 2021.

Meeting this challenge calls for heuristics, as valuation studies would predict.[4] Across individual researchers and departments, publications are incommensurable. To be managed, they need to be made commensurable. The publication strategy serves such a purpose, reducing "singularities to comparabilities" (Esposito and Stark 2019: 7). Counting the number of publications in journals on the IOA15 list serves to measure success no matter the content of all such published and unpublished work. Ironically, the academic publication strategy encourages individual researchers to write to be counted, not to be read – which may not be a real choice anyway, as the fate of almost all publications is that only a few people read them.

As Esposito and Stark (2019) point out, the dean aspires to navigate the uncertainty inherent in academic institutions. This ability does not depend on the validity of the underlying heuristic. Even if we view it as being "simplistic, obscurantist, inaccurate, and subjective" (p. 3), it functions well as a heuristic because others (including our colleagues) observe us in terms of where we publish and how much. Anyone can find out the academic worth of everyone else without ever having read anything they have written. To produce statistics on publication performance relative to the publication strategy invites and enables the public to observe and evaluate the department in such terms. Having made it likely that others will view the department in such terms, the dean may now feel obliged and justified in doing the same.

We sense the strategic expediency in managing the complexity of universities in such a manner. Expediency rests on a certain measure of innocence – in March's (1999: 32) terms, the choice not to attend to the way life is – as opposed to ignorance, which is not knowing the way life is. Even if the faculty took the publication strategy seriously, it would seem to be a reckless deed to take managerial responsibility for future publication performance. The publication strategy is not likely to change the publication statistics in a positive direction. A lack of publications in top-tier journals is explained less by a lack of desire or attention, and more by a lack of luck, access, and connections. If that is true, a decision by more faculty members to submit to the same limited number of journals will have the immediate effect of increasing the competition, implying an even higher dependency on connections and luck. On average, the faculty will publish less than before in the target journals and probably publish less in other journals as well because time and effort are wasted on unsuccessful submissions. The most direct (but much slower) route to improving the publication statistics of the department would be a change in hiring practice, i.e., to hire faculty with strong publication records in the target journals.

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[4] It is paradoxical, if understandable, that we feel discouraged when our theories seem to hold predictive power in our own lives.

Also, the more indirect consequences of such a strategy are well explicated in the field of valuation studies. It may lead to a conventionalization of research topics, theories, and methods since the odds of publishing something slightly new will be slimmer. However, we should not forget that assessments of quality (also conventionalism) are essentially circular. True, the quality of my research is not dependent upon the journal in which it is published, were it not for the fact that this is exactly how others will socially assess quality and value. The reason is simple: By ranking journals as more and/or less valuable outlets, quality of content becomes an attribution that can be made based on the journal's rank. The circle is completed when attribution (quality of the publication) is used to explain and justify publication in a specifically ranked journal. In this sense, valuation is made possible because everyone may know the value of things without knowing anything about that which is being valued except where it was published. The dean, head of department, and my colleagues near and far will know my academic worth without ever wasting time on reading (or caring about) anything I have written. All they need to know is where I have published and how much. In essence, this form of valuation is an embodiment of the halo effect (Rosenzweig 2014).

Answering the heuristic question (where and how much you have published) for the unanswerable question of quality is in many places considered an irrational and human cognitive bias (Ariely 2008; Kahneman 2011). However, the legitimacy of management cannot be maintained were we to acknowledge the irrationality of the mechanisms on which it rests. The restoration of legitimacy is a task that requires another act of reductionism, namely, to instill a notion of reality in which heuristics and numbers are effective management tools.

In managing things beyond reach, we must act on the presumption that knowing such things is not necessary to managing them effectively. Critics point out that it is impossible to assess the effectiveness of such management – at least until it is too late to manage. Until then, the circular "logic" of the publication strategy is impossible to question. I will be seen as a mediocre academic if I have published little in the shortlisted journals; the accepted explanation for not publishing in the right journals is my mediocre academic qualities. Thus, smooth managers succeed by counting publications because they make a virtue of the circular logic involved, doing so in the interest of appearing to manage and control performance. Management is turned into the pretense of managing reality by numbers – unharmful, perhaps, but severely harmful in the multiple manners in which we must all contribute to the pretense of being managed effectively by such numbers.

Costs of maintaining the managerial pretense

The publication complex illustrates the paradox of modern management. The dean wants to gain control and authority over publication practices, but to do so he surrenders all valuation authority to private organizations like the Chartered Association of Business Schools, which produces the AJG with ratings of journals in every field of research. The dean becomes a calculating machine (Dewey 1915), assessing performance using a simple algorithm. The precondition for this type of management is that reality is simple enough to be managed by algorithms. This is not, however, the reality that most of us experience. Consequently, in line with valuation studies, we should consider simplification as a task, not a solution. We should explore the nature of this task and how it is achieved in practice.

To be able to consider the rank of the publishing journal as an index for the quality of papers it publishes and the worth of its authors, we must trust editorial decisions to be objective, fair, and based solely on the stated editorial policies. Presumably, the process is shielded from personal biases by a cumbersome double-blind review procedure. However, it is often forgotten that editorial decisions are made by editors who are not unknowledgeable about the identity of the authors and who are also known to the authors. In this sense, there is certainly reciprocity in the valuation of manuscripts. Editorial decisions cannot be made without a practical judgment that also necessitates a value judgment as to what counts and how much. Letting the identity of the author influence the editorial decision is a value judgment, just as is ignoring this knowledge. It is merely in the final editorial decision that such value judgments are settled. All decisions, including editorial decisions, necessitate a circular logic (Dewey 1915). How much weight the editor puts on the reviews, the status of the author, and the agreeability of the research with the editor's tastes, for example, is a matter that is situationally determined and ultimately derived from the outcome of the editorial decision. The fact that the decision, in some sense, precedes the value judgment does not imply, at least not necessarily, that the decisions are bad or wrong, but only that they cannot be claimed to rest on objective and rational criteria (Kreiner 2020).

Circularity in editorial decisions

A recent article provides insights into the publication complex and how it is made to look simple. William L. Gardner (2020), editor-in-chief of *Group & Organization Management*, has explained why he ends up rejecting some articles after they have been through one or more rounds of revise and resubmit. The statistics are informative. He desk-rejected 47% of submissions, implying that 53% were sent to the journal's reviewers. For 54% of the reviewed articles, authors were invited to revise and resubmit their articles. Of these resubmitted articles, 73% ended up being accepted for publication. Ultimately, 27% of the reviewed and revised manuscripts ended up being rejected. Gardner made a content analysis of the reviews and the rejection letters concerning these ultimately rejected manuscripts. He raises the pertinent question of why, after all the effort authors, reviewers, and editors put in, were these articles finally rejected?

Initially, Gardner observes that "consensus among the reviewers is rare" (Gardner 2020: 2), leaving both the space and a need for editorial judgment. His content analysis revealed that manuscripts rejected in the end suffered from several serious problems. More than 88% of them fall victim to theoretical issues, including "inadequate specification and/or rationale for research questions/hypotheses" and "problems with research model." In more than 64% of cases, "concepts and operationalizations [were] not in alignment." More than 88% of them built on an "inadequate research design." As a final example, more than 70% of the revised manuscripts were criticized for a "lack of responsiveness/success in addressing reviewer concerns" (Gardner 2020: 380, tab. 1).

Based on the high frequency of the individual concerns, we can conclude that most papers exhibited many or most of these fundamental problems. Left with the puzzle as to why a manuscript with such an assortment of fundamental problems was accepted for review and subsequently invited to revise and resubmit, I venture to suggest that such value attributions reflect and change with the stipulated fate of the article. They are not reasons for the outcome, i.e., the rejection, but explanation and justification for a decision to such an effect. In terms of substance, it is unlikely that the quality of the texts deteriorated so drastically during the revision. Attributions more likely changed in light of the altered status of the manuscript, from having some potential to being unrepairable. If given any weight, inadequate research design would have killed the article long before the revise and resubmit stage. That it eventually killed the article indicates a change in relevance and attention at the expense of some other unknown quality that carried it into the review procedure. Killing the article was a practical judgment on the part of the editor that implied making a value judgment that the research design was unacceptable, making the decision consistent and justifiable.

Of course, my claim is not that the manuscripts should have been accepted. The decision to reject may very well have been wise and reasonable. Rather, I claim that we draw false lessons from experience when mistaking justification for reasons. These lessons are biased by the just-world hypothesis (Hafer 2007) – that the ill fate of a paper is deserved because it lacked the required quality. The effect is that measurable performance is rationalized, and the hierarchization of academia, universities, and scholars is legitimized. There were so many things that they could have done to get published, e.g., to provide proper rationale for research questions. Management needs to ensure that the next time a submission to the journal is made, these things will get done correctly, i.e., in ways found adequate by editors and reviewers. However, managers and bureaucrats risk barking up the wrong tree.

Bureaucrats teaching scholars to write *publishable* articles

Probably with the best of intentions, management wants to improve the faculty's track record in terms of publishing in the right journals by teaching them how to write *publishable* articles. Seminars are organized, and editors of high-ranking journals are invited to preach. Most conferences have this type of seminar on the agenda, just as most journals regularly print editorials that spell out what is required to get published – events that Willmott (2021) characterizes as self-congratulatory. However, the lessons taught are inadequate and banal, if not perfectly wrong. They suffer from the same problems as Gardner (2020) ran into when mistaking justification for reasons.

We are taught that manuscripts should cover the relevant literature and represent it correctly – which is what almost 53% of the rejected manuscripts after the revise and resubmit process failed to do. The truth of this claim is not difficult to appreciate, but the degree to which these manuscripts differ substantively from the accepted ones cannot be taken for granted. Again, such assessments reflect a value judgment that is enforced by the practical judgment at hand, i.e., to reject or accept the manuscript (Dewey 1915). Because a rejection must be explicitly justified, such scholarly problems will be attributed to the manuscripts in the very same process as that in which the rejection is decided. They will be discounted if the outcome is different.

Such teaching based on a naive and simple model of editorial decision-making will unlikely improve the faculty's odds of getting published. A thought experiment will illustrate why. Suppose that the teaching proved successful, and all involved parties learned to write academic papers meeting the highest standards required by top journals and enforced by their editors. Editors would face the same practical judgment as before, i.e., to accept a few manuscripts and to reject the rest. Even if reviewers, who are not faced with such practical judgments, were generally to appreciate all the manuscripts as publishable, editors would still need to select a few – and be charged with the responsibility for legitimately justifying their editorial decisions. The practical judgment necessitates the invention of idiosyncratic criteria or weighting contingent qualities (like the identity of the author) more strongly.

Allegiance to the notion of governance

The publication strategy is only one among many similar types of governance that universities adopt to look rational and efficient. For example, my department has also adopted a funding strategy, and all faculty members are expected to raise external funding for their research, both to increase the university's resource base and to enhance their careers. Public research councils are an important target for applying for funds, but the rejection rate is extremely high. Again, quality assessment of the application is based purely on its success, and since failure is the norm, there is seen to be a huge need for improving the quality of applications. Thus, there is an elaborate procedure for assuring the quality of applications that also involves the dean's office. Similarly, seminars are organized on how to write successful applications, presuming that competition between incommensurable research applications is fair, objective, and rational. Lessons here are as dubious as the lessons from unsuccessful publication efforts.

To my mind, the highest costs of this type of governance stem from the humiliation of critical scholars who must talk and act in ways that signal their allegiance to a ridiculously simple notion of reality for the dean to look as if he is managing departments and scholars. Such acquiescence to an institutional lie may be strategically expedient because the dean's decisions also involve a value judgment as to what counts and how much – a value judgment that is co-determined by decisions also made for other reasons. There is much about governance that should remind us of the emperor's new clothes, except that, in our case, the boy is required to act as the other weavers of rationale for governance, ratings, and rankings.

The crack in the wall

In conclusion, we celebrate ratings and rankings because they enable us to valuate things that we do not know; because they enable us to manage things that are beyond reach; because they order and stratify a complex and disorderly place like academia. Ratings and rankings are helpful – they help us navigate turbulent and uncertain situations, and they help us in the face of practical tasks like hiring and firing. They are also dangerous because they postulate a reality that makes them helpful in making the right decisions and conducting proper management. In such a reality, there is no opposition between writing to be counted and to be read, and management should be a matter of algorithmic calculation, relieving deans and others from making subjective judgments.

However, this postulated reality is markedly different from the reality in which we all practice – including the reality in which deans operate. This is where I sense a crack in the wall. The circularity in all forms of valuation processes may be hidden, but the valuator will never be relieved from making a value judgment when facing a practical situation that requires a choice. Dewey is right when he claims that we cannot act before deciding what counts and how much. In specific situations, there will always be more aspects and considerations than the numbers, rankings, and ratings. I owe my career to this truth.

A long time ago, I was lucky enough to be given a university position because another applicant with a much longer publication record handed in his application slightly after the deadline. Knowing the circularity of value judgments, also involving a judgment of what counts and how much, I take this episode as an indication that the head of department wanted to hire me, not the other person, because it would have been easy for him to include the slightly delayed application in the competition. Taking the deadline literally was a value judgment – and a contingent one.

Presumably, that judgment changed my career, but the point here is that management practice will necessarily involve practical judgments that also imply value judgments. There is no way of knowing, given the circumstances, if the head-on competition between two publication records, a short one and a long one, will necessarily recognize the long one as the winner. What we do know is that if the short one were to be given the job, it would have required further, more substantive justification, and therefore more work. We all know that many new concerns and criteria may be invoked in the assessment process (Kreiner 2012).

Even if ratings and rankings are easy and impeccable justification for managerial decisions, they are not necessarily decisive for the outcome. While we cannot trust our managers to be reflective in making such decisions, at least we know that decisions necessarily imply a value judgment that allows them, if motivated, to also make sensible decisions. Such sensibility might more likely be invoked by other means than acquiescence and strategic expediency. As Elangovan and Hoffman (2021) propose, we might experiment with remaining true to our identity as researchers, e.g., by writing to be read, not counted. After all, nobody reads journals any longer, because it is possible to effectively search and find relevant articles no matter where they are published. The procedural rationality that so dominates our thinking about management and practice will never promise a substantially rational outcome (March 1994). There is no way to prescribe a procedure for writing successful manuscripts and applications, and if such success is the aim, we must experiment with ways acting sensibly instead of searching for a foolproof way of aiming (Ryle 1949 [2000]). This is true for deans as well as scholars. So, let me close by quoting Cohen and March (1974) to the effect that it may be in the interest of college presidents (and deans) to encourage experimentation rather than conforming to the current norms of academic life:

> College presidents who can forgo at least some of the pleasures of self-importance in order to trade status for substance are in a strong position. Since leaders receive credit for many things over which they have little control and to which they contribute little, they should find it possible to accomplish some of the things they want by allowing others to savor the victories, enjoy the pleasures of involvement, and receive the profits of public importance. (p. 209)

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