

# Can Culture Account for Investment Expectations?

Michael Lainé

## ▶ To cite this version:

Michael Lainé. Can Culture Account for Investment Expectations?. Journal of Economic Issues, 2016, 50~(1), pp.72-94. 10.1080/00213624.2016.1147895. hal-04265074

## HAL Id: hal-04265074 https://hal.science/hal-04265074v1

Submitted on 17 Nov 2023

**HAL** is a multi-disciplinary open access archive for the deposit and dissemination of scientific research documents, whether they are published or not. The documents may come from teaching and research institutions in France or abroad, or from public or private research centers.

L'archive ouverte pluridisciplinaire **HAL**, est destinée au dépôt et à la diffusion de documents scientifiques de niveau recherche, publiés ou non, émanant des établissements d'enseignement et de recherche français ou étrangers, des laboratoires publics ou privés.



## Journal of Economic Issues



ISSN: 0021-3624 (Print) 1946-326X (Online) Journal homepage: http://www.tandfonline.com/loi/mjei20

# Can Culture Account for Investment Expectations?

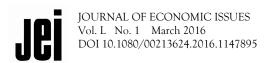
#### Michael Lainé

**To cite this article:** Michael Lainé (2016) Can Culture Account for Investment Expectations?, Journal of Economic Issues, 50:1, 72-94, DOI: 10.1080/00213624.2016.1147895

To link to this article: <a href="http://dx.doi.org/10.1080/00213624.2016.1147895">http://dx.doi.org/10.1080/00213624.2016.1147895</a>



Full Terms & Conditions of access and use can be found at http://www.tandfonline.com/action/journalInformation?journalCode=mjei20



## Can Culture Account for Investment Expectations?

Michael Lainé

**Abstract:** Until recently, risk-taking in investment decisions has been explained by cognitive biases and emotional urges. I would like to propose an alternative explanation, based on the work of Pierre Bourdieu, who links cultural capital to risk-taking. His concept of cultural capital has a very broad meaning, as it encompasses technical skills, aesthetic preferences, verbal facility, general cultural awareness, educational credentials, and artistic competencies. On theoretical grounds, one can assume that a high level of cultural capital enables the taming of uncertainty and allows for temporal horizons that cover longer terms. I test this hypothesis by conducting and analyzing a survey of 307 entrepreneurs. I define risk-taking in two ways: (i) in a somewhat mainstream way, on the basis of expected utility, and (ii) in a heterodox way, in a qualitative, context-dependent setting. I find that, in both cases, there seems to be a link between cultural capital and risk-taking. Furthermore, it seems to make financing issues more salient. I conclude by opening a discussion about the heterogeneity of entrepreneurs and their animal spirits.

**Keywords:** Bourdieu, cultural capital, entrepreneur, investment expectations, risk-taking

IEL Classification Codes: D21, D22, D81

Investment decisions are vital and, yet, entrepreneurs have very little basis on which to form their expectations. "Our knowledge of the factors which will govern the yield of an investment some years hence is usually very slight and often negligible" (Keynes 1936, 149). In spite of this conundrum, entrepreneurs do invest. Fundamental uncertainty does not imply fundamental indecision. How, in actual practice, do entrepreneurs "defeat the dark forces of time and ignorance which envelop our future" (Keynes 1936, 149)? The usual answer, following John Maynard Keynes's insights, is that they resort to a convention. "As living human beings, we are forced to act. Peace and comfort of mind require that we should hide from ourselves how little we foresee. Yet we must be guided by some hypothesis. We tend therefore to substitute for the knowledge which is unattainable certain conventions" (Keynes

Michael Lainé is a junior lecturer of economics at Bordeaux University (France).

1987, 124). This kind of explanation points to institutions and social relations. Therefore, in estimating the prospects of investment, we must have regard to the influence of social context.

My aim here is to propose an explanation of investment expectations by drawing on methods and concepts of sociology — namely, the theory of Pierre Bourdieu. More precisely, four decades ago, Bourdieu assumed that there could be a link between risk-taking in investment decisions and what he dubbed "cultural capital" (Bourdieu 1974). Unfortunately, he never tested his hypothesis empirically, even though it was very consistent with the rest of his theory. Despite the fact that *Distinction*, the book in which Bourdieu (1979a) comprehensively developed his concept of "cultural capital," was ranked the sixth most important sociological work by the International Sociological Association in 1998 (Coulangeon and Duval 2013), his "cultural capital hypothesis" (hereafter CCH) escaped the notice of economists and sociologists alike. I would like to expound and actually test this hypothesis.

Bourdieu (a proper definition follows later in the paper) asserted that the "concept of cultural capital covers a wide variety of resources, such as verbal facility, general cultural awareness, aesthetic preferences, scientific knowledge, and educational credentials" (Swartz 1997, 43). Bourdieu proposed two reasons why a high level of cultural capital might be linked to higher risk-taking: (i) a certain taming of uncertainty and (ii) a specific disposition toward the future. Cultural capital, he asserted, enables one to have a symbolic command over one's own economic practice by spotting opportunities and having a more complete understanding of one's surroundings and one's self. He called it a "feel for the game" (Bourdieu 1980). This is the first point, which also allows for a sense of safety enabling one to be more audacious. Furthermore, it entices one to have temporal horizons that cover the longer term. This is the second point. The first part of the explanation ascribes riskaversion to uncertainty. To a certain extent, a high level of cultural capital makes people more rational, albeit more inclined to take risks than the average. The second part of the explanation designates a phenomenon possibly leading to overconfidence, thus making people less rational to a certain extent.

Two incidental groups of remarks are in order. First, the CCH is congenial to institutional economics since it complies with the six points defining this stream of research according to Geoffrey Hodgson (1998, 173): (i) There is a strong "degree of emphasis on institutional and cultural factors that is not found in mainstream economic theory"; (ii) "the analysis is openly interdisciplinary"; (iii) "there is no recourse to the model of the rational, utility-maximizing agent"; (iv) "mathematical and statistical techniques are recognized as the servants of, rather than the essence of, economic theory"; (v) "the analysis does not start by building mathematical models: it starts from stylized facts and theoretical conjectures concerning causal mechanisms"; (iv) "extensive use is made of historical and comparative empirical material concerning socio-economic institutions." Second, the CCH seems to be complementary rather than opposed to other possible explanations of investment expectations, be they animal spirits (e.g., Akerlof and Shiller 2009), prospect theory (e.g., Kahneman 2011; Kahneman and Tversky 1993), affect heuristic (Slovic et al.

2002, 2004), risk-as-feelings hypothesis (Loewenstein et al. 2001), or even bounded rationality (Gigerenzer 2001; Simon 1956, 1959, 1979).

Whether entrepreneurs are rational or not is not my concern here. Rather, my purpose is descriptive. I define "risk-taking" as taking more risks than the average population of entrepreneurs as regards productive investment (and not portfolio decisions). Since the topic has not been explored so far, my method is a novel one. After drawing a theoretical analysis, I empirically test the CCH by building a cultural capital index on the basis of ordinal and categorical variables.

I organize the paper as follows. In the first section, I give a proper and thorough definition of cultural capital. In the same section, I tackle the comparison with a concept more familiar to economists as "human capital," and stave off some habitual misconceptions. I also ponder the questions as to whether this concept evolved and how it should be understood today. In the second section, I present a field study. In 2013, 307 French entrepreneurs from the same industrial sectors gave complete answers to a questionnaire. Then, I expound on how I measured cultural capital and built indices out of the questionnaires. In the third section, I present the results in two different fashions: in regard to the "gold standard" of decision-making (also known as SEU), and in relation to a context-dependent setting. Finally, I make some concluding remarks.

#### What Is Cultural Capital?

First, I introduce Bourdieu's very definition. In order to do so, I also need to see what does not constitute cultural capital, since there are many competing explanations about it. It differs from "human capital" on several points. Furthermore, one influential work in the field of cultural practices puts forward the model of "omnivorousness" as opposed to the selective model supposed to be Bourdieu's. I consider whether the concept of cultural capital is specific to a given place and time (France of the 1960s and 1970s, for example), as it has been sometimes asserted. In light of these developments, I reflect on what uses of this concept are to be made today.

## Bourdieu's Original Definition

Above all, cultural capital is a metaphor. A metaphor is a specific kind of analogy (Bartha 2013; Holyoak and Thagard 1995). "Two situations [propositions or concepts] are analogous if they share a common pattern of *relationships* among their constituent elements, even though the elements themselves differ across the two situations [propositions or concepts]. Identifying such a common pattern requires a comparison of the situations [propositions or concepts]. ... Typically, one analog, termed the *source* or *base*, is more familiar or better understood than the second analog, termed the *target* ... This asymmetry in initial knowledge provides the basis for analogical transfer — using the source to generate inferences about the target" (Holyoak 2012, 234). Here, the source is the concept of "capital" and the

target is the concept of "culture." A metaphor is nothing, but an analogy where the source and the target are remote. One should bear in mind that only certain features are similar between the target and the source. In other terms, there are bound to be differences, and the metaphor holds despite these differences (Bartha 2013). For instance, the sentence "Socrates is a lion" is undoubtedly a metaphor. The differences are obvious: A lion is an animal and Socrates is a man, but the lion is not a philosopher like Socrates. The analogical transfer in question here concerns certain specific features (and it is because of these features that the metaphor was shaped): A lion is strong, difficult to tame, noble, and proud, and so is Socrates. The richness of metaphors stems from their being suggestive (Holyoak and Thagard 1995). Thus, even if one draws a list of common features between the source and the target analogs, there might be some unexplored meanings, more or less deep and relevant. That is why Deirdre McCloskey (1983) asserted that metaphors are engaged in a transaction between contexts: Given the circumstances, the relevant features may slightly vary.

Consequently, I should first discuss which properties justify the use of the metaphor and which are to be left aside. However, there is no inclusion of all the relevant features in a definition, since the purpose of a metaphor is to remain suggestive. In the following discussion, I limit myself to giving only the most important features. The fact that this concept is mostly metaphorical should not deter one from using it, since most economic models and theories are, in fact, metaphorical (McCloskey 1983, 1995) — from "human capital" to "random walk," "equilibrium," "market," and "game theory" (for instance).

No doubt that "capital" has many meanings across time and disciplines (Hodgson 2014). So, the definition I give does not pretend to be the sole possible one. It is the one retained by Bourdieu (1979a, 1986) and the one that works for my purposes. First of all, capital is a resource. Thus, it can be spent, accumulated, and transmitted. Second, it is accumulated labor. Third, it is a means of social exchange. Fourth, it is a standard of value. Within the limits of a national territory, it has universal validity. Still, it can be converted for usage in other territories. Fifth, capital has legal value and entails legal entitlement. Last but not least, capital is power and confers a social position.

These six features are common to both the source and the target analogs. As a result, culture functions as a resource. It encompasses a very wide range of know-how, awareness, knowledge, skills, and tastes. Cultural capital is accumulated labor (work of self-improvement). It takes time to acquire. It can be the object of investment and exchange, and it can generate profits. These profits can take any form (monetary, symbolic, social, etc.) since cultural capital can be converted into other types of capital. Like any form of capital, it is its relative scarcity that determines its value, hence the importance of social relations and institutions that determine this relative scarcity. Its legal value is, in part, given by academic qualifications and educational achievements. Thus, grades and diplomas are the institutionalized forms of cultural capital. They correspond, so to speak, to the property rights of the source analog. Finally, capital is power and power is an "appropriated future" (Bourdieu 1974, 16). The more capital at one's disposal, the more successful one's anticipations.

Bourdieu (1979b) delineated three forms of cultural capital. First, there is the embodied form — that is, each person's culture, "long-lasting dispositions of the mind and body" (Bourdieu 1986), what is called "cultural capital" without further precision. Second, there is the objectified form — the objects or assets (books, dvds, paintings, machines, etc.). Finally, the institutionalized form is the academic qualification (the value attached to grades and diplomas).

Most of the time, embodied cultural capital is acquired little by little in social relations. Family and relatives, for instance, can transmit their own cultural capital merely by discussion or common practice. "Cultural capital is an asset turned into a being, an embodied feature, which became integral part of the person" (Bourdieu 1979b, 4). It is incorporated most of the time through unconscious acquisition. Moreover, cultural capital in its "objectified form" can be incorporated by virtue of its sole presence that "exerts an educational effect" (Bourdieu 1979b, 5).

As with any metaphor, certain features of the source analog have no equivalent in the target analog. Thus, there are differences that are worth mentioning. It cannot be instantaneously transmitted, cannot be indefinitely accumulated (it dies with its holder), and is characterized by a higher degree of concealment (Bourdieu 1979b). Indeed, familiarity is enough to acquire part of cultural capital, which means that transmission by parents and relatives is mostly implicit, if not denied. For example, the simple fact of being raised in a family where the everyday language spoken is highbrow, endows the offspring with a higher cultural capital, all other things being equal. Furthermore, cultural capital cannot be used as collateral. It can be bought and sold with time and money. However, when it is spent or sold, cultural capital is not lost, but remains in the hands of its holder. It depreciates with time, but only when it is not used. It has no market value, but its value is given by what Bourdieu calls the "field." To a certain extent, the field plays for the target analog the role that the market plays for the source analog. It cannot be directly used in contracts or to purchase goods and services. Instead, it can be converted into "economic capital," for instance, by improving one's productivity or the image of the products one sells, which can be used to purchase goods in turn.

This is where social structures and institutions enter the scene. As I have just put forth, the value of cultural capital is given by the "field." According to Bourdieu, society is divided into fields, each of them endowed with specific rules or rationales, called "nomos." A competition takes place in each field for the highest position given by the possession of all sorts of capital (cultural, symbolic, social, and economic). The more capital one possesses, the higher one's social position. Fields are not immovable. They are "at the same time force fields and fields of struggles in order to alter this balance of power" (Bourdieu 2000, 61). Fields influence the way people expect and decide through their "habitus." While the former are tantamount to social structures, the latter would be the "embodied" social structures — that is, the social structures turned into a living individual. The volume of all types of capital, their structure (i.e., the relative relations between them), and the social trajectory comprise the habitus (Bourdieu 1980). Thus, cultural capital matters because it is one of the bases of this habitus, defined as cognitive structures of preferences, expectations, and actions that

comprise the "practical sense" of the individuals in the form of "dispositions, (derived from) a differential position in social space that function in practice without *necessarily* acceding to explicit representations" (Bourdieu 1989 translated by Clough 1996, 2). This incorporated, unquestioned aspect of habitus (hence of "cultural capital") is central to Bourdieu's theory, which is a theory of non-deliberative, "instinctive" expectation. He went on stressing the "generative" properties of the habitus: Tastes and cultural practices are its outcome. This "quasi nature" (Bourdieu 1980, 94) is not fully deterministic in that it leaves room for change and improvisation. Nonetheless, it is a potent cause for particular behavior. According to Bourdieu, most of human actions display a certain family likeness due to their common underlying mechanism, the habitus.

Consequently, one may draw two implications. First, that cultural capital is "incorporated" or "embodied" means that it automatically gives rise to attitudes and expectations most of the time, without conscious awareness. In other words, cultural capital determines, in part, one's expectations. Second, one should bear in mind that cultural capital is context-dependent. It has no value of its own, since its value is constantly redefined on the basis of all social interactions. This is where the analogy of the field and the market ends, since goods have values in the minds of buyers and sellers before they go to the market, while cultural capital has none outside the field (Bourdieu 1984).

As a concept, cultural capital is also more than a metaphor. It says that taste is not just about taste. It requires knowledge, skill, and awareness (Bourdieu, 1979a). For instance, enjoying a vanguard painting or book implies, first, an understanding of it. Yet, such an understanding cannot be taken for granted. It necessitates mastering or comprehending a certain number of codes to have some familiarity with similar works of art. Every piece of art is, more or less, immediately understandable. The less understandable a given piece of art, the more cultural capital it requires, and vice versa. Thus, tastes are linked, *up to a point*, to competencies, hence the broad meaning of cultural capital that encompasses skills, practices, and preferences. The value ascribed to a cultural item or practice tends to manifest the value of the person because, even if this item or practice does not require high competencies, it has some scarcity and denotes some knowledge. This knowledge does not necessarily appear as such, but is intertwined with "good taste."

## How Does Cultural Capital Differ from Human Capital?

Economists might be accustomed to thinking in terms of "human capital," a concept devised by Theodor Schulz and Gary Becker many decades ago and still very popular. It should be noted at the outset that Bourdieu kept on heaping fierce criticism on Becker's work (Lebaron 2004, 2014). First of all, Bourdieu castigated the concept of human capital for being one of maximization. According to him, the scientist who believes that individuals maximize, or behave as if they did, succumbs to a "scholastic illusion." Such a scientist would be confusing the logical necessities of his/her model with the practical ones of real action by creating an "anthropological

monster, this theoretically minded man of practice" (Bourdieu 2005, 209). Instead, in their actual anticipations, people more readily use their "practical sense" or "feel for the game" —their "habitus" — without any cost-benefit calculation. Second, Bourdieu chastised Becker for not taking proper heed of institutions and social structures. Indeed, in the third edition of *Human Capital*, Becker (1993) paid attention to institutions only insofar as they contribute to the creation of investment opportunities in human capital. Clearly, institutions have no role to play in matters of individual capacities and expectations. Yet, this is an unwarranted assumption, warned Bourdieu (1986). Social structures matter because they help shape the way people behave. They cannot be considered in the purely strategic setting of maximization under constraints, since they impact beliefs as well as aspirations. Another implication comes into play: Capacities are not a substance or a "natural" feature that could be evaluated independently of culture since social norms or institutions that evolve over time hold sway over the perception of these capacities.

A sweeping point might be added. Even if one leaves aside these differences in their respective theoretical backgrounds, the metaphors of human and cultural capital differ by definition. In Becker's metaphor, capital is a durable resource susceptible to depreciation. It encompasses all activities that create "knowledge, skills, and a way of analyzing problems" (Becker 1993, 19). "These are all forms of capital in the sense that they yield income and other useful outputs over long periods of time" (Becker 1993, 15). Of course, these outputs need not be material. In Bourdieu's metaphor, capital is also a durable resource. But the main discrepancy is that it does not necessarily yield income since it has a value in and of itself, no matter how fleeting and changing. Capital is already a reward. As a matter of fact, people's main objective is to accumulate all sorts of capital. By comparison, Becker's metaphor seems to imply that capital is a means to improving labor productivity or one's "psychic income" (Becker 1993). It is not an end. Thus, not only does investment in human capital pertain to on-the-job and schooling trainings, but also to morale and "physical health" (Becker 1993). Given his theoretical framework, it has to be the case since a shorter life diminishes returns and a low motivation hampers labor productivity. In "cultural capital," morale and "physical health" have no part to play. In this regard, cultural capital is more precise and consistent than its "human" counterpart. Furthermore, it is unclear whether "human capital" could also include "social capital" since, to use Becker's very terms, it also consists of "knowledge, skills, and a way of analyzing problems" susceptible to "yield income and other useful outputs over long periods of time." Once again, Bourdieu's theoretical apparatus enables the distinction between the social and cultural aspects of individual behavior. Finally, Bourdieu's definition covers cultural tastes, a dimension totally absent in Becker's work. Tastes have scarcity values, which is a major feature of cultural capital.

#### Culture in an Institutionalist Perspective

The fact that culture has a value in and of itself, and cannot be subject to an instrumental reasoning or rational calculus, was repeatedly put forth by

institutionalists over the years (e.g., Billig 2000; Hayden 1988; Mayhew 1987). Knowledge and reasoning cannot be placed outside of culture's purview, as is the case in standard theory, which considers knowledge as given behind the smokescreen of "probability" and takes culture as given behind another smokescreen — "utility." In this purely instrumental setting, rationality (understood as a maximizing calculus of "probability" times "utility," be it unconscious) is seen as a universal feature, upon which cultural values or beliefs would grow. Very well versed in anthropology, Bourdieu likewise chastised standard theory at length for its lack of historical and cultural plausibility.

Institutionalists have usually put great emphasis on symbols (e.g., Alverson 1986; Mayhew 1987). Such a strong emphasis is germane to Bourdieu's notion of symbolic capital and his definition of social games people play (i.e., "fields") as having this sort of capital as their major issue. F. Gregory Hayden (1988) accurately points out that (what he calls) "cultural values" automatically preclude some alternatives from all possible states of nature. They act as some biased mechanism, rather than in a purely deterministic fashion. Undoubtedly, Bourdieu would have agreed since his main criticism of Herbert Simon consists of saying that human beings are socially bounded (e.g., 1980, 1997). That is, the set of options among which they have to choose is not given by nature or merely by time and cognitive limitations, but by some sensible automatic qualification of options strongly influenced by all types of capital. The point here is twofold: Not only does culture shape, to some extent, what is to be considered an "option" by the decision-maker, but it also eliminates some of these options (sometimes all but one, though not necessarily). At this point, the terrain might seem slippery. Arguably, the crux of the matter of any institutionalist or sociological attempt remains in paying more than lip service to the consensual claim that "the individual is both a producer and a product of her circumstances" (Hodgson 1998, 177). Bourdieu's theory enables one to go one step beyond such an abstract claim by making cultural capital (among other kinds of capital) both a strategic resource and a social constraint, since its very value depends on the ever-changing amounts and contents of capital possessed by all individuals in a given "field." Because capital is a relation, not an essence, it encapsulates institutions.

To the best of my knowledge, institutionalists seem to have focused on culture as the basic holistic unit of analysis (Adkisson 2014; Alverson 1986). Thus, their perspective is more readily placed at a macro-level. They have little studied the influence of culture on actual, specific economic behavior. In other words, they have scantly developed a micro-level perspective (in that they did not design a model of individual behavior), and few field studies have emerged. As Richard V. Adkisson (2014, 93) accurately remarks, "[i]nstitutionalists, original and new, have built strong cases for the importance of culture to economic decisions, yet have been less successful at ... identifying relationships between *specific* economic behaviors ... and *specific* cultural traits." This is where Bourdieu may be insightful. His perspective is as much macro as it is micro. It offers a stimulating way to bound together the two main traits of institutionalism — instinct and culture (Redmond 2006). It seems to me that Bourdieu had a more precise and operational definition of "cultural capital" than

institutionalists when they talk about "culture." Finally, provided that I am correct, none has analyzed individual culture thus understood in relation to entrepreneurial decision-making. Given that Bourdieu's theory is very much in tune with the six features defining institutionalism (Hodgson 1998, 173, outlined above), institutionalists may benefit from his work.

#### Two Widespread Misconceptions

Many scholars seem to have taken the metaphor of culture as capital much further than Bourdieu. For instance, Michelle Lamont (1992), Richard Peterson (1994), Richard Peterson and Roger Kern (1996), Tak Chan and John Goldthorpe (2005) assert that Bourdieu's concept rested on the opposition between high-brow and low-brow cultures. As a matter of fact, at the time Bourdieu conducted his surveys (1960s and 1970s), it was the fundamental opposition: Those having low-brow tastes and activities were said to have little cultural capital, whereas those enjoying high-brow tastes and practices were supposed to have huge cultural capital (Bourdieu 1979a). Furthermore, conceiving of taste as implying some competence seems to entail that, since high-brow culture is more demanding, it has to require higher cultural capital. These authors seem to have taken the metaphor too literally. As a dollar is a dollar, cultural capital would have a substance or an essence. Yet, Bourdieu made it clear that his concepts of capital and habitus are relational (Christoforou and Lainé 2014; Vanderberghe 1999) – that is, they have no meaning on their own. The value of a form of capital depends on the value of all other forms of capital possessed at a given period of time by all other individuals. It is a question of discrepancy, of distinctive features. On many occasions, Bourdieu warned that cultural values change through time: Verdi's Traviata has now waned (Bourdieu 1979a) and tennis and golf have become more accessible (Bourdieu 1994). Thus, the fact that, at one point in time, high-brow culture defined cultural capital does not imply that it had to be, eternally and across countries (Prieur and Savage 2011). It has always been an empirical matter. Indeed, Bourdieu took due account of history — i.e., change through time. Bourdieu devised his concept of cultural capital on the basis of two field studies, conducted and analyzed thanks to a statistical technique called "multiple correspondence analysis" (Saint-Martin 2013). In other words, he did not have an a priori hypothesis to be tested. His method was inductive. Nonetheless, the capital metaphor proves to be helpful if one bears in mind that money may be subject to inflation: The value of some cultural practices and tastes plummet due to too high a demand. Conversely, others skyrocket or remain more or less stable.

Bourdieu's theory implies that individuals are unequal as regards culture. Some people have more culture than others. This is where the metaphor is helpful. Likewise, some people have more money. But this has nothing to do with any elitist form of culture. It has to do with distinctive practices and tastes. In other words, it is the relative scarcity of these practices and tastes that bestows value. Yet, this scarcity cannot be presupposed. It is an empirical matter. The habitus being the underlying scheme behind these practices and tastes, it would be better to assess it. Yet, one may never have direct access to it. One can only measure the perceptible, and Bourdieu's

field studies are no exception to this universal rule. What is perceptible are the consequences of the functioning of the habitus — i.e., practices and tastes. Culture is also meant to be perceived and recognized. It is Bourdieu's contention that culture is a specific kind of power, unequally distributed, whose social principle partly lies in distinction (i.e., "relative scarcity"). His theory is meant to be descriptive, not normative. Whether one likes this feature of modern societies is beyond the purview of science, says the notorious sociologist. Would it be elitist to observe that people are unequal as regards money or wealth, despite the fact that, as social beings, humans all engage in economic activities? As social beings, people may all be acculturated, yet not every activity can be counted as a cultural one (thus some people are bound to have more culture), and culture is differently perceived (thus granting some people more power).

Another widespread misconception stems from the work of Paul DiMaggio (1982). This author attempts to disentangle technical skills from the other components of cultural capital. It has been convincingly argued that there is no severing technical skills or ability/talent from the more general components of cultural capital (Larreau and Weininger 2004) since "ability or talent is itself the product of an investment of time and cultural capital" (Bourdieu 1979b). Consequently, it is not possible to deconstruct cultural capital into whatever components. It has to be a unitary concept. In other words, each component of cultural capital is influenced by the other components, and they cannot be taken in isolation. Technical skills are gauged though cultural capital. Thus, the same technical skills will not be judged on the same footing depending on the presence or absence of other components of cultural capital.

# Do Recent Evolutions of Cultural Practices Change Our Understanding of Cultural Capital?

It has often been asserted that Bourdieu's measure of cultural capital may be highly specific, since it was devised in a given place and time (Peterson and Kern 1996; Warde 2007). So, how do recent changes affect our understanding? It is a legitimate question since it is supposed to be a highly empirical concept. At least four major changes have occurred, three pertaining to practices and tastes and one to technological and social transformations. High-brow does not define cultural capital anymore. Rather, cultivated people tend to have multi-faceted practices and tastes. They are "omnivores" (Bennett et al. 2005; Coulangeon 2010, 2011; Peterson and Kern 1996). They enjoy every genre, be it high-brow (e.g., opera, classical music) or low-brow (e.g., hard-rock, rap). Still, differences remain in that they do not enjoy the same authors/artists, and some of them have more distinctive value. The way they enjoy the same authors/artists also gives different cultural value (Prieur and Savage 2011, 2013). Nowadays, the open-mindedness to a cosmopolitan culture seems to be a salient feature of high cultural capital (Kahma and Toikka 2012; Karadag 2009). Finally, Bourdieu's definition of culture might have been too narrow since it focused on arts. Yet, today's scientific knowledge and technological know-how are becoming increasingly important. If one sees culture in its broadest sense, as ways of life and

behavior (what Bourdieu did by including sport, cooking, and home decoration), a proper place should be given to the internet and new technologies (Prieur and Savage 2013).

Omnivorousness has far-reaching consequences (Bennett et al. 2005; Warde 2007). Some people are engaged in cultural practices, while others are not engaged at all. Consequently, the measure of cultural capital seems to be of an additive nature. The more cultural practices one has, the higher one's cultural capital. However, since differences remain within a given genre or practice (the enjoyment of some artists' work is rarer and thus requires more knowledge or competence), it follows that not all tastes are equally weighed. Thus, the value of a specific practice or taste is still relational since it depends on the functioning of the whole field.

Bourdieu's theory plunges deeper and farther than that. It also broaches the issues of legitimacy domination and agency structure. Judgments of taste are said to operate as class judgment. Since "to exist is to differ" (Bourdieu 1992, 393), social existence lies in the differentiation of cultural practices and tastes. A taste for a given practice often implies a distaste for other practices, hence the social barriers created by cultural capital. Because they are rare, some practices and tastes appear more valuable — that is more legitimate — thus granting their holders more power. In Bourdieu's theory, capital is both a strategical resource and a cause for action. It determines one's expectations and reactions. At the same time, one can use capital to achieve one's goals.

As these two issues remain moot points (Alexander 1995; Lahire 2004), I will not deal with them any further since it is not my subject matter. Whether one is ready to agree with Bourdieu on these points or not, I am reluctant to enter the fray since it is beyond the scope of my analysis. My concern here is to determine whether cultural capital may have a link with risk-taking in investment decisions. Questions about whether one controls cultural capital or is somewhat "shaped" by it, or whether some cultural practices and tastes may serve as social barriers and ground the privileges of the few, is not my subject matter either. Cultural capital is one thing, legitimacy/domination is another.

## An Empirical Inquiry into Cultural Capital

My goal here is not only to expound on the CCH, but also to test it empirically. Above all, let me introduce my sample population and questionnaire. Then, I turn to the measure of cultural capital itself by means of a multiple correspondence analysis. Finally, on the basis of the results of this analysis, I build a numerical index, so as to conduct a multivariate regression to isolate the effect of cultural capital on risk-taking.

## Sample Population and Questionnaire

My sample comprises entrepreneurs from two French mature industrial sectors, where productive investments stretch their consequences over decades. These sectors are clothes-shoes-textile and wines-spirits. The professional database I used contains more than 8,000 companies. I wrote e-mails, inviting entrepreneurs to answer fifteen

questions online. From the entrepreneurs who answered, I filtered out the subcontractors, because I wanted only entrepreneurs who are free of their investment decisions. Furthermore, I eliminated companies with no worker or too low sales revenues to be engaged in any actual investment project (less than 200,000 euros of annual sales revenues). I identified 307 entrepreneurs who gave full answers that matched my requirements.

Since my aim is to test the CCH, I could not be content with running simple regressions. Indeed, it is well known that many factors influence investment decisions. Thus, it was of paramount importance not to attribute to cultural capital what pertains to other variables. I had to phrase questions for each possible causal factor in such a way as to be able to ultimately isolate the effect of cultural capital proper. Consequently, I devised questions as to the size of the company (sales revenues and number of workers), the status of the entrepreneur (founder, partner, salaried CEO), the percentage of capacity utilization, the experience of the entrepreneur (number of years as an executive, number of years as an entrepreneur), and self-assessed personality traits that have proven to influence investment decisions, such as optimism and self-confidence (Chell 2008; Hayton and Cholakova, 2012; March and Shapira 1987, Morris et al. 2012), impulsivity (Keynes 1936), the tendency to feel joy or sadness, regret (Loomes and Sugden 1987), as well as fear and anger (Podoynitsyna, Van Der Bilj and Shore 2012). Angry and happy people are said to take more risks, while frightful and sad ones tend to shun risks (Fessler 2001; Foo 2011; Lerner and Keltner 2001).

Five questions were designed to evaluate cultural capital. One concerned academic achievements (i.e., what was the highest grade obtained). In order to entice respondents to be honest and realistic, I had one item "self-made man" that conveys very positive connotations. As a matter of fact, an entrepreneur, who would otherwise feel ashamed or embarrassed to answer "none," can also answer "self-made man," which evokes admiration. Two questions regarded practices and two questions tastes. As to practices, it was asked to assess the frequency of each possible cultural practice ("theater," "cinema," "concert," "reading fiction," and so on). A specific question was designed for the kind of show followed on TV and radio and its frequency. As to tastes, two lists of writers and films were provided, each of which also had an item "others (please specify)," thus making them semi-open questions. Semi-openness was important because of memory and attention fluctuations. Reading a list of names helps retrieve information from memory and recalls one's tastes. Leaving the answers open allows one to make more relevant answers.

#### Questionnaire:

- 1. Are you a subcontractor?
- 2. Does more than 50% of your sales revenue depend on your subcontracting activities?
- 3. What is your sales revenue?
- 4. How many employees do you have?

- 5. What is, approximately, your capacity utilization rate? (Choice between 50%, 60%, 70%, 80%, 90%, 100%, "I don't know")
- 6. For how long have you been running your company?
- 7. What is your status? Founder, salaried CEO, partner?
- 8. How do your relatives perceive your personality traits? (5-scale answers for: optimistic, self-confident, impulsive, hot-tempered, frightful, joyful, regretful)
- 9. Imagine you have one million € to invest. What would you choose? (1) a "triple A" state bond, 3% yield, with one chance out of one hundred to lose your money; (2) a bond from a big company, 5% yield, with one chance out of five to lose your money; (3) shares from a large company, 9% yield, with one chance out of two to lose your money; (4) shares from an innovative start-up, 30% yield, with four chances out of five to lose your money
- 10. What are your educational achievements? (high-school, bachelor, license degree, master's degree, Ph.D., several college diplomas, self-made man)
- 11. What is the frequency of your cultural practices?

Frequency	Concert	Cinema	Reading non-fiction	Reading fiction, poetry, theatre	Museum/ exhibitions	Dance shows/Operas
Never	0	0	0	0	0	0
1-2 a year	0	0	0	0	0	0
1-2 a quarter	0	0	0	0	0	0
1-2 a month	0	0	0	0	0	0
Once a week	0	0	0	0	0	0
More often	0	0	0	0	0	0
Frequency	Playing music	Writing	Painting/Drawing	Photography shooting	Other practices	
Never	0	0	0	0	0	
1-2 a year	0	0	0	0	0	
1-2 a quarter	0	0	0	0	0	
1-2 a month	0	0	0	0	0	
Once a week	0	0	0	0	0	
More often	0	0	0	0	0	

## 12. What kind of TV and radio shows do you readily follow?

Frequency	Games, reality shows	Documentary	Fiction	Music
Up to once a week	0	0	0	0
Several times a week	0	0	0	0
At least once a day	0	0	0	0

#### 13. Who are your favorite writers?

Marc Lévy	0	Stig Dagerman	0
Stephen King	0	George Martin	0
Amélie Nothomb	0	Oe Kenzaburo	0
Guillaume Musso	0	Stefan Zweig	0
Chloé Delaume	0	Victor Hugo	0
John Irving	0	Emile Zola	0
Elfriede Jellinek	0	Stephenie Meyer	0
Haruki Murakami	0	Pierre Michon	0
None	0	Others (specify)	0

Untouchables	0	Django Unchained	0
Amour	0	Taboo	0
The Hobbit	0	The Master	0
The Miserables	0	Die Hard 5	0
Foxfire	0	Skyfall	0
After May	0	La Guerre est déclarée	0
Like someone in love	0	Millennium	0

0

0

#### 14. What movies have you liked recently?

Elena

Others (specify)

15. What circumstances spur you the most to invest? (5-scale answer: (1) fall in sales revenue; (2) fall in profits; (3) fall in markets shares; (4) fall in interest rates; (5) signature of a new client; (6) possibilities of financing; (7) cost increase; (8) lesser yield of alternative investments; (9) shareholders' demands; (10) rise in sales revenue; (11) profits increase; (12) international institutions' predictions; (13) market expansion)

De rouille et d'os

0

The questionnaire was not pre-tested for validity. Its very design relied extensively on the field studies so far conducted around the world. However, with regard to other empirical surveys implemented so far, mine has some distinctive features. First, contrary to a huge English study achieved in 2003 (Bennett et al. 2005), and the ones carried out by Chan and Goldthorpe (2005), Peterson and Kern (1996), or Bill Bryson (1996), I evaluate creative practices (writing, playing music, taking photos, etc.) and not just "passive" consumptions or tastes. Furthermore, there is an item "other practices" that opens the door to the internet and new technologies. Third, the scale of frequencies is rather wide: from "never" to "more than once a week," I designed a six-grade scale that is more precise than what is usually done. Last but not least, while all the above studies focused on genres (e.g., "historical novels," "science fiction," etc.), I choose to study specific tastes (i.e., which authors/artists one likes), which allows for a more refined account. However, I leave sports and eating out aside of the questionnaire.

## Multiple-Correspondence Analysis

The answers to these questions are categorical (e.g., like/not like) or ordinal (frequencies). Furthermore, they concern a wide array of different items: namely, cultural practices, tastes, and diplomas. Thus, I need to use a proper statistical technique in order to derive some global measurement. To gauge cultural capital, Bourdieu (1979a) implemented a multiple correspondence analysis (MCA). This form of geometrical data analysis allows for a graphical representation of clusters, along some axis not defined *a priori*. The MCA belongs to the wider family of factor analyses. It is a kind of exploratory factor analysis that allows one to make the data

"talk," without the need of any pre-defined idea of its structure. It is close to a principal component analysis, but it uses qualitative instead of quantitative data. This is the great strength of this technique. It does not presuppose any link. Rather, links stand out in the graphs and tables. It is precisely the purpose of the technique to make links apparent by clustering and fracturing data (Clausen 1998; Le Roux and Rouanet 2004). "The attraction of this approach is that its inductive character allows us to begin to report on the patterns revealed in our data without pre-judging what the key relationships should be" (Warde 2007, 2), making it an empirical matter. Therefore, contrary to — say — regressions, a multiple correspondence analysis does not depend on any theoretical assumption as to what the dependent and independent variables are. It serves to ascribe values to the different elements of cultural capital. Since these values depend on the relative scarcity of cultural practices and tastes, which implies many distinctive tastes or practices (hence differences between them), the clustering of data on the basis of their variance is arguably a sound method.

The MCA clusters data around axes. Each and every axis can be accounted for by an allocation key. This key stems from the percentage of the variance of the data explained. For example, 85 percent of the variance of axis 1 is explained by cultural tastes, one of the numerous elements of cultural capital. In turn, each axis contributes to the total variance of the data. For instance, axis 1 explains 27 percent of total variance. Thus, the MCA allows one not to suppose any weighing of these different elements of cultural capital, but the proportion of each element in our global measurement is given *solely* by the clustering of the data.

#### The Construction of a Cultural Capital Index

A significant challenge in my study is that I need to eventually implement a multivariate regression with control variables, so as to isolate the effects of cultural capital on risk-taking. Thus, my measure has to be numerical and aggregate many different components (practices, tastes, diplomas). Since the MCA ranks items according to the exact proportion of variance they explain, it also naturally provides one formula that converts categorical and ordinal variables into a general, numerical one. A few more words are in order since the method is new. It is a reminder that cultural capital is *relational* — i.e., its value is given by the *differences* in practices, tastes, and diplomas. Thus, the variance of the data can account for such differences. In building my general index, any percentage point of variance in the MCA should be translated into one percentage point of my index.

The MCA indicates (Table 1) that tastes account for 26.65 percent of the total variance (axis 1). Axes 2 to 11 concern practices. They account for 49.92 percent of the total variance. From the axis 11 on, the allocation keys appear to be somewhat redundant. Yet, diplomas (what Bourdieu called "scholastic capital") intervene in each and every axis, even if they do not play the prominent role in each of them. Thus, I choose to attribute the rest of the variance to this factor (23.43 percent). Consequently, my cultural capital index should be built, so as to closely mirror these proportions among its three subgroups: cultural capital = 26.65 percent tastes + 49.92 percent practices + 23.43 percent scholastic capital.

Axis	Variance explained	Cumulated percentage	Allocation key
1	26.65	26.65	Tastes
2	14.53	41.18	Number of cultural practices
3	6.36	47.54	Radio and television
4	6.12	53.66	Television shows followed and cinema tastes
5	5.06	58.72	Going out
6	4.26	62.97	Creative artistic practices
7	3.75	66.72	Graphical arts
8	3.03	69.75	Musical arts
9	2.45	72.20	Traditional high-brow culture
10	2.35	74.55	Creative artistic practices, both graphical and musical
11	2.02	76.57	Musical arts
12	22.42	100.00	Education

Table 1. Axis of the MCA (Percent)

Among the subgroup of tastes, some have more discriminating power, hence more value (Table 2). On the basis of the MCA, I cluster tastes around four subsubgroups in ascending value. According to the additive logic of the omnivorousness, all responses are added, but not equally weighed. The most common tastes, those of the first subgroup, comprise the basic unit of value since they explain very little of the variance of the first axis. Those of the second subgroup, less common, weigh 50 percent more. The value doubles for the tastes of the third subgroup. Finally, the rarest tastes, which belong to the fourth subgroup, account for a substantial proportion of the variance. They are weighed twice those of the third sub-subgroup, hence six times those of the first sub-subgroup. Thus, I obtain the formula *Cultural capital* (axis 1) =  $D_1 + 1.5 D_2 + 3D_3 + 6 D_4$ , with  $D_n$  being the tastes of the  $n_{th}$  degree.

Table 2. Discriminating Powers of Cultural Tastes

Taste	Discriminating degree	Reason (axis contribution)
Delaume	4	0.189 (axis 1)
Oê	4	0.189 (axis 1)
Michon	4	0.189 (axis 1)
Elena	4	0.124 (axis 1)
Dagerman	3	0.046 (axis 1)
The Master	3	0.048 (axis 1)
Like Someone in Love	3	0.049 (axis 1)
Taboo	3	0.272 (axis 4)
Après Mai	3	0.272 (axis 4)
Zweig	2	0.014 (axis 1) and 0.034 (axis 2)
Irving	2	0.034 (axis 2)
Zola	2	0.007 (axis 1) and 0.011 (axis 2)
Hugo	2	0.005 (axis 1) and 0.004 (axis 2)
Murakami	2	0.023 (axis 2)
Django Unchained	2	0.045 (axis 2)
De Rouille et d'os	2	0.053 (axis 2)
Millennium	2	0.024 (axis 2)
Amour	2	0.013 (axis 2)

My general index of cultural capital is ordinal and not cardinal. The important point is to respect the proportions provided by the MCA. Of course, the unit of my cultural capital index is bound to be abstract. It does not pretend to have a universal meaning. But so long as it is built on the basis of the MCA, it has at least some validity with regard to French entrepreneurs at a given point in time. Can it also bear some fruits as to other countries? This is an empirical question that should be answered accordingly. Even though it cannot be answered on *a priori* grounds, given Bourdieu's whole theoretical effort and the existing field studies conducted around the world that tend to support it (e.g., Lopez Sintas and Alvarez 2002; Pereira 2013; Prieur and Savage, 2011; Pulici 2013,), I suspect that such may be the case. Once I build my index, it is time to see whether there might be a link with risk-taking.

#### Results

Since I have two definitions of risk-taking, I ran two sets of statistical calculus. My first definition is classical. Risk-aversion is then defined with regard to expected utility (EU). This model consists of multiplying probabilities by utility (that is the "psychic desirability" or "satisfaction" of a given outcome). Within this framework, the traditional claim (Savage and Friedman 1948) is that the different attitudes toward risk are encapsulated in the utility function. Investment decisions are said to be tantamount to gambles or lotteries. When comparing different gambles, risk-averse individuals are said to favor a high probability of winning over a high outcome. Conversely, risk-prone individuals favor a high outcome, even at the cost of a lower probability of winning. Thus, my question was so phrased that higher mathematical expectations were accompanied by higher chances (i.e., less probability of winning the lottery). My second definition follows Bourdieu's caveats as to cultural capital's context-dependency and his rejection of rational action theories (Lainé 2014). As a result, it is more qualitative and does not take for granted that entrepreneurs invest only in cases of high profits and low interest rates. I devised it for the purpose of this study.

#### CCH with Regard to Expected Utility

Recall that my question was so phrased that the higher the EU, the higher the risk-taking inclination. The question was about a *personal* choice among lotteries. Thus, it did not involve the company. In other words, I did not have to include the size of the company or the status of the CEO since both parameters were irrelevant. I ran two kinds of regressions. First, I estimated a bivariate one. Then, I ran a multivariate regression controlling for those emotional traits whose importance has already been outlined by the literature (optimism, self-confidence, impulsivity, tendency to feel regret, anger, fear, sadness, or joy).

The two results are statistically significant. They display levels of statistical significance of 1.5 and 2.7 percent, respectively. The results are robust. Consequently, when I define risk-taking along the lines of EU, the CCH seems to be valid. Bourdieu

made it clear that the CCH should not only concern productive investments, but also speculation (Bourdieu 1974). The evidence seems to substantiate this claim since the wording of the question could have equally applied to a portfolio decision. According to its proponents, EU is supposed to apply to all kinds of circumstances and decisions since it is the rationality standard.

Incidentally, I observe that cultural capital is more important in the determination of risk-proneness than any other parameter assessed — far above impulsivity and self-confidence, which rank second and third, respectively.

However, EU has repeatedly run the gauntlet of criticism, at the very least, as a descriptive model. Moreover, it is worth recalling that Bourdieu stressed that cultural capital is highly context-dependent. It remains to be seen whether my results hold when I consider risk-taking from another perspective.

#### CCH Given Circumstances: An Alternative Approach of Risk-Taking

I test risk-taking in a qualitative fashion by asking entrepreneurs to assess the degree to which peculiar contexts entice them to invest (five-degree scale, ranging from "never" to "very often"). Several circumstances may entice entrepreneurs to invest. Usually, economists outline (i) a fall in interest rates, (ii) a rise in profits, (iii) a cost increase, and (iv) a lesser profitability of alternative investments (stocks, bonds, real estate, etc.). I may add "Keynesian incentives" like (i) a signature of a new contract or client, (ii) a rise in sales revenue, (iii) an expansion of the market, and (iv) a possibility of financing. As agents are forward-looking, they may rely on predictions by international institutions like OECD or IMF. Consequently, I add the item "international institutions (OECD, IMF, etc.) predictions." Furthermore, it is a truism that shareholders may push or deter their CEOs from investing. Risk-taking is defined here as adverse circumstances: dwindling profits, dwindling revenues, and market shares. Arguably, investing in difficult contexts, when the survival of the company is at stake, implies higher risks. When it comes to favorable circumstances, I do not see why an entrepreneur should want to miss an opportunity. That he/she likes risk does not imply that he/she wants to create obstacles on his/her path to prosperity which would not have existed otherwise. Thus, the CCH entails no particular sensitivity to favorable contexts like a rise in profits or a fall in interest rates.

I ran a multivariate regression, including and controlling for all other possibly relevant variables (outlined above), with regard to each of these circumstances (see section 1.2 of Table 1A in the Appendix). Five results particularly stand out: First, according to our test, the CCH seems substantiated. All three variables defining risk-taking are indeed statistically related to cultural capital: When profits fall, entrepreneurs endowed with a high cultural capital appear to invest more than their counterparts (2.1-percent significance). The same is the case when market shares fall (1.0 percent significance) and sales revenues dwindle (4.7 percent significance).

Second, cultural capital seems to make issues of financing more relevant (2.9-percent significance for the item "possibilities of financing" and 1.8 percent for "high level of auto-financing"). According to the CCH, entrepreneurs endowed with high

levels of cultural capital have longer term horizons. They are more forward-looking and anticipate shortages of money further in advance. The goal of self-achievement that is implicit in the will of being cultivated could very well imply the will to control things, to not leave important matters in the hands of randomness. Given the crucial importance of financing, cultivated entrepreneurs may have a stronger focus on this parameter. Incidentally, salaried CEOs and unconfident entrepreneurs pay less attention to such circumstances than the others (2.6 and 4.6 percent significance, respectively), while regretful managers seem to be more sensitive to this context (3.4-percent significance).

Third, a high level of cultural capital is not associated with a peculiar sensitivity to favorable circumstances (high profits, high revenues, expansion of the market, and fall in interest rates). Once again, this lends support to the CCH. Fourth, it should be noted that objective factors pertaining to the company, such as capacity utilization and size, seem to have no effect on investment decisions when all other variables are controlled for. Fifth, among the personality traits, only self-confidence and fearfulness appear to play a significant role. The former is important in contexts of falling profits (2.4-percent significance) and possibilities of financing (already outlined), while the latter would incline to invest according to a rationale of alternative investments as in standard theory (2.3-percent significance) and comply more with shareholders' demands (0.7-percent significance). Finally, cultural capital displays no statistical link to shareholders' demands. Unsurprisingly, a status of salaried CEO appear to considerably increase the chances of toeing the line (zero-percent significance), whereas a status of a partner does not seem to imply a higher sensitivity to shareholders' demands.

#### **Conclusions**

According to the results of my field study, there seems to be a link between cultural capital and risk-taking in investment decisions. A high level of cultural capital may diminish uncertainty and engender a specific disposition toward the future. One feels safer (thus is more enticed to invest) and view things in longer terms. When considered from the angle of EU, cultural capital was more important in explaining risk-taking than any other kind of emotional response already outlined by the literature. When considered in a more heterodox, context-dependent setting, cultural capital plays a prominent role. It remains to be seen whether these results could be replicated in other countries, provided that one uses more or less the same standards in elaborating the questionnaire. This would also require some adaptation. Furthermore, I ought to stress that nothing is said about the strength of the statistical link, only about its existence. Another concern may be the specificity of the industries involved in my field study, since apparel and wine-spirits — like any other industry subject to fashion and trends — have a strong cultural component. Yet, it is not clear whether this distorts my results. The argument goes that, in such industries, entrepreneurs may overreact to matters of image and branding, and thus overinvest. But this is true for all entrepreneurs of my field study, and yet those who have more culture take more risks. The CCH still seems to hold. Furthermore, the questionnaire itself could be improved by adding questions about sports, eating out, and clothing, so as to embrace a more exhaustive view of cultural tastes and practices. I hope to help stimulate future research in this new area, so as to better explain investment decisions.

I suspect that cultural capital may hide behind the gut feelings of animal spirits. It may be a stimulating hypothesis to test in the future and all the more so as the role of conventions in Keynes's analysis has been outlined many times (e.g., Boyer 2003, 2014; Orléan 2011). Bourdieu's habitus seems highly compatible with Keynes's animal spirits since they share vital common features (Lainé 2014). Habitus and animal spirits do not use probability calculus, rely on spontaneous emotions, use analogies, and function most of the time outside conscious awareness. Thus, I put forth that culture whispers to the ears of animal spirits.

#### References

- Adkisson, Richard. "Quantifying Culture: Problems and Promises." Journal of Economic Issues 48, 1 (2014): 89-108.
- Akerlof, George and Robert Shiller. Animal Spirits. Princeton, NJ: Princeton University Press, 2009.
- Alexander, Jeffrey. Fin-de-Siècle Social Theory: Relativism, Reduction, and the Problem of Reason. London: Verso,
- Alverson, Hoyt. "Culture and Economy: Games That 'Play' People." *Journal of Economic Issues* 20, 3 (1986): 661-679.
- Bartha, Paul. "Analogy and Analogical Reasoning." Stanford Encyclopedia of Philosophy, June 25, 2013.

  Available at http://plato.stanford.edu/entries/reasoning-analogy/. Accessed December 1, 2015.
- Bennett, Tony et al. "Cultural Capital and the Cultural Field in Contemporary Britain." Working paper No. 3. Centre for Research on Socio-Cultural Change, 2005.
- Billig, Mark. "Institutions and Culture: Neo-Weberian Economic Anthropology." Journal of Economic Issues 34, 4 (2000): 771-788.
- Bourdieu, Pierre. "Avenir de classe et causalité du probable." Revue française de sociologie 15, 1 (1974): 3-42.
- —. La Distinction: Critique sociale du jugement. Paris, France: Minuit, 1979a.
- ---. "Les trois états du capital culturel." Actes de la recherche en sciences sociale 30 (1979b): 3-6.
- ——. Le Sens pratique. Paris, France: Minuit, 1980.
- ——. "The Forms of Capital." Handbook of Theory and Research for the Sociology of Education, edited by John Richardson, pp. 241-159. New York, NY: Greenwood, 1986.
- —. Les Règles de l'art: Genèse et structure du champ littéraire. Paris, France: Seuil, 1992.
- —. Raisons pratiques: Sur la théorie de l'action. Paris, France: Seuil, 1994.
- ——. Propos sur le champ politique. Lyon, France: Presses Universitaires de Lyon, 2000.
- ——. Pascalian Meditations. Palo Alto, CA: Stanford University Press, 2005.
- Boyer, Robert. "L'art du Judoka." In *Travailler avec Bourdieu*, edited by Encrevé Pierre and Rose-Marie Lagrave, pp. 267-279. Paris, France: Flammarion, 2003.
- ——. "Change and Not Only Reproduction: Pierre Bourdieu's Economic Anthropology and Regulation Theory." In Re-Thinking Economics: Exploring the Work of Pierre Bourdieu, edited by Asimina Christoforou and Michael Lainé, pp. 117-139. London: Routledge, 2014.
- Bryson, Bill. "Anything but Heavy Metal: Symbolic Exclusion and Musical Dislikes." American Sociological Review 61, 5 (1996): 884-899.
- Chan, Tak and John Goldthorpe. "The Social Stratification of Theatre, Dance and Cinema Attendance." European Sociological Review 23 (2005): 1-19.
- Chell, Elizabeth. The Entrepreneurial Personality: A Social Construction. London: Routledge, 2008.
- Cholakova, Magdalena and James Hayton. "The Role of Affect in the Creation and Intentional Pursuit of Entrepreneurial Ideas." Entrepreneurship: Theory and Practice 36, 1 (2012): 41-68.

- Christoforou, Asimina and Michael Lainé. "Re-Thinking Economics Why Pierre Bourdieu?" Re-Thinking Economics: Exploring the Work of Pierre Bourdieu, edited by Asimina Christoforou and Michael Lainé, pp. 3-15. London: Routledge, 2014.
- Clausen, Sten. Applied Correspondence Analysis: An Introduction. London: Sage, 1998.
- Coulangeon, Philippe. Sociologie des pratiques culturelles. Paris, France: La Découverte, 2010.
- —. Les Métamorphoses de la distinction culturelle. Paris, France: Grasset, 2011.
- Coulangeon, Philippe and Julien Duval. "Introduction." In *Trente Ans après la distinction de Pierre Bourdieu*, edited by in Philippe Coulangeon and Julien Duval, pp. 7-25. Paris, France: La Découverte, 2013.
- DiMaggio, Paul. "Cultural Capital and School Success: The Impact of Status Culture Participation on the Grades of U.S. High School Students." American Sociological Review 52 4 (1982): 440-455.
- Fessler, David. "Emotions and Cost-Benefit Assessment." In Bounded Rationality: The Adaptive Toolbox, edited by Reinhart Selten and Gerd Gigerenzer, pp. 191-214. Cambridge, MA: MIT Press, 2001.
- Foo, Maw-Der. "Emotions and Entrepreneurial Opportunity Evaluation." Entrepreneurship: Theory and Practice 35, 2 (2011): 375-393.
- Friedman, Milton and John Savage. "The Utility Analysis of Choices Involving Risks." Journal of Political Economy 56, 4 (1948): 279-304.
- Gigerenzer, Gerd. "The Adaptive Toolbox." Bounded Rationality: The Adaptive Toolbox, edited by Reinhart Selten and Gerd Gigerenzer, pp. 37-50. Cambridge, MA: MIT Press, 2001.
- Hayden, F. Gregory. "Values, Beliefs, and Attitudes in a Sociotechnical Setting." Journal of Economic Issues 22, 2 (1988): 415-426.
- Hodgson, Geoffrey. "The Approach of Institutional Economics." Journal of Economic Literature, 36, 1 (1998): 166-192.
- —. "What Is Capital? Economists and Sociologists Have Changed Its Meaning Should It Be Changed Back?" Cambridge Journal of Economics 38, 5 (2014): 1063-1086.
- Holyoak, Keith. "Analogy and Relational Reasoning." In The Oxford Handbook of Thinking and Reasoning, edited by K.J. Holyoak and R.G. Morrison, pp. 234-259. Oxford, UK: Oxford University Press, 2012.
- Holyoak, Keith and Paul Thagard. Mental Leaps. Cambridge, MA: MIT Press, 1995.
- Kahma, Nina and Arho Toikka. "Cultural Map of Finland 2007: Analyzing Cultural Differences Using Multiple Correspondence Analysis." Cultural Trends 21, 2 (2012):113-131.
- Kahneman, Daniel. Thinking, Fast and Slow. New York, NY: Farrar, Straus & Giroux, 2011.
- —. "Cumulative Prospect Theory: An Analysis of Decision Under Uncertainty." Journal of Risk and Uncertainty 5 (1993): 297-323.
- Karadag, Meltem. "On Cultural Capital and Taste: Cultural Field in a Turkish City in Historical Perspective." European Societies, 11, 4 (2009): 531-551.
- Lahire, Bernard. La Culture des individus. Paris, France: La Découverte, 2004.
- Lainé, Michael. "Animal Spirits and Habitus: Towards a Convergence Between Keynes and Bourdieu!" In Rethinking Economics: Exploring the Work of Pierre Bourdieu, edited by Asimina Christoforou Asimina and Michael Lainé, pp. 74-93. London: Routledge, 2014.
- Lamont, Michelle. Money, Morals and Manners: The Culture of the French and the American Upper-Middle Class. Chicago, IL: University of Chicago Press, 1992.
- Larreau, Annette and Elliott Weininger. "Cultural Capital in Educational Research: A Critical Assessment." In After Bourdieu: Influence, Critique, Elaboration, edited by David Swartz and Vera Zolberg, pp. 105-144. London: Kluwer, 2004.
- Lebaron, Frédéric. "Pierre Bourdieu: Economic Models Against Economism." In After Bourdieu: Influence, Critique, Elaboration, edited by David Swartz and Vera Zolberg, pp. 87-103. London: Kluwer, 2004.
- ——. "Bourdieu on Economics and the Economy." In Re-Thinking Economics: Exploring the Work of Pierre Bourdieu, edited by Asimina Christoforou and Michael Lainé, pp. 35-43. London: Routledge, 2014.
- Lerner, Jennifer and Dacher Keltner. "Fear, Anger, and Risk." Journal of Personality and Social Psychology 81, 1 (2001): 146-159.
- Le Roux, Brigitte and Henri Rouanet. Geometric Data Analysis: From Correspondence Analysis to Structured Data Analysis. London: Kluwer, 2004.
- Loewenstein, George et al. "Risk as Feelings." Psychological Bulletin 127, 2 (2001): 267-286.

- Loomes, Graham and Robert Sugden. "Some Implications of a More General Form of Regret Theory." Journal of Economic Theory 41 (1987): 270-287.
- Lopez Sintas, Jordi and Garcia Alvarez. "Omnivores Show Up Again: The Segmentation of Cultural Consumers in Spanish Social Space." *European Sociological Review* 18, 3 (2002): 353-368.
- McCloskey, Deirdre. "The Rhetoric of Economics." Journal of Economic Literature 21, 2 (1983): 481-517.
- ——. "Metaphors Economists Live By." Social Research 62, 2 (1995): 215-237.
- March, John and Zur Shapira. "Managerial Perspectives on Risk and Risk-Taking." Managerial Science 33, 11 (1987): 1404-1418.
- Mayhew, Anne. "Culture: Core Concept Under Attack." Journal of Economic Issues 21, 2 (1987): 587-603.
- Morris, Michael et al. "Framing the Entrepreneurial Experience." Entrepreneurship: Theory and Practice (January 2012): http://onlinelibrary.wiley.com/doi/10.1111/j.1540-6520.2011.00471.x/pdf.
- Orléan, André. L'Empire de la valeur. Paris, France: Seuil, 2011.
- Pereira, Virgilio. "L'espace social, les pratiques quotidiennes et la ville: Repères pour une sociologie des divisions sociales et symboliques dans la ville de Porto." In Trente Ans après la distinction de Pierre Bourdieu, edited by Philippe Coulangeon and Julien Duval, pp. 206-215. Paris, France: La Découverte, 2013.
- Peterson, Richard. "Le passage à des goûts omnivores: Notions, faits et perspectives." Sociologie et sociétés 36, 1 (1994): 145-164.
- Peterson, Richard and Roger Kern. "Changing High Brow Taste: From Snob to Omnivore." American Sociological Review 61, 5 (1996): 900-907.
- Podoynitsyna, Ksenia, Hans Van Der Bilj and Michael Song. "The Role of Mixed Emotions in the Risk Perception of Novice and Serial Entrepreneurs." Entrepreneurship: Theory and Practice (January 2012): DOI: 10.1111/j.1540-6520.2011.00476.x.
- Prieur, Annick and Mike Savage. "Updating Cultural Capital Theory: A Discussion Based on Studies in Denmark and Britain." *Poetics* 39, 6 (2011): 556-580.
- —. "Emerging Forms of Cultural Capital." European Societies 15, 2 (2013): 246-267.
- Pulici, Carolina. "Le goût dominant comme goût traditionnel: Préférences et aversions esthétiques des élites de Sao Paulo." In Trente Ans après la distinction de Pierre Bourdieu, edited by Philippe Coulangeon and Julien Duval, pp. 216-226. Paris, France: La Découverte, 2013.
- Redmond, W.H. "Instinct, Culture, and Cognitive Science." *Journal of Economic Issues* 40, 2 (2006): 431-438.
- Saint-Martin, Monique. "Les tentatives de construction de l'espace social, d' 'Anatomie du goût' à La Distinction: Quelques repères pour l'histoire d'une recherché." In *Trente Ans après la distinction de Pierre Bourdieu*, edited by Philippe Coulangeon and Julien Duval, pp. 29-44. Paris, France: La Découverte, 2013.
- Simon, Herbert. "Rational Choice and the Structure of the Environment." Psychological Review 63, 2 (1956): 129-138
- ——. "Theories of Decision-Making in Economics and Behavioral Science." American Economic Review 49, 3 (1959): 253-283.
- —. "Rational Decision-Making in Business Organizations." American Economic Review 69, 4 (1979): 493-513.
- Slovic, Paul et al. "The Affect Heuristic." In *Heuristics and Biases*, edited by Thomas Gilovich, Dale Griffin and Daniel Kahneman, pp. 397-420. Cambridge, MA: Cambridge University Press, 2002.
- Slovic, Paul et al. "Risk as Analysis and Risk as Feelings: Some Thoughts About Affect, Reason, Risk, and Rationality." Risk Analysis 24, 2 (2004): 311-322.
- Swartz, David. Culture and Power: The Sociology of Pierre Bourdieu. Chicago, IL: University of Chicago Press, 1997.
- Vanderberghe, Frédéric. "The Real Is Relational: An Epistemological Analysis of Pierre Bourdieu's Generative Structuralism." Sociological Theory 17, 1 (1999): 32-67.
- Warde, Alan. "Cultural Taste and Participation in Britain." Sociology of Consumption Working Group ESA Eight Conference, Glasgow, Scotland, 2007.

#### **Appendix**

Table 1A. Results

1.1. EU							
Risk-taking	Coef.	Std. err.	t-Value	P>t			
Cultural capital	0.0153465	0.0069057	2.22	0.027			
Optimistic	0.0966706	0.0791452	1.22	0.223			
Hot-tempered	-0.0422914	0.0695078	-0.61	0.543			
Self-confident	0.1557058	0.0911221	1.71	0.089			
Regretful	0.0540477	0.0987344	0.55	0.585			
Frightful	-0.1138446	0.0912528	-1.25	0.213			
Sad	0.0569476	0.0813383	0.70	0.484			
Impulsive	0.1220014	0.0797544	1.53	0.127			
Cons	0.785516	0.600592	1.31	0.192			
1.	2. Context-depen	dent fashion					
Fall in profits: Significant va	riables						
Risk-taking	Coef.	Std. err.	t-Value	P>t			
Cultural capital	0.0211602	0.0090885	2.33	0.021			
Self-confidence	0.2585436	0.1135097	2.28	0.024			
Fall in market shares: Signific	cant variables						
Risk-taking	Coef.	Std. err.	t-Value	P>t			
Cultural capital	0.023113	0.0088874	2.60	0.010			
Fall in sales revenues: Signific	Fall in sales revenues: Significant variables						
Risk-taking	Coef.	Std. err.	t-Value	P≻t			
Cultural capital	0.0187198	0.0093946	1.99	0.047			

Fall in interest rates: No significant variable

Signature of a new contract/client: No significant variable

Cost increase: No significant variable Financing possibilities: Significant variables

Risk-taking	Coef.	Std. err.	t-Value	P>t		
Cultural capital	0.0180238	0.0082152	2.19	0.029		
Status: salaried CEO	-0.3658818	0.163305	-2.24	0.026		
Self-confident	-0.2059606	0.1026031	-2.01	0.046		
Regretful	0.2122294	0.0993235	2.14	0.034		
Shareholders' demands: Significant variables						
Risk-taking	Coef.	Std. err.	t-Value	P>t		
Status: salaried CEO	2 1020222					
Status: salaried CEO	0.4908233	0.1373271	3.57	0.000		
Frightful	0.4908233	0.1373271 0.07494	3.57 2.70	0.000		
	0.2021156	0.07494	2.70	0.007		
Frightful	0.2021156	0.07494	2.70	0.007		

Rise in sales revenue: No significant variables

Profit increase: Significant variables

Predictions of international institutions: Significant variables

Risk-taking	Coef.	Std. err.	t-Value	P≻t	
Cultural capital	0.0164221	0.0072081	2.28	0.024	
Market expansion: No significant variable					