

Non-profit Organizations' Business Models: A Bourdieusian Perspective on American Universities

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Résumé:

En dépit d'une vaste littérature sur les *business models*, rares sont les travaux qui s'intéressent aux organisations à but non lucratif pour lesquelles la création de la valeur économique n'est plus une fin en soi mais un moyen d'atteindre leur finalité sociale. L'objectif de cette recherche est donc de répondre à ce vide théorique en développant une conceptualisation des *business models* des organisations à but non lucratif en faisant appel à la théorie de Bourdieu sur l'accumulation et la conversion des formes de capital (i.e. économique, social, culturel et symbolique). Le modèle développé est testé empiriquement à l'aide d'un Tobit sur un échantillon d'universités américaines. Nos résultats montrent la co-existence de trois business models différenciés. L'étude confirme que les universités dotées de formes complémentaires de capital économique, social et culturel ont une probabilité plus forte de faire partie des universités les plus prestigieuses. Cette étude contribue à la fois à la littérature sur les *business models* et à la littérature sur les organisations à but non lucratif en identifiant la spécificité de leurs *business models*.

Keywords:

Business model, non-profit organizations, Bourdieu's theory, non-economic value, forms of capital



INTRODUCTION

According to the National Center for Charitable Statistics (NCCS), more than 1.5 million Nonprofit Organizations (NPOs) are registered in the U.S., taking on an increasingly prominent role in the economy, politics and society. In the United States, nonprofit organizations accounted for 5.5% of the gross domestic product in 2014 (i.e. the equivalent of \$805 billion) and represented the third largest workforce behind the retail and manufacturing industries. Despite the growing importance of NPOs in modern society, research in the management field remains mainly focused on the for-profit sector, considering the nonprofit sector only in ancillary ways, even though nonprofit organizations feature unique characteristics and priorities that sent them apart from For-Profit Organizations (FPOs). The two main differences between FPOs and NPOs have to do with their sources of revenue and their purpose. First, in contrast with FPOs, for whom revenues come from the sale of products and services to willing customers, NPOs primarily receive revenues from other types of sources such as donations and fees. Secondly, the principal values produced by FPOs are the financial returns delivered to shareholders and the use value delivered to customers, while the value produced by NPOs lies in the achievement of social purposes rather than in generating revenues (Moore, 2000). These main differences are sufficiently important to raise questions about the specificity of NPO business models compared to those of FPOs.

Central to business model thinking is how organizations capture, create and deliver value (Chesbrough, 2007; Johnson, Christensen, & Kagermann, 2008; Osterwalder & Pigneur, 2010). Teece (2010) argues that the principle of a business model is the way in which the organization delivers value to customers in order to earn profit. Studies from the conventional business model perspective reflect economic value creation as the essence of for-profit business models (Chesbrough, 2007; Johnson et al., 2008; Osterwalder & Pigneur, 2010; Teece, 2010). More recently, the growing interest in Corporate Social Responsibility (CSR) has led academics and practitioners to develop new forms of business models, the so-called "sustainable business models" (Schaltegger, Hansen, & Lüdeke-Freund, 2016) or "social business models" (Yunus, Moingeon, & Lehmann-Ortega, 2010). In contrast with the conventional perspective, sustainable and social business models expand economic value to include environmental and/or social values along with economic ones (Schaltegger et al., 2016). However, they remain contextualized for a business environment in which the profit equation is still a priority (Schaltegger, Lüdeke-Freund, & Hansen, 2011).



Brehmer et al. (2018) assert that NPOs constitute a specific class apart due to their distinctive business model priorities. NPOs follow a logic of proposing, creating, exchanging and capturing unique types of non-economic value, which differ from FPOs (e.g. Moore, 2000). The principal value delivered by the nonprofit sector is the achievement of its social purpose and the satisfaction of the donors' desires to contribute to the purpose that the organization embodies (Oster, 1995). Arend (2013) stresses the importance of understanding the logic of value, particularly in the nonprofit context. A few studies in business model literature recognize the particular characteristics of NPOs compared to for-profit organizations (Moore, 2000), but to date there is still no clear conceptual understanding of NPO business models. The purpose of this paper is thus to fill this gap by developing a conceptualization of NPO business models highlighting the value logics for such organizations. In doing so, we put an emphasis on the transfer and exchange between economic and non-economic values placing in the forefront the non-economic value as the final purpose in the NPOs. For this reason, we rely on Bourdieu's theory of the four forms of capital (i.e. economic, social, cultural and, symbolic) and their conversion to understand from a wider angle the accumulation and the conversion between economic and non-economic capital in the nonprofit context. According to Bourdieu, symbolic capital (i.e. prestige) is the social recognition of the possession of the other three forms of capital (i.e. economic, social and cultural) and it contributes to their accumulation.

By providing a deep understanding of the mechanism of conversion between noneconomic and economic capital, it contributes to identifying the specificities of NPO business models in terms of value logic. Unlike business models for FPOs, economic value is not seen as an end in itself but as a means to achieve their social (non-economic) purpose. NPO business models contrast with those of FPOs by reversing the relationship between aim and means. For NPOs, revenues, or any form of economic capital, aim at supporting the organization in order to have a social impact and gain social recognition for its responsible behavior. For FPOs, socially responsible behavior aims at increasing corporate reputation (symbolic capital) in order to increase revenues.

We analyze this issue using data on American private nonprofit universities. According to the National Center for Charitable statistics, American nonprofit universities represent almost 17.1% of NPOs, they are the second class of NPOs in terms of representativeness, and their essential value as well as their business models are still under-researched (Miller, McAdam, & McAdam, 2014). However, understanding the logic of their value and business



models is a specific, important, and current challenge for universities that is part of wider national discussion about higher education. Universities are looking toward sustainable models in order to maintain the status quo and seek prestige while maintaining academic excellence and global competitiveness (Crow & Dabars, 2015). Considering prestige could have impact in the long-term of the business model; some universities have had major challenges improving their recognition and visibility. Universities are considered to be important cultural organizations (Beyer & Lodahl, 1976) whose key missions are teaching, producing research (Laredo, 2007), and sustaining economic and social development (Bercovitz & Feldman, 2006). In order to achieve their missions and to ensure both "good policy" (Hansmann, 1990) and a "margin of excellence" in research (Leslie, Drachman, Conrad, & Ramey, 1983), nonprofit American universities are perpetually competing to attract funds (Clark, 1998); this is partly due to the evolution of academic institutions toward a market rationale (De Wit, Ferencz, & Rumbley, 2013). A highly competitive university will attract the brightest students and the best faculty selection. This helps to leverage endowments and tuition revenues to sustain research programs (Marginson, 2006).

To test this framework empirically, we investigate a sample of American private nonprofit universities from a list of universities provided by the National Association of College and University Business Officers and Commonfund. First, using a classification procedure, we identify three classes of non-profit universities according to their stock of economic, social and cultural capital. Secondly, we run a Tobit model to determine the most appropriate business model for improving academic prestige. This study offers both theoretical and managerial contributions. First, we propose a Bourdieusian framework to understand and characterize the business models of NPOs. We depart from conventional and sustainable business model literature by prioritizing non-economic value and putting in a secondary position the economic value. Our study contributes to business model and non-profit literature that explicitly addresses how different forms of capital (i.e. economic and non-economic) are accumulated and then converted in order to improve academic prestige (i.e. symbolic capital). We show that the best business models permit an organization to accumulate economic, social and cultural capital, without neglecting any of these forms of capital. Secondly, our study also offers managerial assistance. On one hand, it may provide decision support to NPOs that will help them define their business models according to their non-economic goals. On the other hand, our results



could assist non-profit university presidents and boards in defining the best strategy to boost their symbolic capital, thereby improving their scoring in academic rankings.

In the next section, we offer an overview of research on business models, highlighting the theoretical gaps. We then present our theoretical framework using the Bourdieusian theory of forms of capital and their conversion to understand the business models of NPOs. In the empirical section, we detail the data and methods we used to identify differentiated NPO business models and the best fit to contribute to their symbolic capital. Finally, we discuss the empirical results and outline theoretical and managerial contributions.

1. LITERATURE REVIEW

1.1. BUSINESS MODELS OF FOR-PROFIT ORGANIZATIONS (FPOS)

1.1.1. Conventional business models: Profit maximization equation.

The conventional business model perspective gained popularity in the 1990's (Zott, Amit, & Massa, 2011) and became a mainstream concept in both academia and business practice (Pedersen, Gwozdz, & Hvass, 2018). Business model thinking is defined as how organizations capture, create and deliver value (Chesbrough, 2007; Osterwalder & Pigneur, 2010; Richardson, 2008). As noted by Teece (2010:172), the essence of the business model is "in defining the manner by which the enterprise delivers value to customers, entices customers to pay for value, and converts those payments to profit." Central to discussions about business models is the concept of "value" from the dual perspective of the customer and the firm (Chesbrough, 2007; Osterwalder & Pigneur, 2010).

Conventional business model literature has historically focused on business models as profit-oriented, and indeed economic value creation is the dominant and homogeneous value from the perspective of the customer and the firm (Laasch, 2018; Pedersen et al., 2018). The value concept is manifested in various models that outline the main foundations of a business model. However, there is no consensus on what the business models must include since a number of authors highlight differing elements that business models should contain (Boons & Lüdeke-Freund, 2013; Casadesus-Masanell & Ricart, 2010; Chesbrough & Rosenbloom, 2002; Osterwalder, 2004; Osterwalder & Pigneur, 2010; Zott et al., 2011). The architecture of a business model is comprised of between three (Richardson, 2008; Zott et al., 2011) and nine dimensions (e.g. Osterwander and Pigneur, 2010). Based on a wide range of studies, we have found Richardson's (2008) proposition to be the most commonly used to describe the components of a business model because it provides a useful framework for both practitioners



and academics. He proposes the following three main components: the value proposition (i.e. what the firm will deliver to its customers), the value creation and delivery system (i.e. how the firm will create and deliver that value to its customers) and the value capture system (i.e. how the firm generates revenue and profit).

Today, with the inclusion of corporate responsibility into business models, the conventional business model perspective has become too narrow. Firms are no longer able to focus solely on profit maximization for their shareholders but must also take on new responsibilities to alleviate societal difficulties. Both political and societal pressures lead to rethinking the conventional business model perspective to address broader challenges in order to integrate the consideration of social, environmental, and economic issues to generate value creation for all stakeholders including the environment and society (Bocken, Rana, & Short, 2015).

1.1.2. Sustainable business models: A compromise between profit and societal values.

Achieving sustainable development has become one of the main issues of modern society (Brundtland, 1987; Jansen, 2003). The idea of corporate sustainability has pushed firms from a sole focus on profit maximization toward taking on the role of socially and environmentally responsible entities in society (Freeman, Wicks, & Parmar, 2004; Mitchell, Agle, & Wood, 1997). Scholars and practitioners are increasingly examining how conventional business models have been modified to include the integration of sustainability considerations (e.g. Boons & Lüdeke-Freund, 2013; Pedersen et al., 2018; Schaltegger et al., 2016; Stubbs & Cocklin, 2008).

In general terms, Lüdeke-Freund (2010) defined a sustainable business model as the creation of competitive advantage through superior customer value while contributing to sustainable development for the firm and society. Later, Schaltegger et al. (2016) adopted a system-level perspective from multiple stakeholders and defined a sustainable business model as supporting societal progress, with the inclusion of social and environmental values in addition to the economic one. These definitions show the specific characteristics of sustainable business models compared to traditional ones, including the introduction of new concepts and purposes related to sustainability, and the integration of sustainability issues into value propositions, value creation and delivery, and value capture (Geissdoerfer, Vladimirova, & Evans, 2018).



With increasing studies on sustainable business models, scholars have tried to clarify their attributes and components. The seminal study of Stubbs & Cocklin (2008) is an extensive conceptual work which connects corporate sustainability issues with a generic business model. They proposed five main principles: (1) a purpose oriented simultaneously toward economic, environmental and social goals, (2) a triple bottom line approach in measuring performance, (3) the inclusion of several stakeholders, (4) the inclusion of nature as a stakeholder, and (5) the broader system as well as the narrow firm level perspective. Lüdeke-Freund (2009:67) suggested an extension of the generic template for business models for sustainability with a fifth non-market pillar defined as "dedicating resources and activities to secure free, legitimate and legal behavior and to explore currently neglected opportunities in non-market spheres." More recently, Joyce & Paquin (2016) developed the triple layered business model canvas as a tool for exploring the sustainability-oriented business model, by adding two layers to the original business model canvas: an environmental layer and a social layer based on a stakeholder perspective.

We can note two major changes introduced by the sustainable business model perspective in contrast to the conventional perspective. First, value creation is not only for the firm and its customers but for its whole range of stakeholders, including the environment and society (Geissdoerfer et al., 2018; Joyce & Paquin, 2016; Schaltegger et al., 2016). Secondly, the concept of value needs to be reconsidered in order to simultaneously integrate "sustainable value creation" and economic value creation (e.g. Bocken et al., 2015). As noted by Bocken et al. (2015:70): "business models are often perceived from a value creation perspective [...]. For sustainability thinking, this focus is too narrow and raises the need for a more holistic view of value that integrates social and environmental goals, to ensure balancing or ideally alignment of all stakeholder interests to deliver sustainable value creation." Within this perspective, the narrow view of (economic) value in conventional business model thinking is broadened to the wider concept of impact with the introduction of new forms of environmental and social values.

To date, prior research has largely neglected how economic value creation is balanced with environmental and social value creation (Boons & Lüdeke-Freund, 2013). Only implicitly does research interrogate what value is being transferred to the triple bottom line within business models (Jolink & Niesten, 2015). The sustainable business model perspective permits the extension of the value concept to a wider perimeter of stakeholders. This can help to capture the full range of organizational business models and value logics through a compromise



between profit equation and societal values (Arend, 2013). However, despite significant improvements, the sustainable business model perspective remains generally focused on forprofit organizations, which do not share the same primary purpose as NPOs. The former seeks to maximize profit for shareholders, while the latter seek to achieve a specific social purpose. Even for responsible FPOs, economic value creation remains the ultimate purpose and non-economic value creation is meant to contribute to economic value creation. The motto "doing well by doing good" illustrates this causality. NPO business models reverses this causality by putting non-economic value creation first.

1.2. BUSINESS MODELS OF NONPROFIT ORGANIZATIONS (NPOS)

1.2.1. Existing literature.

Due to their specificities, nonprofit organizations constitute a specific class in terms of business model development (Brehmer, Podoynitsyna, & Langerak, 2018; Dahan, Doh, Oetzel, & Yaziji, 2010; Yunus et al., 2010) requiring reconsideration of the organizational value logics applied (Arend, 2013). Firstly, in contrast to FPOs, the ultimate purpose of NPOs is to create non-economic value by having a social impact on society. Secondly, NPOs are particular organizations regarding their sources of revenue. They rely primarily on external donors (donations and fees) rather than on sales of specific services or product, which creates specific challenges and risks (Banks, Hulme, & Edwards, 2015; Cotterlaz-Rannard, Bocquet, & Ferrary, 2017). NPO specific issues therefore differ from those faced by FPOs, which underlines the need to increase research and awareness on NPO business models particularly in terms of the management and transfer of value (Arend, 2013). For FPOs, non-economic resources accumulated through social behavior are a means to create economic value. NPO business models reverse this causality because, for them, economic resources are a means to create noneconomic value through social behaviors.

To date, the definition of value logics and their transfer is mainly determined from the cross-sector partnership context, and focuses on how the collaboration between a for-profit organization and a nonprofit organization could create noneconomic value along with economic value, as well as how these values are transferred between both organizations (e.g. Dahan et al., 2010; Le Ber & Branzei, 2010; Yunus et al., 2010). Le Ber & Branzei (2010) stress the advantages of value transfer through partnerships between FPOs and NPOs, creating processes of value creation through cross-sector partnerships (value exchange with stakeholders). The last study developed by Laasch (2018) extends the emerging discussion of business models for the



nonprofit and social enterprise context. He proposes a conceptual model that connects a variety of institutional logics by defining heterogeneous organizational value logics (i.e. commercial, sustainability, welfare and government logics). As noted by the author, further research is needed to understand the differences between sustainability value logics in sustainable business models when applied FPOs versus the logics applicable to NPOs.

Until now, existing literature on sustainable business models and nonprofit organizations has not provided a clear framework to conceptualize the business models of nonprofit organizations, particularly the conversion of economic values into noneconomic values (i.e. social, environmental and other values such cultural, etc.). Economic value is a means to achieve noneconomic purposes but, for NPOs, is not an end in itself, suggesting that in the NPO context, the profit equation needs to be relegated to a secondary position; noneconomic values are the key components for NPOs. To understand and rethink values and their conversion in the nonprofit context, we propose using the Bourdieusian perspective on the forms of capital and their conversion.

1.3. A BOURDIEUSIAN PERSPECTIVE OF BUSINESS MODELS FOR NPOS

1.3.1. Bourdieu's theory of forms of capital and their conversion.

The Bourdieusian perspective provides a suitable and useful framework for a better understanding of NPO business models through the examination of the way by which capitals are converted. By explicitly incorporating noneconomic capital (i.e. social, cultural and symbolic), Bourdieu's theory makes it possible to prioritize noneconomic capital, which is the core value for NPOs. The anthropologist Alan Smart sees the Bourdieusian perspective as a useful tool for mediating between business and society: "One of the most influential efforts to reintegrate social and economic analysis has been Pierre Bourdieu's theoretical project to develop a general science of the economy of practices. Such a science would recognize market exchange and capitalist production, or the economic in a narrower sense, as only a particular type of economic practice and would explore the conversions that occur between the economic and noneconomic (...)" (Smart, 1993:388-389).

In his seminal study of "the forms of capital," Pierre Bourdieu described his theory as: "A general science of the economy of practices, capable of re-appropriating the totality of the practices which, although objectively economic, are not and cannot be socially recognized as economic (...) must endeavor to grasp capital and profit in all their forms and to establish the laws whereby the different types of capital (or power, which amounts to the same thing) change



into one another" (Bourdieu, 1986:247). According to Bourdieu (1986:81), to understand the functioning of the social world, we need to consider capital in all its forms and purposes rather than focusing only on those recognized by economic theory. Bourdieu's theory of capital is broader than the monetary notion of capital in economics; in his view, capital is a generalized "resource" that can take various forms (i.e. monetary, non-monetary, tangible, and intangible forms) and time to accumulate (Bourdieu, 1986:243). As noted by Bourdieu (1979), capital is a social relation and a resource that provides holders with power and an advantageous position in the field in which it is produced and reproduced. Power positions with a field depend on the forms of capital possessed (Bourdieu & Wacquant, 2013; Oakes, Townley, & Cooper, 1998), but possession of these forms of capital is not stable nor symmetrical, but instead reflects relations of power and domination (Bourdieu, 1990).

Bourdieu (1986, 1993) proposed four distinct forms of capital: economic, social, cultural and symbolic. Economic capital refers to financial resources such as monetary income with which other forms of capital can be acquired and developed (Bourdieu, 1986). According to Wacquant (1987), Bourdieu's definition of economic capital is similar to Marx's, namely, as money, commodities, means of material production, and other material assets. Economic capital retains the traditional meaning of mercantile exchange of capital in Bourdieu's sociology (Yang, 2014). The second form of capital is social capital. Social capital aggregates the actual or potential resources related to the possession of a durable network of more or less institutionalized relationships (Bourdieu, 1986). That is, it is the sum of actual and potential resources that can be mobilized through membership in social networks of actors and organizations (Anheier, Gerhards, & Romo, 1995). Because social capital is the nexus of an organization's relationships with other persons and organizations, "the volume of social capital possessed by a given agent depends on the size of the network of connections he can effectively mobilize and on the volume of the capital (economic, cultural or symbolic) possessed in his own right by each of those to whom he is connected" (Bourdieu 1986:249). Thirdly, Bourdieu (1986) conceptualizes cultural capital with three dimensions. The first one is the embodied form, cultural capital consists of permanent dispositions in the individual person. Bourdieu (1986:83) defined it as long-lasting dispositions of the mind and body. The second one is the objectified state, cultural capital is defined as cultural goods such as pictures, books, instruments, etc. The last one, is the institutionalized state, cultural capital consists of educational qualifications such as academic degrees.



Finally, the fourth form is symbolic capital (Bourdieu, 1993:37), which is "being known and recognized and is more or less synonymous with: standing, good name, honor, fame, prestige and reputation." Symbolic capital is the social recognition (prestige) related to the possession of one or all three other forms of capital and contributes to their accumulation. For Bourdieu (1993:7), symbolic capital is "a degree of accumulated prestige ... and is founded on a dialectic of knowledge and recognition." It confers a benefit or credit "in the broadest sense, a kind of advantage, a credence, that only the group's belief can grant to those who give it the best symbolic and material guarantees, it can be seen that the exhibition of symbolic capital which is always expensive in material terms" (Bourdieu, 1993:120). As noted by Bourdieu (1980), symbolic capital would guarantee economic resources in the long term: "economic or political capital that is disavowed, mis-re-cognised and thereby recognized, hence legitimate, a credit which, under certain conditions, and always in the long run, guarantees economic profits" (Bourdieu, 1980:262). Symbolic capital could be the most important form of capital, because its possession enhances and legitimizes the accumulation of all other forms of capital, particularly the economic one (Pret, Shaw, & Drakopoulou Dodd, 2016).

Bourdieu highlighted the importance of legitimation and capital conversion; the convertibility of the different types of capital is the basis of the strategies aimed at ensuring the reproduction of capital. In other words, the different types of capital can be distinguished according to their reproducibility (Bourdieu 1986). A key property of capital is that it can be converted from one into another, i.e., each form also has the potential to be convertible (Bourdieu & Wacquant, 2013). Bourdieu specifically argues that the accumulation of symbolic capital is just as rational as the accumulation of economic capital, particularly because capital can be converted from one form to another (BliegeBird et al., 2005). All forms of capital (i.e. economic, social, cultural and symbolic) are convertible from one into another (see Figure 1). The last form of capital, symbolic capital, is the social recognition of the other forms of capital (i.e. economic, social and cultural) and its conversion allows to legitimate and further accumulate the other forms of capital (see Figure 1). Bourdieu's conceptual model articulating accumulation and conversion of the four forms of capital (economic, social, cultural and symbolic) may be mobilized to characterize the specificity of NPO business models and the differences between those of FPOs.



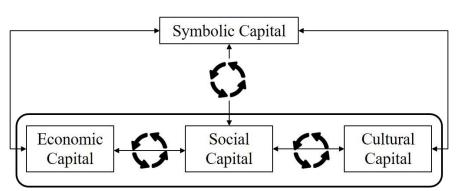


FIGURE 1. Conversion of four forms of capital

1.3.2. NPO business models within the Bourdieusian perspective.

Bourdieu's theory could provide an opportunity to rethink the central value concept of business models by placing the accumulation of non-economic capital in the forefront. The business models of the non-profit American universities. By definition, non-profit American universities are not-for-profit institutions of higher education, under Section 501(c)(3) of the U.S. Internal Revenue Code (i.e. exempt from income tax). Therefore, non-profit universities are not owned by shareholders but are governed by a president and a board of directors. The overarching raison d'être of non-profit universities is its non-economic purpose expressed through educational and research goals. In other words, the ultimate purpose of a non-profit university is to achieve a social purpose rather than to maximize profit to its shareholders.

According to the Bourdieusian perspective, non-profit universities are able to accumulate all forms of capital to convert them into symbolic capital in the form of academic prestige. In other words, non-profit universities seek to accumulate economic capital through endowments (entirely derived by donations), social capital by developing its networks, and cultural capital through academic publications (research productivity) in order to convert them into symbolic capital (i.e. academic prestige), which in turn contribute to the accumulation of the other forms of capital (i.e. economic, social and cultural). The universities might be differentiated in terms of prestige according to their possession of all three others forms of capital. The more prestigious universities will possess a large stock of all forms of capital, i.e. economic, social, cultural and symbolic. Academic prestige (i.e. symbolic capital) is the social recognition of the economic, social and cultural capital, and its conversion contributes to the accumulation of the other forms of capital. On the other hand, less prestigious universities will possess a lower stock of economic, social and cultural capital compared to the prestigious universities. The accumulation and conversion of economic, social and cultural capital would



lead to symbolic capital, contributing then, to the accumulation of economic, social and cultural capital. Therefore, we propose the following hypotheses:

Hypothesis 1. There exist different classes of non-profit universities according to the stock-level of economic, social and cultural capital

Hypothesis 2. The more the non-profit universities have accumulated economic, social and cultural capital, the higher their stock of symbolic capital will be

2. METHOD

2.1. DATA SOURCES AND SAMPLE

To test our hypotheses, we used a list of US universities and colleges provided by the National Association of College and University Business Officers and Commonfund Institute in 2018. This list includes a total of 818 institutions, among which 214 are private non-profit universities (the rest being public American universities or American colleges). For the purpose of our study, our sample is based on these 214 private non-profit universities in the US. Due to non-responses, our final sample is restricted to 203 representative units.

2.1.1. Empirical Procedure

To test our hypotheses, a two-stage approach was followed. First, we conducted a classification procedure to identify potential distinct university profiles according to their stock of capital (economic, cultural and social) (H1). Second, we ran a Tobit model to distinguish the most appropriate profile for improving the university's academic prestige (i.e. symbolic capital) (H2). A Tobit model is a better approach than ordinary least squares due to the censoring of the dependent variable, the symbolic capital variable, that ranges from 0 to 100. We start with the description of the variables used for the classification and then detail the variables introduced in the Tobit model (see Annexe A).

2.1.2. Definition of variables used for the classification

Economic capital. For each university, we obtained information about its economic capital by using its stock in endowments in 2016 (*Economic_capital*). Previous studies show that endowments, entirely derived from donation, constitute the major financial reserve for non-profit universities and they show that the accumulation of endowments could serve as a financial buffer against periods of financial adversity, helping to insure the long-term survival of the institution (e.g. Christopherson, Gertler, & Gray, 2014; Hansmann, 1990; Pfeffer & Fong, 2004; Smith & Smith, 2016).



Social capital. We identified the number of followers on the LinkedIn website page to measure the social capital (*Social_capital*) for each university. Currently, LinkedIn is often used in academic research to measure the social network of individuals and organizations because of the considerable data it provides. Studies in marketing, management, and psychology have developed quantitative analyses using data from LinkedIn pages (e.g. (Komljenovic, 2018; Mishra, 2019; Utz, 2016).

Cultural capital. We measured cultural capital using the academic publication listings provided via the ISI Web of Knowledge for the sciences, social sciences, and arts and humanities for the year 2016 (*Cultural_capital*). Previous studies on higher education and management fields have used the number of papers published in academic journal as the academic excellence in research (i.e. cultural capital as Bourdieu's theory) (e.g. Durand & Dameron, 2011; Jensen & Wang, 2018).

Accordingly, we ran a K-means classification procedure to obtain clusters of American private non-profit universities that share a similar stock of economic, social and cultural capital. To determine the final number of clusters, we used three common criteria (Hardy, 1996; Hartigan & Hartigan, 1975): (1) the statistical accuracy of the classification (Fisher's test), (2) the number of NPOs per cluster, and (3) the significance of the clusters identified. Based on these criteria, we identified the version with three clusters as optimal. To interpret the three clusters, we calculate the mean of each indicator in each cluster (see Annexe B).

In cluster 1 (n=64), the universities are characterized by a medium stock of economic capital (8.44), social capital (4.72) and cultural capital (2.30) compared to the mean of the universities in our sample. In cluster 2 (n=41), universities are characterized by a large stock of economic capital (9.50), social capital (5.20) and cultural capital (3.63). In cluster 3 (n=98), universities are characterized by a low stock of economic capital (7.85), social capital (4.32) and cultural capital (0.70) compared to the mean of universities in our sample. In support of hypothesis 1, we highlight three classes of non-profit universities according to the stock-level of economic, social and cultural capital. We call cluster 1 the "Intermediary status", cluster 2 the "High status" and cluster 3 the "Low status". However, to establish the existence of three differentiated business models, we need to confirm that following the three classes of non-profit universities, the probability to improve the university's academic prestige will be different; the more non-profit universities have accumulated economic, social and cultural capital, the higher their stock of symbolic capital will be. To do so, we conducted a Tobit model.



2.1.3. Definition of the variables used in the Tobit model

Dependent variable: symbolic capital of American non-profit universities. To identify an appropriate measure of symbolic capital, we conducted an extensive literature review on the operationalization of this concept related to higher education. There is no consensus in the literature on a proxy to measure symbolic capital, nevertheless, several authors propose that university ranking might be an appropriate proxy (e.g. Amsler & Bolsmann, 2012; Marginson & Van der Wende, 2007; Volkwein & Sweitzer, 2006). According to Marginson and Van der Wende (2007:13), global university rankings could reflect "prestige and power." The ranking of universities might be a machinery of symbolic power that contributes to the creation of a "new order" in higher education (Carey, 2006) legitimized by social scientific and political authorities (Amsler & Bolsmann, 2012). Focusing on academic rankings, there are several global rankings, such as the Academic Ranking of World Universities (ARWU), The Times Higher Education World University Rankings (THES) and US News and World Report. The last ranking is most frequently used in the US because it was the first popular survey in the US. Since the first edition in 1983, the US News and World Report ranking has expanded and incorporated more "objective" indicators of academic and institutional standing (Myers & Robe, 2009). In this study, we looked at the last edition of the US News and World Report ranking for "Best Global Universities" (2019) in order to establish a symbolic capital indicator for the American non-profit universities in our sample. The "Best Global Universities" ranking is determined with a score (from 0 to 100) focusing specifically on academic research and reputation (www.usnews.com). Each score is calculated using the 13 indicators and weights to measure global research performance, such as global research reputation (academic reputation survey), citations, and international collaboration. The Symbolic_capital variable ranging from 0 (min.) to 100 (max.) reflects the score obtained by each American non-profit university in the ranking.

Independent variables. We introduce three variables (i.e. "High_status", "Intermediary_status" and "Low_status"), stemming from the classification procedure, as our main independent variables. These dummy variables represent the three distinct classes of American non-profit universities. Cluster "Low status" is taken as reference in the model.

Control variables. We include the scientific field as a control variable; Engineering and Computer Sciences (*Eng_comp*), Life and Physical Sciences (*Hard_sciences*), Medical and Health (*Medicine*) and Social Sciences (*Social_sciences*). According to literature on higher



education, the field of universities is important because the business models of universities in social sciences, clinical sciences and engineering might be differentiated (Volkwein & Sweitzer, 2006). We also introduce the number of fields that each university has (Fields_N). Some universities are more specialized, while others are more generalized. We speculate that the degree of specialization of the universities could affect their business models. Moreover, we include the Age variable that corresponds to the number of years the university has been in service. We assume that the age of the university could affect its link with "high status", "low status" or "intermediary status" clusters. In addition, we introduce the percentage of graduates to undergraduates at each university (Graduates). Specifically, a high percentage of graduates to undergraduates could positively affect its use of the "high status" business model. In contrast, a low percentage of graduates to undergraduates could positively affect its use of the "low status" business model. Lastly, we introduce the research budget transformed in log (Research_budget). We speculate that the higher the research budget, the more likely the university could adopt a "high status" business model. Annexe A summarizes all the variables used in the classification procedure and Tobit model.

3. RESULTS

Universities that belong to the cluster "High status" have a positive and significant probability of improving their score in the US News and World Report "Best global universities" ranking (see Table 2). The fact of belonging to this group increases the probability of improving the university's academic prestige for 41.95%. Therefore, hypothesis 2 is supported. The more the non-profit universities have accumulated economic, social and cultural capital, the higher their stock of symbolic capital will be. Universities that belong to Cluster "Intermediary status" have also positive and significant probability of improving their score in the US News and World Report ranking. However, the probability of increasing their score in this ranking is lower (31,19 %). Regarding the control variables, being active in engineering and computer sciences (*Eng_comp*) or medicine fields (*Medicine*) significantly and negatively affects the accumulation of symbolic capital. In contrast, proposing a broad range of disciplines (Fields_N) has a positive and significant effect on increasing the accumulation of symbolic capital. Therefore, the broader the fields a university offers, the more likely it is to obtain a high score in the ranking, and thus, to gain symbolic capital. In addition, the percentage of graduates (Graduates) to undergraduates has a positive and significant effect on the score. In other words, the higher the percentage of graduate students a university has as opposed to undergraduates,



more likely the university will improve its score in this ranking (i.e. symbolic capital). Lastly, higher research budgets (*Research_budget*) have a positive and significant effect on the score in the US News and World Report ranking. The more a university invests economic capital into research and into recruiting graduate students, the more likely it is to improve the university's academic prestige.

TABLE 2. Tobit estimation results

	Symbolic_capital
Intermediary_status (Cluster 1)	31.18855***
•	(7.122366)
High_status (Cluster 2)	41.95122 ***
	(12.23897)
Low_status (Cluster 3)	Ref.
Age	0233308
	(.053774)
Eng_Comp	-42.70318***
	(14.37266)
Hard_sciences	136.3926
	(2520.016)
Medecine	-17.82691*
	(9.879321)
Social_sciences	Ref.
Graduates	54.63319***
	(18.66641)
Research_budget	30.3609***
	(6.916908)
Fields_N	17.36029 **
	(7.072851)
Number of observations	195
Log pseudo-likelihood	-438.13821
Wald χ2	217.66***

^{***} Significant at 1%. ** Significant at 5%. * Significant at 10%. Marginal effect, robust standard error into brackets.

4. DISCUSSION

This paper responds to the theoretical gap of the business models of NPOs highlighting non-economic value as the final purpose for these organizations. By applying Bourdieu's framework of forms of capital and their conversion, we put an emphasis on understanding how economic, social and cultural capital are accumulated and converted into symbolic capital to accumulate more economic, social and cultural capital. By doing so, we contribute to identifying and characterizing the business models of NPOs and how an NPO could improve social recognition (i.e. symbolic capital) through the accumulation and conversion of other forms of capital. For NPOs (such as NGOs, universities, etc.), social purpose is a key issue



because their focus is not economic value but the accumulation and the conversion of economic and non-economic capital in order to maximize a social purpose.

Our findings confirm the existence of three differentiated business models of American non-profit universities according to their stock of economic, social and cultural capital. The "high status" business model appears to be the best fit for contributing to symbolic capital compared to the other business models (see Figure 2). In the "high status" business model, universities have large stock of economic, social and cultural capital and then they convert it into symbolic capital, improving their academic prestige and thus further accumulating the other three forms of capital. In the "intermediary status" business model, universities are characterized by a medium stock of all three forms of capital (i.e. economic, social and cultural). These universities convert the three forms of capital into symbolic capital but their stock of symbolic capital is lower than universities with the "high status" business model (see Figure 2). Finally, universities using the "low status" business model, are characterized by a low stock of economic, social and cultural capital, so they are not able to convert it into symbolic capital (i.e. academic prestige) (see Figure 2).

FIGURE 2. Conversion of forms of capitals into symbolic capital following the three business models

	Economic capital	Social capital	Cultural capital		Symbolic capital
« High status » BM	+++	+++	+++		+++
« Intermediary status » BM	+	+	+		+
« Low status » BM	-	-	-	\longrightarrow	-

Regarding previous studies on business model literature and higher education, the current study goes a step further by providing a detailed analysis of the business models of NPOs, namely the American non-profit university Our results align with Marginson's study (2006) of the higher education system which defined three segments of higher education institutions. The first segment is composed of the "elite research universities" that are characterized by research productivity, high quality students and have highly competitive entrance requirements. The second segment is constituted by "aspirant research universities" which are trying to gain access to the first segment. The last segment includes "teaching-focused universities" which are characterized by high student-volume. Our study fits with the previous categorisation while going a step further. Our main results show that the "high status" business model align with research-focused universities (i.e. segment 1). According to our framework,



research universities have a greater stock of symbolic capital compared to the other universities. These universities are well known in academia and society; they are the most attractive in the education market (for both students and academic staff). The accumulation of symbolic capital permits these universities to consolidate the other forms of capital (economic, social and cultural) that will, in turn, further contribute to symbolic capital accumulation (Everett, 2002). The second segment of "aspirant research universities" align with universities that use the "intermediary status" business model. In fact, these universities seek to belong to the elite category of research universities, but they do have not yet accumulated sufficient economic, social and cultural capital to convert into the symbolic capital that will then consolidate the other forms of capital. These universities invest in research and develop strategies to attract graduate students, but they suffer from the competition of the research universities. In the "intermediary status" business model, universities focus on both research and teaching values. The last business model "low status" aligns with "teaching-focused universities." In this business model, universities are characterized by a low stock of all forms of capital compared to the other universities. Therefore, these universities are not able to accumulate symbolic capital, thus, as they cannot maximize their academic prestige, they focus on teaching as a core value.

Moreover, we believe that we can extend this analysis of business models to sustainable enterprises. A sustainable enterprise seeks to maximize its economic value (economic capital) but also its non-economic values (social and environmental impact for example). We think that the Bourdieusian framework is an interesting and promising approach to understanding the business models for organizations that have a unique non-economic finality as do NPOs, but also to investigate business models whose end goals are dual (both economic and non-economic). Therefore, we suggest that our framework could be complementary to the sustainable business model framework, providing a broader understanding of the accumulation and conversion of economic and non-economic capital.

4.1. MANAGERIAL IMPLICATIONS

This study has key managerial implications. First, it could provide decision-support to the governing bodies of universities (both the President and the Board) in the effort to accumulate social recognition and academic prestige, and consolidating the other forms of capital. Our study responds to current issues for non-profit universities as they seek to improve their standing and to navigate the competitive educational market. Secondly, it can inform



decision-making by NPOs regarding their business models. Our study shows NPOs (namely American non-profit universities) that economic capital is one of the means required to sustain their business models but that it is not sufficient. The accumulation of economic, social and cultural capital is the first step toward an increase in symbolic capital, improving on the one hand, social impact, and on the other hand, consolidating the other forms of capital (i.e. economic, social and cultural). With this study, NPOs (as well as nonprofit universities) have solid bases to seek the best business model to improve non-economic value creation, independent of their sector (NGOs, universities, etc.). Non-economic value is currently a key challenge for NPOs because it is the primary factor in long-term sustainability. A NPO that is not be able to create and deliver non-economic value will likely have difficulties. A failure in to increase non-economic capital could impact all forms of capital and vice versa, leading to uncertainty in terms of sustainability.

4.2. LIMITATIONS AND FURTHER RESEARCH

This study is not free of limitations. Our conceptual model is a dynamic framework with two stages, firstly the accumulation of economic, social and cultural capital and secondly the conversion between these three forms of capital into symbolic capital. However, our data measure the economic, social and cultural capital for the years 2016 and the symbolic capital for the year 2018-2019. It would have been preferable to study data over a longer period to further analyze the conversion mechanism; however, specific data are not always available (for example, we did not have access to historical data on the followers in LinkedIn). Longitudinal research could be an option to explore more deeply the three business models in order to better characterize and analyze each NPO business model. Despite these limitations, we believe that our conceptual model is a promising step toward understanding and characterizing NPO business models regardless the sector. Moreover, we think that the Bourdieusian framework could be an interesting approach in understanding the business models of responsible for-profit organizations because of the duality of their purpose (economic and non-economic). To this end, we can conduct expanded studies of the business models for responsible organizations within the Bourdieusian framework in order to better understand the accumulation and conversion between all forms of capital.



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ANNEXE A. Variable definitions and summary statistics

VarName	Label	Mean (SD)				
Variables used in the classification procedure						
Economic_capital	Stock endowment held by each university in 2016 (in log)	8.36 (0.75)				
Cultural_capital	Number of academic publications produced by each university in 2016 (in log)	1.49 (1.48)				
Social_capital	Number of users who follow the university's linkedIn pages (data collected on December 2018, in log)	4.62 (0.43)				
Variables used in the	Variables used in the Tobit estimation					
Symbolic_capital	Score obtained (from 0 to 100) in the US News and World Report "best global universities ranking" (2019)	25.71 (32.46)				
Intermediary_status	= 1 if the university belongs to university cluster 1, 0 otherwise	0.31 (0.47)				
High_status	= 1 if the university belong to university cluster 2, 0 otherwise	0.20 (0.40)				
Low_status (ref.)	= 1 if the university belongs to university cluster 3, 0 otherwise	0.48 (0.50)				
Age	Age of the university (in years)	138.79 (47.22)				
Eng_comp	= 1 if the university is active in the Engineering, Technology or Computer science fields, 0 otherwise	0.89 (0.32)				
Hard_sciences	= 1 if the university is active in the Life and Physical Science field; 0 otherwise	0.98 (0.12)				
Medecine	= 1 if the university is active in the medical field, 0 otherwise	0.74 (0.44)				
Social_sciences (ref.)	= 1 if the university is active in the social sciences field, 0 otherwise	0.98 (0.15)				
Graduates	Percentage of university graduates in each university	0.32 (0.15)				
Research_budget	Research budget of each university in 2016 (in log)	7.87 (0.75)				
Fields_N	Number of fields in which the university is active (from 1 to 5)	4.19 (0.96)				

ANNEXE B. Interpretation of the three university clusters

Mean

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	Economic_capital	Cultural_capital	Social_capital			
Cluster 1 : Intermediary_status (n=64)	8,443	2,297	4,715			
Cluster 2: High_status (n=41)	9,501	3,627	5,199			
Cluster 3: Low_status (n=98)	7,847	,0707	4,319			
Total (n=203)	8,369	1,491	4,621			

Notes: Mean values in bold are significantly higher in the considered cluster.