UNIVERSIDAD DE BURGOS

Programa de Doctorado en Ciencias Jurídicas, Económicas y Sociales

Teresa Elvira Lorilla

DOCTORAL DISSERTATION

Cash Holdings and Social Media as Drivers of Donations in Nonprofit Organizations. Four Essays about their Determinants and Effects

Supervised by:

Dr. Íñigo García Rodríguez

Dr. M. Elena Romero Merino

July 2024

TABLE OF CONTENTS

TABLE OF CONTENTS

LIST OF TABLES

LIST OF FIGURES

INTRODUCTION- ABSTRACT

INTRODUCTION

In recent decades, the world has become a more volatile environment, with economic and financial crises, political instability and increased international conflicts, leading to a more complicated situation for organizations worldwide. Nonprofit organizations (NPOs) have been particularly affected, as these organizations rely heavily on external funding to operate, carry out their activities and fulfill their mission. NPOs play a crucial role in society by addressing social, environmental and cultural issues that are often not adequately addressed by the public or private sectors. All these circumstances have become a major challenge for these organizations, since this external funding, which can come from individuals as well as corporations or government agencies, can decrease just when the need for NPOs' activities increases, especially in crisis situations.

After the drastic reduction in the funding that these organizations received from governments and public institutions as a result of the 2007-08 financial crisis, there has been a gradual increase in funding from these sources. However, in quite a few cases, they have not yet returned to pre-crisis levels[1], making private funding more important than ever for NPOs. Hence, private donations have become a vital source of funding that allows these organizations to implement their projects and maintain their operations in order to fulfill their mission. Moreover, in recent years, awareness and importance of social responsibility has increased among both

[1] For example: https://coordinadoraongd.org/2022/05/insuficiente-recuperacion-de-la-financiacion-de-las-ong-de-desarrollo/

individuals and corporations. This presents an opportunity for NPOs to increase the donations they receive from private donors.

It is therefore particularly important to understand the factors that can help organizations attract more donations. The literature on the determinants of donations to NPOs stems from the work of Weisbrod and Dominguez (1986), who developed the Economic Model of Giving through some organizational characteristics that explain the level of donations from NPOs. Building on their model, previous authors have tested that the success of NPOs in attracting and sustaining donations does not depend solely on external factors or donor characteristics. Internal organizational characteristics play a key role in influencing giving behavior and it is important to identify the key organizational characteristics that can enhance a NPO's ability to secure donations and build lasting donor relationships.

From the theoretical perspective, different theories have been proposed to explain the factors that may influence giving. Resource Dependence Theory, which states that organizations depend on external resources to survive and must develop strategies to acquire and maintain these resources (Pfeffer & Salancik, 1978). In NPOs, donations are a critical resource, and understanding how to secure and manage these donations is essential for organizational stability and success. Signaling Theory (Spence, 1973) focuses on the communication of organizational quality and trustworthiness to potential donors. NPOs that can effectively signal their efficiency, transparency, and impact are more likely to attract donations. Signaling these attributes helps build credibility and trust with donors, who prefer to contribute to organizations they perceive as competent and reliable. From the perspective of Stakeholder Theory (Freeman, 1984), managing relationships with all stakeholders, including donors, beneficiaries, employees and the general society is important for NPOs. Effectively engaging stakeholders and addressing their concerns and interests is crucial to securing donations and maintaining trust. Other theories applied to this issue include Legitimacy Theory (Suchman, 1995), which emphasize the importance of trust and reputation in attracting donations. Those

NPOs that establish a strong reputation through consistence performance and communication are more likely to gain and retain donor support.
NPOs are therefore navigating an increasingly complex and competitive funding environment in which understanding the dynamics of giving, including donor motivations and NPO strategies, is critical to the sustainability and effectiveness of these organizations.

It is in this context of increased need for funding that this doctoral thesis is set, as it addresses two different factors that could influence the donations that NPOs receive from private donors: social media and cash holdings. We approach this analysis in four chapters, looking first at the factor itself and then at its influence on donations. Understanding why NPOs use social media, as well as the reasons behind decisions to hold cash, is essential to fully understand how these factors affect NPOs' contributions.

The choice of these two factors in particular as determinants of donors' giving decisions can be explained by two recent crises –the financial crisis of 2007-08 and the COVID-19 pandemic crisis of 2020. Both crises, which are very different in nature –the first purely economic and the second health-related– have put NPOs under pressure and forced them to face challenges in order to maintain their funding and, ultimately, their survival.

Regarding social media, its importance has been most evident since the COVID-19 pandemic crisis. In fact, research on social media is quite recent due to the novelty of these technologies. The increasing integration of digital technologies has created new opportunities and challenges for communication and interaction and has become increasingly important for any organization, including NPOs. These social media platforms reach a wider audience, attract younger donors and facilitate easier donation processes. Thus, they provide a favorable environment for attracting new funds and donors, which NPOs could use to increase the contributions of NPOs.

In terms of to cash accumulation, cash holdings have proven to be essential for organizations in times of financial crisis to survive and overcome difficulties such as the financial crisis of 2007-08. However, in the nonprofit sector, an excess of cash holdings has a negative connotation as being an inconvenience to donors and are outright dismissed. It is therefore particularly challenging to explain what is the dominant effect in the relationship between the amount of cash held by the NPO and the private donations received by the organization. When considering the influence of cash on donations, it is important to note that NPOs can impact donations no only through fundraising tools, but also through their activities and financial decisions. In this respect, cash holdings offer several advantages and benefits to NPOs, as they provide financial flexibility, that could allow for future growth and act as a buffer for adverse situations. Thus, it is important to analyze why NPOs hold cash and whether donors actually penalize the decision to hold cash in NPOs —as has always been assumed— or whether they view it in a different light. Although some models have been developed to test cash holdings in NPOs, they have not explained why NPOs hold cash or what theory might explain this decision, and the results of the effect of cash holdings on donations are inconclusive.

Thus, this dissertation focuses on the analysis of social media and cash holdings and their relationship to private donations outside the scope of US nonprofits, which have mostly been used in the literature on both social media and cash holdings of NPOs. In particular, we use a sample of Spanish NPOs for the social media analysis and a sample of British charities to analyze cash holdings and their effect on donations.

We organize this doctoral thesis in four academic articles, included in the chapters from the first to the fourth. After this introduction, the first two chapters analyze social media, introducing the social media and the determinants of engagement (first chapter) and then analyzing their relationship with private donations (second chapter); while the third and fourth chapters focus on cash holdings analyzing why NPOs hold cash and how holding cash affects private donations, respectively.

Thus, in our first chapter we analyze the engagement on social media for NPOs. We consider different types of variables that could affect the engagement on social media, including organizational variables and others more related to social media, such as the use of these platforms and the content and characteristics of the posts.

This study focuses on Instagram, which is a more innovative platform that could generate higher engagement from followers.

The second chapter analyzes how the use of social media translates into donations for NPOs. Using the postulates of signaling theory, stakeholder theory and legitimacy theory, we study how social media can have an effect on the donations that NPOs receive. The variables used include some variables analyzed by previous scholars, such as the social media presence, network size, activity or follower engagement, and we add the content of the posts as another factor that could promote fundraising. We test our model on the four most used social media platforms: Facebook, Twitter —now X—, YouTube and Instagram.

The third and fourth chapters focus on cash holdings. Thus, the third chapter reflects on the determinants and models that explain cash holdings in NPOs. We first analyze the different theories that could explain why NPOs hold cash (trade-off, pecking order and agency theory) and then test which model could be more appropriate to explain NPO cash holdings. On the one hand, we take into account the model used in for-profit organizations, i.e. the model developed by Opler et al. (1999), and adapt it to the unique characteristics of NPOs. On the other hand, we test the model used in nonprofit literature, developed by Fisman and Hubbard (2003) and Core et al. (2006). We compare these two models and include some other variables that have not been previously considered, designing an integrative model with more explanatory power.

Finally, in the fourth chapter, we test the effect that excessive cash holdings in NPOs could have on the amount of donations the organization receives. While most of the literature has only considered the donors perception, we include the behavior of NPOs by introducing efficiency and fundraising efforts into the relationship between excess cash holdings and donations. We analyze how donors perceive NPOs with high cash holdings and we then introduce agency problems (measured by the organization's efficiency) and fundraising efforts of NPOs with excess cash holdings, which also affect the final donations received by wealthy organizations.

To conclude this doctoral dissertation, we will present the main findings of the four chapters, including some of their limitations and future lines of research.

GENERAL CONCLUSIONS

GENERAL CONCLUSIONS

This doctoral dissertation provides further insight into the current funding problem faced by NPOs. In particular, we have analyzed the role of social media and cash holdings as two possible factors affecting the contributions received by these organizations. In developing this thesis, we have focused not only on the fundraising ability of these factors, but also on the factors themselves, analyzing which characteristics have led to achieving greater social media engagement and why NPOs hold cash. This thesis represents only a few steps in the journey towards understanding these issues, and there are still several avenues of research to be explored, but we have made some progress, which is described below.

The main finding of this dissertation is that social media encourages private donations, while the effect of excess cash holdings is more complex and depends not only on donor assessment but also on the managerial behavior of the NPO. In both cases, we consider that the NPO plays an active role in the level of donations it receives, that will be affected by how they use social media and by the allocation decisions they take when they have excessive cash. Therefore, contrary to what has been considered in previous literature, we argue that NPOs are not mere receptacles of donations, but that their activities and decisions influence donors' willingness to contribute.

With regard to social media, we have found that these platforms have a great deal of potential for engaging the public and as a fundraising tool. However, NPOs have not taken advantage of all the opportunities they offer. While NPOs have entered the world of social media by creating their accounts on various platforms, according to our results, it is how these platforms are used and what it is posted on them that really seems to influence donors' attitudes. Therefore, to attract the attention of potential donors, it is not enough to just be on social media, but to use them appropriately. In our first chapter we observed that organizational characteristics do play a part in the engagement that NPOs received in social media, but engagement is also influenced by the use of these platforms and the content that is in line with what users of social media are looking for. It is worth noting that social media can be an effective fundraising tool, but NPOs are not actively using it for this purpose. From a financial perspective, soliciting donations through these platforms can be a cost-effective alternative to traditional fundraising activities. Our second chapter, therefore, focused on analyzing the impact of these social media on donations. In particular, we have found that posts that explicitly ask people to donate to the NPO influence followers' attitudes towards giving and can have an impact on the donations the organization receives. It is also important to note that social media platforms differ in both format and target audience, so adapting to the platform is a necessary first step to harnessing the full potential of social media. NPOs seem to post the same information on every social media platform where they have an account, without considering the specificities of each platform, such as the preferable post format or the main audience of the platform. Due to these specificities of the platforms, some are more focused on building relationships with followers and fostering engagement, others can be useful fundraising tools, and others have a predominantly younger audience that may not be able to donate money but could provide volunteers. Therefore, NPOs should learn about the different audiences of each platform and what they are looking for on that particular platform. This would allow them to adapt their social media activity and be more efficient by using each platform for the purposes for which they are better suited.

Besides the study of social media and their suitability as a fundraising tool, this doctoral dissertation has considered NPO cash holdings as a factor influencing the contributions received by NPOs. In the nonprofit sector, it is assumed that holding cash is against the donors' intentions and that if an organization holds too much, it risks alienating donors. However, this assumption has hardly been tested in the literature. In this respect, NPO cash holdings have only become a topic of interest in the literature since the study by Fisman & Hubbard (2003), and this limited literature has reached different results and conclusions about the reasons and consequences of cash holdings in these organizations. Therefore, in our third chapter we have revisited the issue of the reasons NPOs have for holding cash, considering that it needs to be re-examined because they are always assumed and accepted, despite the limited or inconclusive research on them. To address this issue, we have taken the theories and models that have been developed in the for-profit sector —where this issue has been extensively studied— and adapted them to the NPO sector. In this way, we have tested whether they can provide a better insight into the reasons for cash holdings in these organizations. With regard to the model that better explains why NPOs hold cash, we compared the models based on for-profit organizations that derived from Opler et al. (1999), and the model used in NPOs, developed by Fisman and Hubbard (2003) and implemented by Core et al. (2006). The results showed that the model developed by Opler et al. (1999) seemed to be better able at predicting NPO cash holdings' decisions, although the variables specific to the NPO sector added significant value to the model. Therefore, we proposed an integrative model that included all the variables adapted from the for-profit and nonprofit fields. Furthermore, in this third chapter, we argued that the different theories used to explain cash holdings in the for-profit sector could be adapted to the nature and specific characteristics of NPOs and, according to our results, the pecking order theory seemed to explain better cash holding decisions. Thus, NPOs hold cash mainly due to information asymmetries and their main objective is to avoid having to ask for external funding. Consequently, NPOs may be inclined to hold as much cash as possible in order to fulfil this objective. However, the nonprofit context has always considered that this would be detrimental to the reputation of the organizations and their ability to attract donations.

Our fourth chapter focused precisely on analyzing this complex relationship. Whether donors penalize these cash holdings —as expected and commonly assumed— or whether they perceive the real reasons why NPOs hold cash, has been scarcely explored in the literature to date. Moreover, studies have only considered donor behavior towards cash holdings. Nevertheless, the actions of NPOs have an impact on the donations they receive and should therefore be considered. That is, the effect of cash holdings on donations is a combination of how donors perceive those cash holdings and the behavior of managers of NPOs with excessive cash holdings. On the one hand, donors seem to be able to recognize this precautionary motive for holding cash and reward these organizations. We, therefore, move away from the negative perception of NPO cash holdings. On the other hand, managers of NPOs with excess cash holdings reduce their fundraising efforts because they do not need as much money from donations to cover the needs of the organization. Furthermore, excess cash holdings also decrease the efficiency of organizations due to agency problems and a reduced pressure to control costs and achieve a good performance. The reduction of both fundraising efforts and efficiency leads to lower donations. Thus, there is indeed a reduction in donations received by an NPO with excessive cash holdings, but this is not due to direct donor perceptions but rather to a reduction in both efficiency and fundraising efforts within the organization itself.

From an empirical point of view, the samples analyzed in the different chapters of this thesis are made up of European organizations. More specifically, the NPOs used to analyzed social media engagement and the effect of social media on donations (first and second chapters), are Spanish NPOs, while for the cash analyses we use a sample of British charities. This moves away from the use of US organizations, which have been most commonly used to analyze both social media and cash holding decisions by NPOs. In addition, the cash holding analyses include within its temporal range some years affected by the crisis created as a consequence of the COVID-19 pandemic. This provides a better insight into the use of cash in a period when it could be very much needed, especially for precautionary motives. This could explain some differences when comparing our results with those of previous literature carried out in different contexts and situations.

This dissertation has several contributions both theoretical and empirical. First, from the theoretical perspective, we propose a classification of the variables affecting engagement on social media. In addition, our studies support stakeholder theory as the most suitable theoretical framework for the relationship between social media and donations. Similarly, we contribute to cash holding literature by finding that pecking order theory arguments seem to be better suited to explain the reasons behind cash holding decisions in NPOs. Finally, we present the approach of the precautionary motive for holding cash as the main explanation for donor reaction to organizations with excessive cash.

This thesis also has empirical contributions. In the studies on social media, we not only introduce a new and innovative social media platforms such as Instagram, but also address a multiplatform analysis including more traditional platforms (Facebook, Twitter and YouTube). In those studies, we also include the influence of the type of content and the different posting format in both engagement and the donations received by the NPO. Regarding cash holdings, our results show that an integrative new model for cash holdings in NPOs based on traditional corporate variables and including specific nonprofit characteristics fits better to explain why NPOs hold cash. Finally, when analyzing the relationship between excess cash holdings and private donation our results confirm a competitive mediation through the effects of efficiency and fundraising efforts.

As a result of all these studies, we can also make important recommendations to practitioners in the nonprofit sector. First, as already mentioned, NPOs should actively participate in social media. They should promote those features of social media that can help them increase the engagement of their followers. In addition, they should adapt their activity in social media to the different platforms considering those that are more efficient for fundraising. They should also enhance the fundraising aspect of social media and not just use them for information purposes. In particular, they should increase the number of posts actively soliciting funds from followers, as these can attract new funds and are currently under-utilized.

Regarding cash holdings, practitioners could benefit from the model developed to estimate the level of cash held by NPOs, as it shows managers how others make this financial decision according to the characteristics of the NPO. We also learned that NPO practitioners may hold cash as a precautionary measure, without limiting it in fear of donor reaction. However, while donors do not seem to penalize cash holdings *per se*, managers should be aware that their allocation decisions may be detrimental to their ability to attract donations, i.e., holding cash does not crowd out donations by itself, but the resulting reduction in fundraising and efficiency in NPOs with excessive cash does.

Although this doctoral thesis has made some contributions to the literature, it is not without limitations, which we will describe in the following paragraphs.

In terms of the empirical analyses, the chapters on social media (chapters one and two) use a small sample of organizations. This is due to the fact that data had to be collected manually in order to obtain the level of detail required for the study. The analyses also focused on a specific sector of organizations (the nongovernmental organizations for development, NGDOs). These organizations have their own characteristics and may have more involved supporters than other NPOs. As a result, some findings may not be readily applicable to all organizations in the nonprofit sector.

Moreover, with regard to the studies on cash holdings, the empirical analyses include years that were affected by the COVID-19 pandemic, so that the level of cash holdings as well as other variables influencing it, may have been affected by this situation. This may also reduce the applicability of these results to other situations.

Finally, in light of the results obtained through this doctoral thesis, as well as the limitations observed, there are several lines of research that could be addressed in the future. First, regarding the impact of social media on NPOs, it would be interesting to study the effectiveness of social media as a fundraising tool. In this way, while the access to social media platforms is almost always free or has a very low cost, using them, posting frequently and creating posts designed for each platform requires from both time and resources from organizations. In addition, most social media platforms allow donations to be made through the platform itself or through links to donation sites, so the contributions received through these means could be measured. Therefore, analyzing the costs of social media for NPOs as well as those contributions obtained due to these platforms, would allow testing how efficient social media are in terms of fundraising. In addition, it could be interesting to analyze not only short-term fundraising, but also whether social media through their dialogic capabilities and their ability to raise awareness could also enhance the commitment with the organization leading to increased donations in the long term.

Regarding the study of NPO cash holdings, among the positive aspects of holding cash, some authors have pointed out that holding cash contributes to the financial health of NPOs and their continuity in the future. Therefore, it could be interesting to analyze whether those organizations with more cash are in fact better suited to face obstacles and survive in times of crisis. Along the same lines, future research could study whether donors are able to assess that financial health that comes from holding cash in the organizations and reward it with more donations.

Another line of research that could be faced in the future would be to enlarge the samples used to test the different models. Including more sectors, more organizations and even organizations from different countries and contexts could help overcome some of the limitations mentioned above and increase the transferability of the results to the third sector as a whole. Including more subsectors in the analysis of the use of social media in NPOs would make it possible to look for differences due to the characteristics of organizations in different sectors, which may have different types of donors with different motivations or preferences for social media. It would also be helpful to extend the time period over which the implementation and use of social media is analyzed, in order to make the results more robust. Finally, an international study could allow the introduction of some macroeconomic and institutional variables that might be explaining differences between the effect of both social media and cash holdings in the contributions received by NPOs.

In summary, this doctoral dissertation continues to explore the factors that determine and/or influence NPOs' giving. First, we have analyzed a new fundraising tool such as social media and its ability to raise funds. We have focused not only in the availability of social media but also on the use that NPOs make of these new technologies. Second, we looked at how financing decisions about cash holdings can also affect private donations. We have changed the traditional approach of only considering donor behavior towards cash holdings by introducing the decisions made within the NPOs with excess cash holdings. In particular, it should be emphasized that donors are particularly concerned with how the NPO's resources are allocated, and therefore, any financing decision taken by the NPOs should have to be balanced with a correct allocation of resources in order not to crowd out donations. Nevertheless, while we have made progress on these understudied and novel issues, there is still a long way to go in understanding how to achieve fundraising success.

REFERENCES

Aftab, U., Javid, A. Y., & Akhter, W. (2018). The determinants of cash holdings around different regions of the world. *Business and Economic Review*, *10*(2), 151-181.

Alibakhshi, R., & Srivastava, S. C. (2022). Post-Story: Influence of Introducing Story Feature on Social Media Posts. *Journal of Management Information Systems*, *39*(2), 573-601.

Alonso-Cañadas, J., Galán-Valdivieso, F., Saraite-Sariene, L., & Caba-Pérez, M. C. (2019). Unpacking the Drivers of Stakeholder Engagement in Sustainable Water Management: NGOs and the Use of Facebook. *Water*, *11*, 1-19.

Andreoni, J., & Payne, A. A. (2003). Do government grants to private charities crowd out giving or fund-raising?. *American Economic Review*, *93*(3), 792-812.

Andreoni, J., & Payne, A. A. (2011). Is crowding out due entirely to fundraising? Evidence from a panel of charities. *Journal of Public Economics*, *95*(5-6), 334-343.

Andres-Alonso, P., Garcia-Rodriguez, I., & Romero-Merino, M. E. (2020). The impact of public funding on the different types of private contributions. *Financial Accountability & Management*, *36*(1), 33-49.

Auger, G.A. (2014). Rhetorical framing: Examining the message structure of nonprofit organizations on Twitter. *International Journal of Nonprofit and Voluntary Sector Marketing*, *19*(4), 239-249.

Ba, Y., Berrett, J., & Coupet, J. (2023). Panel data analysis: A guide for nonprofit studies. *VOLUNTAS: International Journal of Voluntary and Nonprofit Organizations*, *34*, 193-208.

Baron, R. M., & Kenny, D. A. (1986). The moderator–mediator variable distinction in social psychological research: Conceptual, strategic, and statistical considerations. *Journal of Personality and Social Psychology*, *51*(6), 1173.

Bates, T. W., Kahle, K. M., & Stulz, R. M. (2009). Why do US firms hold so much more cash than they used to?. *The Journal of Finance*, *64* (5), 1985-2021.

Becker, G. S. (1974). A theory of social interactions. *Journal of Political Economy*, *82*(61), 1063–1093

Benito-Esteban, C., Garcia-Rodriguez, I., & Romero-Merino, M. E. (2019). Towards a higher transparency. The use of websites by NGDOs. *UCJC Business and Society Review*, *16*(3), 44-71.

Bhati, A., & McDonnell, D. (2020). Success in an Online Giving Day: The Role of Social Media in Fundraising. *Nonprofit and Voluntary Sector Quarterly, 49*(1), 74-92.

Bigelli, M., & Sánchez-Vidal, J. (2012). Cash holdings in private firms. *Journal of Banking & Finance*, *36*(1), 26-35.

Calabrese, T. D. (2011a). Testing competing capital structure theories of nonprofit organizations. *Public Budgeting & Finance*, *31*(3), 119-143.

Calabrese, T. D. (2011b). Do donors penalize nonprofit organizations with accumulated wealth?. *Public Administration Review*, *71*(6), 859-869.

Calabrese, T. D. (2012). The accumulation of nonprofit profits: A dynamic analysis. *Nonprofit and Voluntary Sector Quarterly*, *41*(2), 300-324.

Calabrese, T. (2013). Running on empty: The operating reserves of US nonprofit organizations. *Nonprofit Management and Leadership*, *23*(3), 281-302.

Calabrese, T. D. (2018). Do operating reserves stabilize spending by nonprofit organizations?. *Nonprofit Management and Leadership*, *28*(3), 295-311.

Calabrese, T. D., & Gupta, A. (2019). A replication of "agency problems of excess endowment holdings in not-for-profit firms" (Journal of Accounting and Economics, 2006). *Public Finance Review*, *47*(4), 747-774.

Callen, J. L., Klein, A., & Tinkelman, D. (2003). Board composition, committees, and organizational efficiency: The case of nonprofits. *Nonprofit and Voluntary Sector Quarterly*, *32*(4), 493-520.

Campbell, D., & Lambright, K. (2020). Terms of engagement: Facebook and Twitter use among nonprofit human service organizations. *Nonprofit Management and Leadership*, *30*(4), 545-568.

Carboni, J. L., & Maxwell, S. P. (2015). Effective Social Media Engagement for Nonprofits: What Matters?. *Journal of Public and Nonprofit Affairs*, *1*(1), 18-28.

Carroll, D. A., & Stater, K. J. (2009). Revenue diversification in nonprofit organizations: Does it lead to financial stability?. *Journal of Public Administration Research and Theory*, *19*(4), 947-966.

Castillo, M., Petrie, R., & Wardell, C. (2014). Fundraising through online social networks: A field experiment on peer-to-peer solicitation. *Journal of Public Economics*, *114*, 29-35.

Charles, C., Sloan, M. F., & Butler, J. S. (2021). Capital structure determinants for arts nonprofits. *Nonprofit Management and Leadership*, *31*(4), 761-782.

Connelly, B. L., Certo, T., Ireland, R. D., & Reutzel, C. R. (2011). Signaling Theory: A Review and Assessment. *Journal of Management*, *37*(1), 39-67.

Core, J. E., Guay, W. R., & Verdi, R. S. (2006). Agency problems of excess endowment holdings in not-for-profit firms. *Journal of Accounting and Economics*, *41*(3), 307-333.

Dittmar, A., Mahrt-Smith, J., & Servaes, H. (2003). International corporate governance and corporate cash holdings. *Journal of Financial and Quantitative Analysis*, *38*(1), 111-133.

Dixon, B., & Keyes, D. (2013). The permanent disruption of social media. *Stanford Social Innovation Review*, *11*(1), 24-29.

Elvira-Lorilla, T., Garcia-Rodriguez, I., Romero-Merino, M. E., & Santamaria-Mariscal, M. (2024). Can the Use of Debt by Nonprofit Organizations Raise Government Funding?. *Public Performance & Management Review*, 47(3), 600–626.

Ferreira, M. A., & Vilela, A. S. (2004). Why do firms hold cash? Evidence from EMU countries. *European Financial Management*, *10*(2), 295-319.

Fisman, R., & Hubbard, R. G. (2003). The role of nonprofit endowments. *The Governance of Not-for-profit Organizations*, *217*, 217-18.

Fisman, R., & Hubbard, R. G. (2005). Precautionary savings and the governance of nonprofit organizations. *Journal of Public Economics*, *89*(11-12), 2231-2243.

Freeman, R. E. (1984). Strategic Management: A Stakeholder Approach. Boston: Pitman Publishing Inc.

Fritz, M. S., & MacKinnon, D. P. (2007). Required sample size to detect the mediated effect. *Psychological Science*, *18*(3), 233-239.

Frumkin, P., & Kim, M. T. (2001). Strategic positioning and the financing of nonprofit organizations: Is efficiency rewarded in the contributions marketplace?. *Public Administration Review*, *61*(3), 266-275.

Garcia-Rodriguez, I., & Romero-Merino, M. E. (2018). Inercias de financiación en el sector de la cooperación al desarrollo [*Inertias of funding in the development cooperation sector*]. *REVESCO. Revista de Estudios Cooperativos*, *128*, 127-148.

Garcia-Rodriguez, I., Romero-Merino, M. E., & Santamaria-Mariscal, M. (2022). Capital structure and debt maturity in nonprofit organizations. *Nonprofit and Voluntary Sector Quarterly*, *51*(6), 1451-1474.

Grizzle, C., Sloan, M. F., & Kim, M. (2015). Financial factors that influence the size of nonprofit operating reserves. *Journal of Public Budgeting, Accounting & Financial Management*, *27*(1), 67-97.

Guidry, J. P., Jin, Y., Orr, C. A., Messner, M., & Meganck, S. (2017). Ebola on Instagram and Twitter: How health organizations address the health crisis in their social media engagement. *Public Relations Review*, *43*(3), 477-486.

Guo, C., & Saxton, G. (2012). Tweeting Social Change: How Social Media Are Changing Nonprofit Advocacy. *Nonprofit and Voluntary Sector Quarterly*, *43*(1), 57-79.

Guo, C., & Saxton, G. D. (2018). Speaking and being heard: How nonprofit advocacy organizations gain attention on social media. *Nonprofit and Voluntary Sector Quarterly*, *47*(1), 5-26.

Hair, J., Black, W. C., Babin, B. J. & Anderson, R. E. (2010) Multivariate data analysis (7th ed.). Upper Saddle River, New Jersey: Pearson Educational International.

Hansmann, H. B. (1980). The role of trust in nonprofit enterprise, *The Yale Law Journal*, 89 (5), 835-901.

Hansmann, H. (1990). Why do universities have endowments?. *The Journal of Legal Studies*, *19*(1), 3-42.

Haro-de-Rosario, A., Sáez-Martín, A., & Caba-Pérez, M. C. (2018). Using social media to enhance citizen engagement with local government: Twitter or Facebook? *New Media & Society*, *20*(1), 29-49.

Harris, E. E., Neely, D. G., & Saxton, G. D. (2023). Social media, signaling, and donations: Testing the financial returns on nonprofits' social media investment. *Review of Accounting Studies*, *28*, 628-688.

Haski-Leventhal, D., & Foot, C. (2016). The Relationship Between Disclosure and Household Donations to Nonprofit Organizations in Australia. *Nonprofit and Voluntary Sector Quarterly*, *45*(5), 992-1012.

Hodge, M. M., & Piccolo, R. F. (2005). Funding source, board involvement techniques, and financial vulnerability in nonprofit organizations: A test of resource dependence. *Nonprofit Management and Leadership*, *16*(2), 171-190.

Hughes, J. P. (2013). A new cost efficiency measure for not-for-profit firms: Evidence of a link between inefficiency and large endowments. *Atlantic Economic Journal*, *41*, 279-300.

IAB Spain (2021). *Estudio de Redes Sociales 2021 [2021 Social Media Study]*. https://iabspain.es/estudio/estudio-de-redes-sociales-2021/

Jacobs, F. A., & Marudas, N. P. (2009). The combined effect of donation price and administrative inefficiency on donations to US nonprofit organizations. *Financial Accountability & Management*, *25*(1), 33-53.

Jensen, M. C. (1986). Agency costs of free cash flow, corporate finance, and takeovers. *American Economic Review*, *76*(2), 323-329.

Johnson, A. F., Rauhaus, B. M., & Webb-Farley, K. (2021). The COVID-19 pandemic: a challenge for US nonprofits' financial stability. *Journal of Public Budgeting, Accounting & Financial Management*, *33*(1), 33-46.

Kaden, S., Peters, G., Sanchez, J. M., & Fleischman, G. M. (2022). The impact of relative CEO compensation on not-for-profit contributions. *Journal of Public Budgeting, Accounting & Financial Management*, *34*(2), 210-237.

Kim, C. S., Mauer, D. C., & Sherman, A. E. (1998). The determinants of corporate liquidity: Theory and evidence. *Journal of Financial and Quantitative Analysis*, *33*(3), 335-359.

Kim, C., & Yang, S. U. (2017). Like, comment, and share on Facebook: How each behavior differs from the other. *Public Relations Review*, *43*(2), 441-449.

Kim, D., Chun, H., Kwak, Y., & Nam Y. (2014). The employment of Dialogic Principles in Website, Facebook, and Twitter Platforms of Environmental Nonprofit Organizations. *Social Science Computer Review*, *32*(5), 590-605.

Lam, W. F., & Nie, L. (2020). Online or Offline? Nonprofits' Choice and Use of Social Media in Hong Kong. *VOLUNTAS: International Journal of Voluntary and Nonprofit Organizations*, *31*(1), 111-128.

Lee, Y. J. (2021a). Liked on Facebook, liked for real?: Nonprofits' online popularity and financial performance. *Nonprofit Management and Leadership*, *31*(3), 609-621.

Lee, Y. J. (2021b). Nonprofit marketing expenses: Who spends more than others?. *Journal of Nonprofit & Public Sector Marketing*, *33*(3), 385-402.

Lee, Y. J. (2022). Social media capital and civic engagement: Does type of connection matter? *International Review on Public and Nonprofit Marketing*, *19*(1), 167-189.

Lee, Y. J., & Shon, J. (2018). What affects the strategic priority of fundraising? A longitudinal study of art, culture and humanity organizations' fundraising expenses in the USA. *VOLUNTAS: International Journal of Voluntary and Nonprofit Organizations*, *29*, 951-961.

Lee, Y. J., & Shon, J. (2023). Nonprofits' online social capital and charitable support. *Journal of Nonprofit & Public Sector Marketing*, *35*(3), 290-307.

Lee, S., & Woronkowicz, J. (2019). Nonprofit cash holdings and spending: The missing role of government funding. *Nonprofit Management and Leadership*, *29*(3), 321-340.

Li, Z. C., Ji, Y. G., Tao, W., & Chen, Z. F. (2022). Engaging your feelings: Emotion contagion and public engagement on nonprofit organizations' Facebook sites. *Nonprofit and Voluntary Sector Quarterly*, *51*(6), 1281-1303.

Lovejoy, K., & Saxton, G. (2012). Information, Community and Action: How Nonprofit Organizations Use Social Media. *Journal of Computer-Mediated Communication*, *17*(3), 337-353.

Lovejoy, K., Waters, R., & Saxton, G. (2012). Engaging stakeholders through Twitter: How nonprofit organizations are getting more out of 140 characters or less. *Public Relations Review, 38*(2), 313-318.

Marcuello, C., & Salas, V. (2001). Nonprofit organizations, monopolistic competition, and private donations: Evidence from Spain. *Public Finance Review*, *29*(3), 183-207.

Martínez-Sola, C., García-Teruel, P. J., & Martínez-Solano, P. (2018). Cash holdings in SMEs: speed of adjustment, growth and financing. *Small Business Economics*, *51*, 823-842.

Marudas, N. P. (2004). Effects of nonprofit organization wealth and efficiency on private donations to large nonprofit organizations. *Research in Governmental and Nonprofit Accounting*, *11*, 71-92.

Marudas, N. P., & Jacobs, F. A. (2004). Determinants of charitable donations to large US higher education, hospital, and scientific research NPOs: New evidence from panel data. *VOLUNTAS: International Journal of Voluntary and Nonprofit Organizations*, *15*, 157-179.

Marwell, N. P., & Calabrese, T. (2015). A deficit model of collaborative governance: Government–nonprofit fiscal relations in the provision of child welfare services. *Journal of Public Administration Research and Theory*, *25*(4), 1031-1058.

Mato-Santiso, V., Rey-García, M., & Sanzo-Pérez, M. J. (2023). Volunteer omnichannel behavior in nonprofit organizations: Key antecedents and implications for management. *Nonprofit Management and Leadership*, *34*(2), 433-463.

Maxwell, S. P., & Carboni, J. L. (2016). Social media management: Exploring Facebook engagement among high-asset foundations. *Nonprofit Management and Leadership*, *27*(2), 251-260.

Mitchell, G. E., & Calabrese, T. D. (2019). Proverbs of nonprofit financial management. *The American Review of Public Administration*, *49*(6), 649-661.

Miller, M. H., & Orr, D. (1966). A model of the demand for money by firms. *The Quarterly Journal of Economics*, *80*(3), 413-435.

Moran, G., Muzellec, L., & Johnson, D. (2020). Message content features and social media engagement: evidence from the media industry. *Journal of Product & Brand Management*, *29*(5), 533-545.

Myers, S. (1984), The capital structure puzzle, *Journal of Finance*, *39*(3), 572-592.

Myers, S. C., & Majluf, N. S. (1984). Corporate financing and investment decisions when firms have information that investors do not have. *Journal of FinancialEeconomics*, *13*(2), 187-221.

Nah, S., & Saxton, G. (2013). Modeling the adoption and use of social media by nonprofit organizations. *New Media & Society, 15*(2), 294-313.

Okten, C. & Weisbrod, B. A. (2000) Determinants of donations in private nonprofit markets. *Journal of Public Economics*, *75*(2), 255-272.

Olinski, M., & Szamrowski, P. (2021). Facebook as an engagement tool: How are public benefit organizations building relationships with their public?. *PloS One*, *16*(9), e0256880.

Opler, T., Pinkowitz, L., Stulz, R., & Williamson, R. (1999). The determinants and implications of corporate cash holdings. *Journal of Financial Economics*, *52*(1), 3-46.

Ozkan, A., & Ozkan, N. (2004). Corporate cash holdings: An empirical investigation of UK companies. *Journal of Banking & Finance*, *28*(9), 2103-2134.

Parsons, L. M. (2003). Is accounting information from nonprofit organizations useful to donors? A review of charitable giving and value-relevance. *Journal of Accounting Literature*, *22*, 104-129.

Pfeffer, J., & Salancik, G. R. (1978). The external control of organizations: A resource dependence perspective. New York, NY: Harper and Row.

Pfeffer, J., & Salancik, G. (2015). External control of organizations—Resource dependence perspective. In *Organizational behavior 2* (pp. 355-370). Routledge.

Phua, J., Jin, S. V., & Kim, J. J. (2017). Uses and gratifications of social networking sites for bridging and bonding social capital: A comparison of Facebook, Twitter, Instagram, and Snapchat. *Computers in Human Behavior*, *72*, 115-122.

Pizzini, M., & Sterin, M. (2023). The relation between cash reserves, governance, and donations in nonprofit organizations. *Journal of Accounting, Auditing & Finance*, 0148558X221142953.

Ramirez, A. (2011). Nonprofit cash holdings: Determinants and implications. *Public Finance Review*, *39*(5), 653-681.

Ratajczak, P. (2021). The mediating role of natural and social resources in the corporate social responsibility—corporate financial performance relationship. *Managerial and Decision Economics*, *42*(1), 100-119.

Salomon, D. (2013). Moving on from Facebook: Using Instagram to Connect with Undergraduates and Engage in Teaching and Learning. *College and Research Libraries News*, *74*(8), 408-412.

Saxton, G. D., Kuo, J. S., & Ho, Y. C. (2012). The determinants of voluntary financial disclosure by nonprofit organizations. *Nonprofit and Voluntary Sector Quarterly*, *41*(6), 1051-1071.

Saxton, G., & Waters, R. (2014). What do Stakeholders Like on Facebook? Examining Public Reactions to Nonprofit Organizations' Informational, Promotional, and Community-Building Messages. *Journal of Public Relations Research*, *26*(3), 280-299.

Saxton, G. D., & Wang, L. (2014). The social network effect: The determinants of giving through social media. *Nonprofit and Voluntary Sector Quarterly*, *43*(5), 850-868.

Siegel, A. F., & Wagner, M. R. (2022). Multiple regression: predicting one variable from several others. *Practical Business Statistics. Academic Press: United States of America*.

Smith, J. N. (2018). The social network?: Nonprofit constituent engagement through social media. *Journal of Nonprofit & Public Sector Marketing*, *30*(3), 294-316.

Sobel, M. E. (1982). Asymptotic confidence intervals for indirect effects in structural equation models. *Sociological Methodology*, *13*, 290-312.

Spence, M. (1973). Job market signaling. *The Quarterly Journal of Economics, 87*(3), 355–374.

Statista (2021). *Most popular social networks worldwide as of January 2021, ranked by number of active users*. https://www.statista.com/statistics/272014/global-social-networks-ranked-by-number-of-users/

Statista (2023). Number of Instagram users worldwide from 2020 to 2025. https://www.statista.com/statistics/183585/instagram-number-of-global-users/

Suchman, M. (1995). Managing legitimacy: Strategic and institutional approaches. *Academy of Management Review*, *20*, 571–610.

Svensson, P., Mahoney, T., & Hambrick, M. (2015). Twitter as a Communication Tool for Nonprofits: A Study of Sport-For-Development Organizations. *Nonprofit and Voluntary Sector Quarterly*, *44*(6), 1086-1106.

Schwartz, R. A. (1970). Personal philanthropic contributions. *Journal of Political Economy*, *78*(6), 1264-1291.

Taylor, M., & Kent, M. L. (2014). Dialogic engagement: Clarifying foundational concepts. *Journal of Public Relations Research*, *26*(5), 384-398.

Tian, F., Labban, A., Shearer, R., & Gal, Q. (2021). The Impact of Social Media Activity on Nonprofit Donations in China. *VOLUNTAS: International Journal of Voluntary and Nonprofit Organizations*, *32*(2), 488-497.

Tinkelman, D., & Mankaney, K. (2007). When is administrative efficiency associated with charitable donations?. *Nonprofit and Voluntary Sector Quarterly*, *36*(1), 41-64.

Tremblay-Boire, J., & Prakash, A. (2015). Accountability.org: Online Disclosures by U.S. Nonprofits. *VOLUNTAS: International Journal of Voluntary and Nonprofit Organizations, 26*(2), 693-719.

Trussel, J. M., & Parsons, L. M. (2007). Financial reporting factors affecting donations to charitable organizations. *Advances in Accounting*, *23*, 263-285.

Tuckman, H. P., & Chang, C. F. (1993). How well is debt managed by nonprofits?. *Nonprofit Management and Leadership*, *3*(4), 347-361.

Waters, R. D., & Jones, P. M. (2011). Using video to build an organization's identity and brand: A content analysis of nonprofit organizations' YouTube videos. *Journal of Nonprofit & Public Sector Marketing*, *23*(3), 248-268.

Weidemann, J. F. (2018). A state-of-the-art review of corporate cash holding research. *Journal of Business Economics*, *88*, 765-797.

Weisbrod, B. A., & Dominguez, N. D. (1986). Demand for collective goods in private nonprofit markets: Can fundraising expenditures help overcome free-rider behavior?. *Journal of Public Economics*, *30*(1), 83-96.

Yetman, M. H., & Yetman, R. J. (2013). Do donors discount low-quality accounting information?. *The Accounting Review*, *88*(3), 1041-1067.

Young, J. A. (2017). Facebook, Twitter and Blogs: The Adoption and Utilization of Social Media in Nonprofit Human Service Organizations. *Human Service Organizations: Management, Leadership & Governance*, *41*(1), 44-57.

Yue, C. A., Men, L. R., & Hart, E. B. (2023). “Chief engagement officers?” A comparative study between US corporate and nonprofit executive Leaders' social media communication strategies. *Nonprofit Management and Leadership*, *33*(4), 879–892.

Zhao, X., Lynch Jr, J. G., & Chen, Q. (2010). Reconsidering Baron and Kenny: Myths and truths about mediation analysis. *Journal of Consumer Research*, *37*(2), 197-206.