



# Environmental, Social and Governance (ESG) Scores and Financial Performance of Multilatinas: Moderating Effects of Geographic International Diversification and Financial Slack

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## Abstract

This paper examines whether a firm's financial performance (FP) is associated with superior environmental, social and governance (ESG) scores in emerging markets of multinationals in Latin America. The study addresses the current research gap on this issue; it develops hypotheses and tests them by applying linear regressions with a data panel drawn from the Thomson Reuters Eikon™ database to analyse data on 104 multinationals from Brazil, Chile, Colombia, Mexico and Peru between 2011 and 2015. The results suggest that the relationship between the ESG score and FP is significantly statistically negative. Furthermore, in examining environmental, social and governance separately to accurately determine each variable's relationship to multilatinas' FP, the results reveal a negative relationship. Finally, the empirical analysis provides evidence for a moderating effect of financial slack and geographic international diversification on the relationship between ESG dimensions and firms' FP. This study furthers understanding of the relationship between ESG dimensions and FP for the Latin American business context.

**Keywords** Environmental, social and governance dimensions · ESG performance · ESG score · Financial performance · Geographic international diversification · Financial slack · Emerging market multinationals · Multilatinas

**JEL Classification** M14 · F23

## Introduction

Corporate social responsibility (CSR) has acquired great relevance in academia and business management in recent years (Barrena et al. 2016; Madorran and Garcia 2016). Organizations have been increasingly subjected to tremendous pressure to maximize productivity and profitability (Javalgi et al. 2009) while experiencing constant demand from consumers, suppliers, employees, investors, non-governmental organizations and public powers to invest in the

development and implementation of CSR practices (Kolk and van Tulder 2010). Firms are thus concerned not only with economic issues but also with the social and environmental impacts of their activities (Maas and Reniers 2014). A firm can achieve success through the implementation of good corporate governance practices and by maintaining strong relationships with society and the environment (Foote et al. 2010).

Environmental, social and governance (ESG) score has emerged as an important pillar of CSR for the development of sustainable strategies that affect the financial performance (FP) of multinational firms (Eccles and Serafeim 2013). In fact, the relationship between ESG performance and FP has been widely studied (Brammer et al. 2006; Friede et al. 2015; Lee et al. 2016; Lo and Sheu 2007; McWilliams and Siegel 2000; Nollet et al. 2016; Ortas et al. 2015; Surroca et al. 2010; Van Beurden and Gössling 2008; Waddock and Graves 1997) and has produced controversial results. While some studies find that investing in ESG activities improves FP (Cahan et al. 2015; Eccles et al. 2014; Fatemi et al. 2015;

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Filbeck et al. 2009; Lo and Sheu 2007; Rodriguez-Fernandez 2016; Wang and Sarkis 2017), certain researchers have found negative effects (Branco and Rodrigues 2008; Brammer et al. 2006; Lee et al. 2009). For instance, Lee et al. (2009) find that ESG investment worsens FP and argue that this could indicate a lower cost of equity capital for firms with high ESG scores. A third group of authors concludes that there is, in fact, no relation between the ESG score and FP (Galema et al. 2008; Statman 2006; Horváthová 2010; Orlitzky et al. 2003).

All of these studies have been performed on multinationals in developed markets (DMNs), while the impact of this relationship on emerging market multinationals in Latin America (multilatinas) remains far from clear (Bondy et al. 2012; Doh and Guay 2006; Lourenço and Branco 2013; Muller and Kolk 2009; Orsato et al. 2015). Although the empirical evidence reported by these studies is quite broad and highlights the relevance of the value of ESG activities, this information cannot be generalized to emerging markets. It is important to emphasize that multilatinas are significantly and systematically different from DMNs in terms of their social, cultural and managerial practices (Griesse 2007); this is the case because enterprises from emerging economies must deal with weak or dysfunctional institutions (Aulakh et al. 2000; Contractor et al. 2007; Khanna and Palepu 2010; Peng et al. 2008), limited state control (Gammeltoft et al. 2010), less favourable business climates, a lack of corporate governance (Benites and Polo 2013; Peinado-Vara 2006), higher levels of uncertainty, specifically higher corruption levels (Beets 2005; Cuervo-Cazurra 2016) and greater political risks (Henisz 2000). In sum, Latin America serves as an interesting and rather unique context for testing old theories and generating new insights about CSR, and specifically for identifying the effect of ESG practices on the performance of multinationals. For this reason, this study analyses the relation between the FP of multilatinas listed as emerging markets (Brazil, Chile, Colombia, Mexico and Peru) and their ESG scores. Our research hypotheses were confirmed by a sample of 104 multilatinas from 8 economic sectors during the period 2011–2015. The results show that the relationship between ESG score and FP is negative for multilatinas.

Since the ESG score is based on a company's performance in the environmental (E), social (S) and governance (G) sub-factors in equal proportion, it is possible for a company to participate in individual E, S and G activities at different levels (Humphrey et al. 2012). Some companies can develop initiatives in one of these three dimensions that contribute to the generation of value, while others can decrease financial value. For example, a multilatina can manage social practices and relationships with stakeholders but may not be environmentally conscious or may employ weak governance practices. As such, a more detailed

analysis of the sub-factors may be advantageous for better understanding the impact of ESG activities on multilatinas' FP. This paper thus also examines E, S and G separately to determine accurately the relationship of each sub-factor to FP in Latin America.

Besides the relationship of ESG score to FP, studies suggest that other factors that can strengthen or weaken this relationship, such as innovation (Hull and Rothenberg 2008; Surroca et al. 2010), long-term orientation (Wang and Bansal 2012), stakeholder relations (Barnett 2007) and managerial action (Kim and Statman 2012). This study analyses other factors of importance in the literature but little studied in the context of the multilatinas. First, it is important to identify internal aspects such as slack financial resources that can play an important role in improving the relationship between FP and ESG score. To identify these resources, we assume that the presence of this type of slack yields additional funds in which the firm can invest to develop efficient ESG initiatives that can improve benefits derived from multilatinas' visibility and reputation, in turn improving their FP. Multilatinas with a great availability of financial resources would be able to invest in more advanced and sustainable ESG activities and achieve better FP in response to pressures from their different stakeholders. This paper also discusses whether having a greater international presence can lead to better benefits derived from greater pressure on multilatinas to maintain legitimacy in the different markets in which they operate (Kostova and Zaheer 1999). Such pressure could lead to engaging in advanced ESG activities, thus improving their FP. The concern for legitimacy forces companies to adopt best ESG practices (Bansal and Clelland 2004; Berrone and Gomez-Mejia 2009; Deephouse and Suchman 2008; Brammer et al. 2009) to improve their corporate reputation (Christmann and Taylor 2001) and access to resources. This activity makes multilatinas more visible, raising the expectation that they achieve better FP. In sum, determining the existence of any of these moderations should be important for multilatinas' development of strategies, since they will seek to implement advanced ESG practices in the different markets where they operate to achieve better reputation, legitimacy and approval from stakeholders.

This paper makes several key contributions. First, previous studies have mainly focused on the effect of ESG on the corporate FP of DMNs. In most cases, samples have included companies listed in a North American stock exchange (Friede et al. 2015). In contrast, this study focuses on emerging market multinationals (EMNs) and specifically on multilatinas. Although it is true that multinational firms founded in emerging economies have been studied in very recent literature (Cuervo-Cazurra 2016; Cuervo-Cazurra et al. 2018; Meyer and Estrin 2014; Marano et al. 2017; Orsato et al. 2015), few empirical studies have been performed on ESG dimensions in the multilatinas. Since this

relationship has not been directly explored in the context of multilatinas, these findings fill an important gap in the field. Second, this study represents an important advance in the International Business literature on multinational firms, as it applies both resource-based views and institutional theory to analyse the influence of ESG scores and individualized effects of each sub-factor (E–S–G) on multilatinas' FP results, contributing coherence to the study of multinational firms (Aguilera-Caracuel et al. 2012) and especially of multilatinas. The paper not only illustrates the effect of ESG scores on FP as a whole but also analyses how the three components (E, S and G) contribute to the aforementioned relationship. Finally, little attention has been paid to analysing the moderating effects of financial slack (FS) and geographic international diversification (GID) in the relationship between ESG and FP (and even less in the case of Latin American multinationals). On the one hand, FS is of interest because multilatinas in many cases are slower to carry out ESG activities because they are perceived as having scarcity of resources and do not see these activities as a priority. They justify not investing in ESG because they do not have liquid resources and are conditioned by ESG practices' commitment to their level of liquidity. It is therefore interesting to analyse whether the presence of FS can condition multilatinas to have other priorities, adopt efficient ESG practices and determine the latter's effect on FP. It is also important to analyse the effect of the GID, since multilatinas are experiencing a desire to increase their presence in foreign markets, making it worthwhile to analyse how this international projection affects multilatinas' performance, taking into account cultural, political, institutional and economic differences in the host countries. This paper makes a unique contribution to the literature by analysing the moderating effects of GID and FS as key explanatory factors shaping the relationships mentioned.

This article is organized as follows. It first discusses the theoretical framework and the two theories used to develop the hypotheses. Next, it describes the sample, data, and methodology used. Finally, it reports the results and provides a discussion of the main findings and concluding remarks.

## Theoretical Background

### Importance of Emerging Markets of Multinationals

Over the last two decades, an important group of multinationals has emerged from developing countries, especially from Asia and Latin America. Some authors argue that the presence of such companies outside of their countries of origin is explained only by their privileged access to scarce natural resources and/or access to cheap labour (Debrah et al. 2000; Fleury et al. 2010). Others state that such EMNs

operate in hostile environments due to the presence of weak institutions, judicial systems, limiting regulations and feeble control of corruption (Cuervo-Cazurra and Genc 2008; Del Sol and Kogan 2007). As a result, EMNs have achieved innovative capabilities that are relevant to other countries and relatively easy to transfer internationally (Khanna and Palepu 2006).

An important characteristic that differentiates EMNs from DMNs lies in the presence of poor institutional conditions in home countries (Marano et al. 2017), especially with regard to weak corporate governance (Cuervo-Cazurra and Ramamurti 2014), higher levels of political risk (Henisz 2000) and corruption (Cuervo-Cazurra 2016). Hence, Cuervo-Cazurra et al. (2018) argue that EMNs employ better internationalization processes when they develop the capacity to manage uncertainties of political risk and corruption; these processes allow them to face political systems and conditions that differ markedly from those of their home countries and, in turn, allow them to adapt more easily to foreign markets with respect to compliance with rules and regulations. Other scholars such as Narula (2012) argue that EMNs behave similarly to other multinationals yet experience different sets of country- and firm-specific advantages.

Another striking difference lies in degrees of transnationality (that is, the volume of multinationals' foreign activities relative to all activities, both domestic and foreign). First, EMNs are less transnational in terms of assets, sales and employment levels than DMNs. This is the case because, although EMNs have expanded their foreign sales rapidly, the core basis of their production has remained in their home countries (UNCTAD 2014). Another explanatory factor concerns ownership. EMN ownership structures often differ from those of DMNs, as the former are often owned by the state or by families, entities whose goals may extend beyond those related to business. The existence of other objectives (simply due to the participation of other owners) may explain the difference observed in EMN internationalization patterns (Cuervo-Cazurra 2012).

On the other hand, EMNs experience more risk in pursuing stronger ESG performance than do DMNs due to issues of political uncertainty, corruption, working conditions and climate change faced in emerging countries (Clark et al. 2015). In addition, limited corporate transparency in corporate cultures and business regulations lead perceived ESG risks to be more pronounced in emerging countries than in developed countries. In turn, EMNs must develop specific skills related to environmental, social and corporate governance dimensions that enable them to operate in more demanding institutional contexts (for example, in other geographic contexts). In sum, it is necessary to better understand these dimensions of the Latin American context to develop a stronger understanding of how EMNs differ from DMNs.

## Multilatinas

One subgroup of EMNs that has developed a leading role is multilatinas, or multinational firms originating in Latin American countries. Multilatinas have existed for many decades, but their visibility has grown considerably since the 1990s and even more in the new millennium (Aguilera et al. 2017). For example, 62 multilatinas appeared in the 2016 Forbes ranking of Global 2000 Leading Companies (Forbes 2016). From 2008 through 2016, the top 100 multilatinas registered annual revenue growth levels of 5.2% measured in US dollars; this value is approximately three times higher than the average for all large Latin American companies (BCG 2018). The first multilatinas originally performed their activities in basic and manufacturing industries due to the large quantities of natural resources that their regions of origin possessed. Multilatinas' foreign activities were initially oriented towards such regions (markets located in Latin America) but are now increasingly oriented towards countries abroad, including both emerging and developed countries. Today, these firms also devote some of their activities to software development; the petrochemical industry; and services such as finance, transportation, consumer goods and communications, among others (UNCTAD 2014).

According to the Economic Commission for Latin America (ECLA) (CEPAL in Spanish), the success of these companies in recent decades has been due to economic reforms conducted in countries of the region, saturation of local markets, the need to diversify risks and especially the ease with which Latin American companies have expanded into local and international markets (CEPAL 2015). As these multilatinas enjoy a privileged competitive position in their region, the fruits of technological, productive and commercial knowledge that they have acquired through mergers and acquisitions, and an ability to connect more intimately with consumers and to create innovation networks (Aguilera et al. 2017), they now face the challenge to internationalize and access new markets to improve their reputations (Aguilera-Caracuel et al. 2017) and legitimacy levels (Eccles et al. 2014).

## Hypotheses

### ESG Score and the FP of Multilatinas

The ESG score can be classified as the added value of CSR performance derived from many environmental, social and governance actions. Given that the Latin American context presents different conditions than those of developed markets, firms that achieve higher levels of ESG require greater investments. Thus, multilatinas must allocate considerable financial resources to strengthen their practices in ESG

factors and to develop effective organization-level capacities to achieve superior performance. However, costs related to the improvement of ESG are not often reflected in a firm's FP, possibly because such practices are not carried out in the most effective manner; these practices are not visible, and firms' stakeholders do not ascribe enough importance to them.

According to the traditional neoclassical approach, investing in ESG activities creates additional costs for a firm (Derwall et al. 2005; Hassel et al. 2005; Palmer et al. 1995; Semenova and Hassel 2008), which impacts FP. For instance, investments required to reduce emissions or to improve use of natural resources are excessive (Rassier and Earnhart 2010; Sueyoshi and Goto 2009), and some multilatinas' uses of obsolete technologies in their production processes (implemented without considering their effects on the environment and without clear emissions reduction, noise control or waste management policies) render the costs of converting to processes that use clean technologies quite high. Thus, when these firms decide to invest in environmental initiatives, they find their economic resources compromised, and their performance decreases since environmental goals are not priorities for them (neither is investment in environmental matters).

In addition, a lack of trust in corporate environments among multilatinas' stakeholders (Zhang et al. 2013) caused by high indexes of corruption in Latin American governments, political and business scandals due to bribes, manipulation of information (as communications and media outlets create information asymmetries), low degrees of investor protection, etc. experienced in Latin America forces multilatinas to make more investments in corporate governance mechanisms (for example, hiring external auditors, modifying company bylaws, or affording more independence to boards of directors) to demonstrate greater legitimacy in questions relevant to its stakeholders (Reimann et al. 2012). These initiatives are generally short-term and are perceived as high expenses that affect companies' performance.

On the other hand, despite efforts made to develop initiatives on social issues (Fiaschi et al. 2017; Gugler and Shi 2009; Marquis and Raynard 2015), multilatinas have not yet garnered sufficient trust and loyalty from their workers, from consumers and from society in general (governments, unions and NGOs, among others). This may be the case because these companies suffer lack of legitimacy due to weak institutions and the poor reputations of their home countries (Fiaschi et al. 2017). Furthermore, cultural and institutional differences observed in emerging markets in which multilatinas operate and the minimal set of ethical and moral values applied in these countries have resulted in corruption (Cuervo-Cazurra 2016), human rights violations, labour exploitation, limited placement of women in managerial positions and discrimination, among other

issues. These practices have historically generated image problems in communities. Multilatinas' donations or social investments are often perceived as bribes, not as initiatives contributing to firm value. Thus, multilatinas' social benefits are left unrecognized, as their socially motivated actions receive little visibility and publicity (Araya 2006; Vives 2012). These activities do not attract stakeholder attention, improve a firm's brand image or grant subsidies to firms that work in these areas.

For these reasons, we propose the following hypothesis:

**H1** Multilatinas' high ESG scores are negatively related to their FP.

A company's ESG score is based on its sub-factors' (environmental, social and governance) performance. Each sub-factor's effect on corporate FP has been a topic of interest in the literature. Friede et al. (2015), Galema et al. (2008) and Statman and Glushkov (2009) note that the ESG score is determined by a number of factors, each of which may have a different relation to and impact on FP. But which dimensions of this ESG score affect its relationship to FP? There is no consensus on the actual effect of ESG on FP. Some authors (Limkriangkrai et al. 2017) state that the global score can be used, while others (Humphrey et al. 2012) recommend using the individualized score of each dimension due to factors such as conditions of the country of origin, pressures from different stakeholders and institutional conditions, among others. For this reason, it is important to examine the relationship between E, S and G sub-factors and their effects on multilatinas' value. Based on these assertions, the following hypotheses are proposed as constituents of H1:

**H1a** Multilatinas' high E scores are negatively related to their FP.

**H1b** Multilatinas' high S scores are negatively related to their FP.

**H1c** Multilatinas' high G scores are negatively related to their FP.

### **Moderating Effects of Financial Slack on the Relationship Between ESG and FP**

Financial resource availability is one factor that influences a firm's capacity to invest in ESG practices (Aguilera-Caracuel et al. 2015; Allouche and Laroche 2005; Surroca et al. 2010; Waddock and Graves 1997). When organizations have resources that can be allocated to other uses, their managers tend to take more innovative actions (Voss et al. 2008), satisfying corporate stakeholders' demands. Conversely, when resources are limited, firms are more likely to implement

conservative strategies to protect themselves, investing in what they consider to be fundamental for their survival (Aguilera-Caracuel et al. 2015).

Multilatinas are observed to have weak corporate governance (Cuervo-Cazurra and Ramamurti 2014) and to lack financial flexibility due to scarcity of resources. They therefore focus somewhat more on their operational activities than on sustainability initiatives. Because financial resources are limited, managers tend to adopt more profitable activities, since they consider ESG initiatives expensive and do not view them as a priority (Sharma 2000). Conversely, when multilatinas possess sufficient financial margin, managers do not have to worry about repayment times and short-term expenses. In this situation, multilatinas are more likely to support E, S and G investments or initiatives needed to respond to changes in pressures from their different stakeholders.

As FS increases, multilatinas can thus change their perceptions of investments in ESG issues; they may consider these issues as priorities and integrate them into the company's strategy as a source of competitive advantage. This approach enables them to perform more advanced and sustainable ESG activities with greater commitment from managers and workers. Such activities will have a greater effect on FP (Brammer and Millington 2008; Velte and Velte 2016), due to increased transparency. They will also reduce costs; stakeholders will value these initiatives more, since they make the organization more visible and will bring it a better reputation (Aguilera-Caracuel et al. 2017; Miles and Covin 2000). These arguments have led the authors to propose the following hypothesis:

**H2** The availability of financial slack in multilatinas weakens the relationship between ESG score and FP.

The following hypotheses are proposed as constituents of H2:

**H2a** The availability of financial slack in multilatinas weakens the relationship between E scores and FP.

**H2b** The availability of financial slack in multilatinas weakens the relationship between S scores and FP.

**H2c** The availability of financial slack in multilatinas weakens the relationship between G scores and FP.

### **Moderating Effects of GID in the Relationships Between ESG and FP**

The Latin American context provides a different economic and institutional environment for firms' strategies of GID. Multilatinas operate in national economies of relatively



high risk and are subject to unpredictable structural changes (Nachum 2004). Many emerging markets are still tightly regulated, with strong restrictions on private firms. Such characteristics motivate the GID of multilatinas.

Institutional Theory states that organizations that diversify beyond their home region face greater pressure to maintain the organization's legitimacy in the foreign markets where they operate (Kostova and Zaheer 1999). These organizations must adapt to the expectations of their host regions (Aldrich and Fiol 1994), and concern for legitimacy forces companies to adopt best ESG practices (Bansal and Clelland 2004; Berrone and Gomez-Mejia 2009; Deephouse and Suchman 2008; Brammer et al. 2009; Kostova and Zaheer 1999; Sharfman et al. 2004), improving their corporate reputation (Christmann and Taylor 2001) by enhancing access to resources.

Thus, the greater the multilatinas' presence in international markets, the greater the impact of ESG initiatives on their FP. Having greater international projection means that companies have stakeholders that are more diverse (Sharfman et al. 2004) in cultural, political, institutional and economic characteristics, since multilatinas operate in countries with differentiated profiles. Their resulting greater visibility creates a greater need to face the demands of the different stakeholders and to have greater acceptance, legitimacy and freedom to operate in other markets (Kostova and Zaheer 1999). Multilatinas must thus be careful to recognize the power of ESG measures (Bansal and Clelland 2004; Berrone and Gomez-Mejia 2009; Deephouse and Suchman 2008; Brammer et al. 2009; Kostova and Zaheer 1999; Sharfman et al. 2004), as well as their substantial character. When integrated into corporate strategy, ESG measures will bring more significant improvements in FP by improving reputation and level of transparency (Bansal 2005; Christmann 2004). For these reasons, the following hypotheses are proposed:

**H3** The geographic international diversification of multilatinas weakens the existing relationship between ESG score and FP.

The following hypotheses are proposed as constituents of H3:

**H3a** The geographic international diversification of multilatinas weakens the relationship between E scores and FP.

**H3b** The geographic international diversification of multilatinas weakens the relationship between S scores and FP.

**H3c** The geographic international diversification of multilatinas weakens the relationship between G scores and FP.

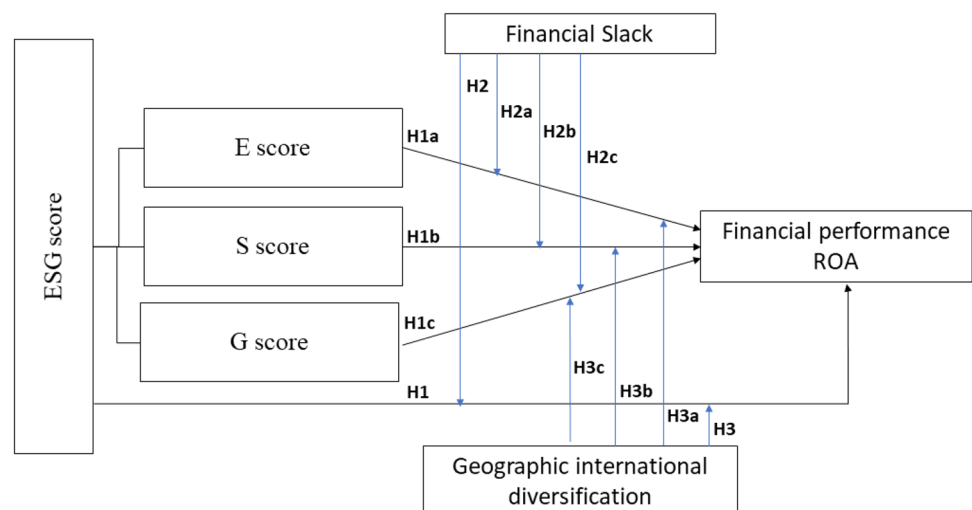
Figure 1 summarizes the research model developed in this study.

## Methodology

### Data

This study used several criteria to determine the sample. First, it considered only multilatinas with more than USD \$1 billion in annual revenue headquartered in Latin American countries included in the MSCI Emerging Markets Index. The MSCI Emerging Markets Index is designed to reflect the performance of large- and mid-cap securities in 24 emerging markets. Thus, only multilatinas in Brazil (C1), Chile (C2), Colombia (C3), Mexico (C4) and Peru (C5) were selected. These five countries represent 88% of all multilatinas in the region (CEPAL 2015). Second, companies listed on Latin America's stock market were chosen due to quality of financial data and availability of financial information. Finally,

Fig. 1 Research model



firms disclosing no financial, environmental, social and corporate governance or internationalization information on the Thomson Reuters' database or on ASSET4 ESG by Eikon for 2011–2015 were not taken into consideration. The latter database contains financial, environmental, social, corporate governance and internationalization information for over 6000 firms worldwide for all activity sectors, incorporating over 400 measures clustered into over 70 indicators and drawn from over 75,000 information sources, all of which are compared. All values are standardized and verified to facilitate the statistical analysis. The initial data set consists of 147 companies from Brazil, Colombia, Chile, México and Peru. Of these, 24 companies not listed on the stock exchange and 19 not providing enough ESG or financial data were excluded.

As a result of the above, a longitudinal database composed of 104 firms and 520 observations was obtained; the firms were distributed into seven activity sectors following the North American Industry Classification Systems (NAICs): 22.1% manufacturing (S31), 21.15% distribution (S44), 19.23% finance and insurance (S52), 15.38% utilities (S22), 9.62% mining and gas and petroleum extraction (S21), 6.73% transportation (S48) and 5.77% construction (S23). Complete information at the country level for this sample was obtained; these data include countries in which the selected multilatinas' headquarters are located and other countries in which they operate.

## Variables

### Dependent Variable

The dependent variable is FP. Return on Assets (ROA) is used in this paper as a proxy for the firm's FP. Numerous studies show that the most commonly used FP variables are financial accounting returns (specifically Return on Equity and Return on Assets) and Tobin's  $q$  (Elsayed and Paton 2005; Hart and Ahuja 1996; Rassier and Earnhart 2010; Tang et al. 2012). ROA is widely used in the literature as a proxy to examine the effects of ESG on FP (Choi and Wang 2009; Tang et al. 2012; Velte 2017). ROA is defined as the net income's ratio to total assets and focuses on how a company's earnings respond to different managerial policies and to the relative efficiency of asset utilization (Lee and Faff 2009). Thomson Reuters' DataStream was used to collect financial data on the selected multilatinas.

### Independent Variables

This study uses the ESG scores retrieved from Thomson Reuters' Asset4 database as independent variables. The total ESG score can be classified as an added value of CSR performance for the three subgroups (E, S and G) (for example,

emissions, environmental product innovation, human rights, employment quality, training and development, community, shareholders, etc.). Values range from 0 to 100, with 100 as the highest score. We can thus quickly and easily identify each multilatina's ESG strengths (50–100 points) or weaknesses (0–49 points).

This paper also analyses the impacts of the three E, S and G score components separately: environmental score (E score), social score (S score) and governance score (G score); these were obtained from Asset4 (Thomson Reuters 2017).

- E score: This component covers a firm's business actions in terms of environmental responsibility. For this dimension, 57 indicators were evaluated. Among them there are the implementation of actions for pollution control, emissions reduction policies, use of renewable energy, eco-sustainable product development, environmental investment making and environmental standard establishment. This standard reflects the extent to which a company uses best management practices to avoid environmental risks and is capitalised from environmental opportunities. This composite index is generated from a weighted score of a company's strengths and weaknesses on indicators related to: (a) emissions reduction, (b) product innovation and (c) resource consumption reduction.
- S score: This component reflects a firm's commitment to the community, not only the community in which it operates but also beyond. The dimension contains 60 indicators that include information on the policies and the programmes implemented by the firms related to health, safety, workplace diversity, training and labour rights, employee and customer satisfaction, percentage of women employed, whether a firm has received distinctions or prizes for its CSR and other social issues relevant to interested internal and external parties. It reflects a company's reputation, which is a key factor in determining its ability to generate long-term value. The composite index is generated from a weighted score of a company's strengths and weakness on indicators related to: (a) product responsibility, (b) community, (c) human rights and (d) workforce.
- G score: This component measures the degree to which a firm's systems and processes guarantee that its members and board executives act in the best interest of its shareholders in envisioning long-term operations. This dimension contains 48 indicators on levels of leadership team transparency with stakeholders; the completion of sustainability reports; minority shareholders' rights; and the remuneration of executives, independent board members and audit committees. It reflects a company's capacity (through its use of best management practices) to direct and control its rights and responsibilities through crea-

tion of incentives. The composite index is generated from a weighted score of a company's strengths and weaknesses on indicators related to: (a) management (board functions and structures) and (b) CSR strategies.

### Moderating Variables

**Financial Slack** As mentioned above, FS refers to the level of liquid assets, such as cash without commitments made to any goal by an organization (Kraatz and Zajac 2001), that can be invested in a wide range of activities. The following formula was used to calculate financial slack (FS):

$$\text{Slack}_i = \text{current assets} / \text{current liabilities} \quad (1)$$

We used Thomson Reuters' DataStream to collect FS data on multilatinas.

**Geographic International Diversification** Since the internationalization of a firm's sales can affect its social and environmental performance (Attig et al. 2016; Brammer et al. 2006; Kang 2013), the entropy index was used to measure a firm's degree of GID. To calculate the entropy index, Hitt et al. (1997) and Aguilera-Caracuel et al. (2015) measured firms' sales outside of the domestic market according to their global distribution; to do so, the following equation was used:

$$GID_j = \sum_{i=1}^n P_{ij} \times \left( \ln \frac{1}{P_{ij}} \right), \quad (2)$$

where  $P_i$  is sales percentage in a specific region  $i$ , and  $\ln \frac{1}{P_i}$  represents the weight given to a region. The ratio considers both the number of regions in which a company operates and the relevance of each region relative to a company's total sales (Hoskisson et al. 1993). To calculate entropy, this study used international market sales data available in the Thomson geographic segment for each company; it classifies foreign markets into six relatively homogeneous global regions: North America, Central America, Latin America (without taking into account its own market), Europe, Asia-Pacific and Africa.

### Control Variables

To complete the model, we used several control variables identified in the literature as influencing ESG performance and firm value (Cho and Patten 2007; Clarkson et al. 2008; Jo and Harjoto 2011). These variables include proxies for firm size (logarithm of sales, LogSales) and the leverage ratio (Lev), which was measured as the long-term debts ratio to total equity for a company and to the gross domestic product (GDP) of a firm's country of origin. Firm size may be relevant for several reasons (for example, the possible

existence of economies of scale inherent to environmentally and socially oriented investments) (Elsayed and Paton 2005). Leverage is a proxy for unsystematic risk (Fischer and Sawczyn 2013). Firms with an increased level of ESG are perceived as less risky with regard to "insurance effects" and will be related to lower costs of debt capital (Orlitzky and Benjamin 2001; Godfrey et al. 2009).

To determine if there are any differences between the countries examined and their relations to the dependant variable, this study used four control variables (one for each country, taking the form of a dummy variable). Such a variable is used as a way of quantizing a categorical variable containing non-numerical data. The dummy is coded as 1 when a company is located in a specific country and as 0 for a company operating in any other country. We also used six dichotomous variables for the seven activity sectors to consider possible effects of industry type on the sample of firms.

Table 1 presents the correlation matrix and descriptive statistics for each of the study variables. We can see that the correlation coefficients are not very high, indicating that our estimations do not suffer from collinearity among the independent variables. The average ESG score is 59.62. Of the three ESG pillars, the governance pillar takes the highest average score for the group of multilatinas, followed by the social pillar. The environmental pillar presents the lowest values, highlighting a weakness of the multilatinas studied. In addition, we find a positive but insignificant correlation between ESG and E scores and ROA, and a negative but nonsignificant correlation between S and ROA. The relationship between G scores and ROA is positive and significant at 5%. This result suggests that nonfinancial qualifications are not the only issues that explain the performance of assets as a measure of a firm's FP. We find a positive but insignificant correlation between firm size and ROA of 0.013.

## Results

Our starting point is to estimate static panel data regression models of firm performance as a function of environmental, social and governance performance; it includes various controls as appropriate. The authors estimate both fixed and random effects models. The fixed effects model involves estimating a parameter for each cross-sectional unit—in our case, firms. The random effects model assumes that the firm-specific terms are randomly distributed. The random effects estimator will be inconsistent in the presence of correlations between fixed effects and one or more independent variable (Baltagi 2005). To control unobserved heterogeneities of the data, this study ran the Hausman test to determine when to use a fixed or random effects model. The Hausman test compares two estimators: one consistent under both the null and alternative hypotheses and one consistent under the



**Table 1** Correlation matrix and summary statistics

	Mean	SD	1	2	3	4	5	6	7	8	9	10	11
1. ROA	0.069	0.093	1										
2. ESG score	59.624	10.323	0.040	1									
3. E score	53.688	14.047	0.054	0.878**	1								
4. S score	61.158	10.688	-0.063	0.801**	0.526**	1							
5. G score	66.189	13.177	0.121**	0.781**	0.572**	0.457**	1						
6. Lev	3.937	3.610	-0.265**	-0.049	-0.125**	0.188**	-0.214**	1					
7. LogSales	3.449	0.610	0.013	0.251**	0.308**	0.154**	0.121**	0.111*	1				
8. GDP	3.017	0.419	0.092*	0.143**	0.252**	0.003	0.053	0.109*	0.237**	1			
9. Slack	1.750	1.826	0.007	-0.130**	-0.043	-0.184**	-0.116**	-0.172**	0.062	0.072	1		
10. GID	0.883	0.479	-0.184**	0.103*	0.103*	0.050	0.117**	-0.046	0.178**	-0.072	-0.071	1	
11. C1	0.471	0.500	0.153**	-0.033	0.023	-0.088*	-0.039	-0.172**	-0.020	-0.072	0.204**	-0.215**	1
12. C2	0.173	0.379	-0.011	0.137**	0.023	0.223**	0.233**	-0.117**	-0.151**	-0.086*	-0.054	-0.006	-0.118**
13. C3	0.115	0.320	-0.054	0.082	0.063	0.057	0.087*	-0.090*	0.011	-0.055	-0.053	0.259**	-0.081
14. C4	0.202	0.402	-0.174**	-0.222**	-0.066	-0.380**	-0.109*	-0.184**	0.045	0.146**	0.143**	0.166**	-0.174**
15. C5	0.038	0.192	0.122**	0.119**	0.138**	0.013	0.122**	-0.080	0.252**	0.017	-0.071	-0.115**	-0.169**
16. S21	0.096	0.295	0.005	0.138**	0.102*	0.061	0.181**	-0.031	-0.073	0.060	-0.075	0.042	-0.073
17. S22	0.115	0.320	-0.164**	-0.118**	-0.200**	0.204**	-0.359**	0.637**	-0.038	-0.173**	-0.104*	-0.121**	-0.159**
18. S23	0.058	0.233	-0.054	0.082	0.063	0.057	0.087*	-0.090*	0.011	-0.055	-0.053	0.259**	-0.068
19. S31	0.221	0.415	-0.174**	-0.222**	-0.066	-0.380**	-0.109*	-0.184**	0.045	0.146**	0.143**	0.166**	0.100*
20. S44	0.212	0.409	0.122**	0.119**	0.138**	0.013	0.122**	-0.080	0.252**	0.017	-0.071	-0.115**	-0.064
21. S48	0.048	0.214	0.005	0.138**	0.102*	0.061	0.181**	-0.031	-0.073	0.060	-0.075	0.042	0.058
22. S52	0.192	0.394	-0.164**	-0.118**	-0.200**	0.204**	-0.359**	0.637**	-0.038	-0.173**	-0.104*	-0.121**	-0.167**
	Mean	SD	12	13	14	15	16	17	18	19	20	21	22
1. ROA	0.069	0.093											
2. ESG score	59.624	10.323											
3. E score	53.688	14.047											
4. S score	61.158	10.688											
5. G score	66.189	13.177											
6. Lev	3.937	3.610											
7. LogSales	3.449	0.610											
8. GDP	3.017	0.419											
9. Slack	1.750	1.826											
10. GID	0.883	0.479											
11. C1	0.471	0.500											
12. C2	0.173	0.379	1										

Table 1 (continued)

	Mean	SD	12	13	14	15	16	17	18	19	20	21	22
13. C3	0.115	0.320	-0.089*	1									
14. C4	0.202	0.402	-0.192**	-0.132**	1								
15. C5	0.038	0.192	-0.187**	-0.128**	-0.276**	1							
16. S21	0.096	0.295	-0.081	-0.056	-0.120**	-0.116**	1						
17. S22	0.115	0.320	-0.176**	-0.121**	-0.260**	-0.253**	-0.110*	1					
18. S23	0.058	0.233	-0.113**	0.298**	-0.022	-0.049	-0.081	-0.089*	1				
19. S31	0.221	0.415	-0.060	-0.192**	0.078	0.014	-0.174**	-0.192**	-0.132**	1			
20. S44	0.212	0.409	0.074	-0.113**	0.150**	-0.104*	-0.169**	-0.187**	-0.128**	-0.276**	1		
21. S48	0.048	0.214	0.016	-0.081	-0.001	-0.045	-0.073	-0.081	-0.056	-0.120**	-0.116**	1	
22. S52	0.192	0.394	0.035	0.206**	-0.002	0.029	-0.159**	-0.176**	-0.121**	-0.260**	-0.253**	-0.110*	1

Signif. codes: 5% \*\*\* 10% \*\*

null hypothesis only. A significant difference between them indicates that the null hypothesis is unlikely to hold. Thus, the results for the Hausman test could imply that the estimators of fixed effects are inconsistent and that the estimates of random effects are more appropriate. The results of this test (for the models used in this article) denote a  $p$  value of higher than 0.05 with a level of significance of 5%. The null hypothesis thus cannot be rejected, and a random effects model is the preferred model for this regression. Finally, we used a multiple-moderated regression analysis (Cohen et al. 2013) to test the hypotheses while introducing the moderating effect as a multiplicative variable.

## ESG Performance and FP

Table 2 shows the results of the random effects regression analyses for each of the independent variables (ESG, E, S and G scores), including control variables industry type, home country, firm size, leverage and GDP. The variance inflation factors (VIF) are lower than 5 for each of the models presented, indicating that the results are not biased due to issues of multicollinearity (Hair et al. 2012). All values for adjusted  $R^2$  are above the acceptable limit for the three models.

For Model I, the ESG score was used as the independent variable. Our results show that achieving a high ESG score leads to worse FP ( $\beta = -0.001$ ;  $p < 0.05$ ), supporting Hypothesis H1. In Model II, the E score was used as the independent variable. Our results show that the relationship between the E scores and FP of the multilatinas in our sample is negative and statistically significant ( $\beta = -0.001$ ;  $p < 0.05$ ), supporting Hypothesis H1a. Our study shows that environmental performance does not lead to an increase in FP for the period analysed (2011–2015). Social performance was used as the independent variable in Model III. As observed for environmental performance, social performance is negatively related to multilatinas' FP ( $\beta = -0.004$ ;  $p < 0.01$ ). These results allow us to accept H1b on the existence of a negative association between the performance of a firm's investments and its behaviour in social terms. Finally, Model IV shows results obtained for independent variable G, providing evidence of a negative and significant relationship between G and ROA ( $\beta = -0.0005$ ;  $p < 0.05$ ). We can thus accept Hypothesis H1c.

## Moderating Role of FS and FP

Table 3 shows the results of the random effects regression analysis including the effect of moderating variable FS on the relationship between ESG scores and multilatinas' FP. The table also presents the moderating effects on each relationship between sub-factors E, S and G and FP.

**Table 2** Regression analysis results: ESG score

	Model I (H1)	Model II (H1a)	Model III (H1b)	Model IV (H1c)
Constant	0.120 (0.051)*	− 0.261 (0.184)	− 0.208 (0.186)	− 0.270 (0.186)
Control variables				
S21	− 0.006 (0.029)**	− 0.002 (0.029)*	− 0.015 (0.029)	− 0.006 (0.029)
S22	− 0.020 (0.027)	− 0.024 (0.027)	− 0.025 (0.026)	− 0.021 (0.027)
S23	− 0.056 (0.035)	− 0.055 (0.035)	− 0.064 (0.034)	− 0.057 (0.035)
S31	− 0.087 (0.023)***	− 0.080 (0.022)***	− 0.096 (0.023)***	− 0.079 (0.022)***
S44	− 0.027 (0.023)	− 0.026 (0.023)	− 0.037 (0.023)	− 0.026 (0.023)
S48	− 0.016 (0.037)	− 0.020 (0.036)	− 0.030 (0.036)	− 0.020 (0.037)
C1	− 0.127 (0.094)	− 0.134 (0.095)	− 0.133 (0.094)	0.152 (0.094)*
C2	− 0.026 (0.043)	− 0.029 (0.043)	− 0.025 (0.043)	− 0.034 (0.043)
C3	− 0.043 (0.050)	− 0.051 (0.049)	− 0.046 (0.049)	− 0.056 (0.049)
C4	− 0.076 (0.076)	− 0.082 (0.076)	− 0.080 (0.076)	− 0.095 (0.076)
LogSales	0.045 (0.011)***	0.045 (0.011)***	0.043 (0.011)	0.041 (0.011)***
Lev	− 0.009 (0.001)***	− 0.009 (0.000)***	− 0.008 (0.001)***	− 0.009 (0.001)***
GDP	0.123 (0.079)	0.128 (0.079)	0.124 (0.079)	0.135 (0.079)*
Independent variables				
ESG score	− 0.001 (0.000)**			
E score		− 0.001 (0.000)*		
S score			− 0.004 (0.000)**	
G score				− 0.000 (0.000)*
R <sup>2</sup> within	0.1299	0.1253	0.1286	0.1195
F static	15.352***	15.170***	15.342***	14.896***
VIF	1.222	1.368	1.674	1.515

Number of observations ( $n$ ) = 520; number of groups (multilatinas) = 104. The table includes coefficients of the regression model (estimators); standard deviations are shown in parentheses

\*\*\* $p < 0.001$ ; \*\* $p < 0.01$ ; \* $p < 0.05$

The relationships identified between ESG scores and FP are moderated by FS in multilatinas, as shown in Model V. It is interesting to note that, despite the appearance of moderation effects, the observed linkages between firms' ESG scores and FP become positive ( $\beta = 0.001$ ;  $p < 0.05$ ). This result suggests that high levels of FS in multilatinas allow them to adopt advanced ESG practices, improving their FP (see Fig. 2). Hypothesis H2 is thus accepted.

In Model VI, we see that the existence of FS not only weakens the relationship between environmental and financial performance but also reverses its sign ( $\beta = 0.0005$ ;  $p < 0.01$ ), producing a decreasing negative impact on FP. These results enable us to accept H1b; having access to slack financial resources not directly required for multilatina functioning likely changes the perspectives of managers, who begin to view investments in environmental matters as an interesting long-term option, as shown in Fig. 3. As they begin to achieve better environmental performance (a product of the availability of financial resources), multilatinas' FP becomes positive.

In Model VII, we also observe that FS weakens the relationship between S scores and ROA ( $\beta = 0.0001$ ;  $p < 0.05$ ) with a slightly positive moderating effect (see Fig. 4). These

results allow us to accept Hypothesis H2b. When multilatina managers have access to FS resources, they manage to invest in social initiatives that are more efficient and visible to the community.

Similarly, Model VIII confirms Hypothesis H2c, according to which FS weakens the relationship between G scores and FP, reversing the direction of this relationship to a positive one ( $\beta = 0.0005$ ;  $p < 0.001$ ). Having access financial resources that can be allocated to activities other than operations causes managers of multilatinas to consider investing in better governance practices (such as hiring external auditors and modifying company statutes) as appropriate to achieve stronger FP over the long term (as a result of achieving more legitimacy in the eyes of stakeholders). Figure 5 illustrates this behaviour.

### Moderating Role of Geographic International Diversification and FP

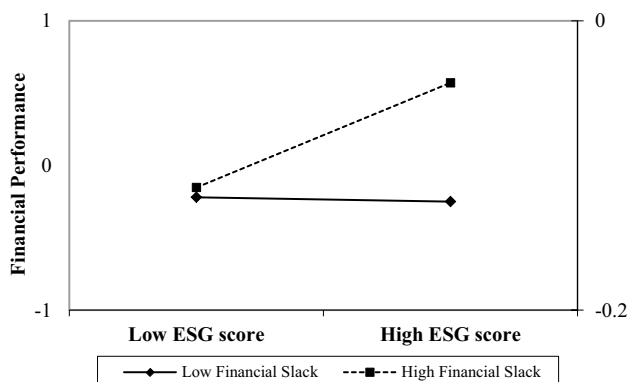
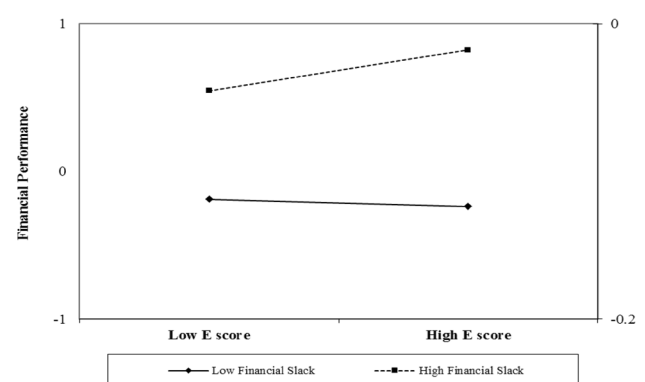
Table 4 presents the results of the random effects regression analysis, including the role of the moderating variable GID in relationships between multilatinas' ESG dimensions and FP.

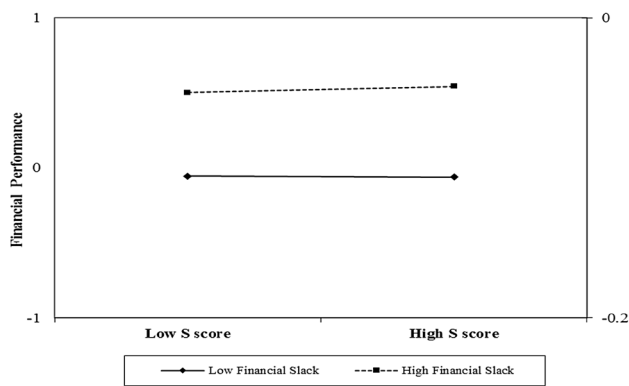
**Table 3** Regression analysis results: financial slack

	Model V (H2)	Model VI (H2a)	Model VII (H2b)	Model VIII (H2c)
Constant	− 0.178 (0.184)	− 0.161 (0.162)	− 0.189 (0.186)	− 0.239 (0.182)
Control variables				
S21	0.011 (0.030)	0.073 (0.019)***	− 0.004 (0.030)	0.018 (0.030)
S22	− 0.023 (0.027)	0.017 (0.017)	− 0.026 (0.027)	− 0.026 (0.028)
S23	− 0.061 (0.035)*	− 0.001 (0.023)	− 0.066 (0.035)*	− 0.065 (0.035)*
S31	− 0.085 (0.023)***	− 0.004 (0.014)***	− 0.094 (0.023)***	− 0.077 (0.023)***
S44	− 0.028 (0.023)	0.028 (0.015)*	− 0.037 (0.023)	− 0.027 (0.023)
S48	− 0.023 (0.037)	0.008 (0.024)*	− 0.034 (0.036)	− 0.030 (0.037)
C1	− 0.115 (0.094)	− 0.071 (0.082)	− 0.128 (0.094)	− 0.143 (0.093)
C2	− 0.014 (0.044)	− 0.001 (0.030)	− 0.020 (0.044)	− 0.020 (0.044)
C3	− 0.035 (0.050)	− 0.012 (0.036)	− 0.044 (0.050)	− 0.047 (0.050)
C4	− 0.059 (0.076)	− 0.027 (0.064)	− 0.073 (0.076)	− 0.077 (0.075)
LogSales	0.041 (0.011)***	0.039 (0.011)***	0.041 (0.014)***	0.032 (0.010)**
Lev	− 0.009 (0.001)***	− 0.009 (0.001)***	− 0.009 (0.001)***	− 0.009 (0.001)***
GDP	0.122 (0.078)	0.124 (0.078)	0.124 (0.078)	0.139 (0.078)*
Slack	− 0.011 (0.003)**	− 0.010 (0.003)***	− 0.007 (0.004)	0.014 (0.003)***
Independent variables				
ESG score	− 0.001 (0.000)**			
E score		− 0.001 (0.000)*		
S score			− 0.001 (0.000)**	
G score				− 0.0006 (0.000)
Moderating effects				
ESG score × slack	0.001 (0.000)*			
E score × slack		0.0005 (0.000)**		
S score × slack			0.0001 (0.000)*	
G score × slack				0.0005 (0.000)***
R <sup>2</sup> within	0.1461	0.1465	0.1367	0.1485
F static	15.370***	15.397***	14.978***	15.463***
VIF	1.348	1.198	1.333	1.821

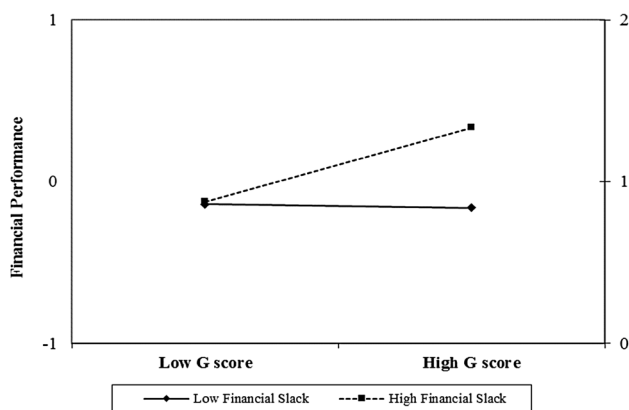
Number of observations ( $n$ )=520; number of groups (Multilatinas)=104. The table includes coefficients of the regression model (estimators); standard deviations are shown in parentheses

\*\*\* $p < 0.001$ ; \*\* $p < 0.01$ ; \* $p < 0.05$

**Fig. 2** Moderation of Financial Slack in the ESG score–FP relationship for multilatinas**Fig. 3** Moderation of Financial Slack in the E score–FP relationship for multilatinas



**Fig. 4** Moderation of Financial Slack in the S score–FP relationship for multilatinas



**Fig. 5** Moderation of Financial Slack in the G score–FP relationship for multilatinas

In Model IX, we see the moderating effect of GID on the relationship of ESG scores to FP ( $\beta = 0.001$ ;  $p < 0.05$ ). This result allows us to accept Hypothesis H3. Enjoying a stronger international presence allows multilatinas to achieve higher scores in ESG matters and better FP (see Fig. 6).

Model X shows the positive relationship between GID and FP for multilatinas included in our sample ( $\beta = 0.021$ ;  $p < 0.05$ ) and the moderating effect of GID on the relationship between E and ROA ( $\beta = 0.001$ ;  $p < 0.05$ ), confirming Hypothesis H3a. The results show that higher levels of GID weaken the relationship between a firm's E score and FP, improving ROA, as shown in Fig. 7.

Model XI, in contrast, does not provide enough statistical support for Hypothesis H3b. That is, a firm's GID does not moderate the relationship between its S score and FP for our sample of firms, as Fig. 8 shows.

Finally, Model XII shows that GID has a positive moderating effect on the relationship between G scores and ROA ( $\beta = 0.001$ ;  $p < 0.05$ ). Multilatinas' presence in other geographic markets weakens the relationship between good

governance and FP, even reversing the direction of the sign of the relationship (see Fig. 9). Hypothesis H3c is accepted.

## Conclusions and Discussion

To date, research on the relationship between the performance of ESG factors and multinationals' FP has achieved limited advances in emerging markets. In particular, only slight attention has been paid to the Latin American context. We address this gap in the research by studying the relationship between the performance of ESG dimensions and FP with the advantage of focusing on firms from emerging markets. Our empirical results indicate that ESG scores are negatively associated with multilatinas' FP according to a random effects regression. The negative sign of this association indicates that multilatinas with the best ESG scores tend to be less profitable. This finding could occur because costs related to the implementation of ESG initiatives are not reflected in a company's FP because these initiatives are not performed in the correct manner or because there is not enough institutional support to render them more visible, thus not ensuring approval from stakeholders. Alternatively, when multilatinas make high investments in ESG, they may sacrifice their cash flow and divert resources required for their operation, decreasing their performance. This result is in line with Lee et al. (2009), who find that ESG investment reduces FP and who argue that the result could indicate a lower cost of social capital for companies with high ESG scores. These findings also conflict with those of Miralles-Quirós et al. (2018), who find that the effect of ESG is positively related to economic performance among Brazilian listed companies.

Given that ESG scores are determined by a number of factors, each of which may have a different impact on performance (Galema et al. 2008), we analyse the individual effects of the E, S and G dimensions on multilatinas' FP. While the results show a negative relationship between the three score dimensions and FP, social scores have a more significant negative impact on FP than governance and environmental scores; this may be the case because multilatinas do not always behave responsibly since poorly prepared managers often focus on responding to the most powerful parties' demands (Eweje 2006) and not to the needs of the community in general. It is expected that managers will only decide to spend on social issues when there is strong demand for this form of activity and when there are chances of the firm profiting; such managers believe that allocating funds to social issues does not guarantee improvement in terms of competitive advantage, and may even reduce financial results (Lourenço and Branco 2013; Pillai and Al-Malkawi 2017). Likewise, due to the abundance of natural resources in Latin America and a lack of state regulation in environmental

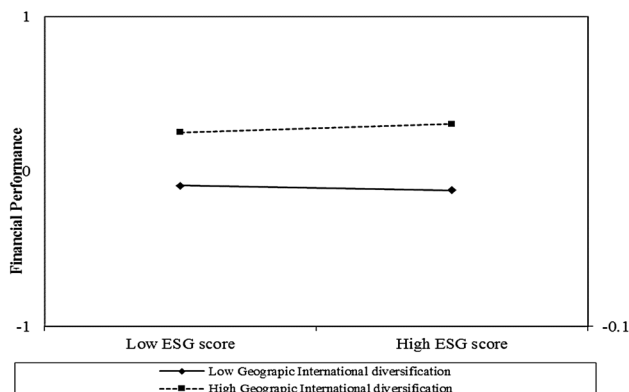
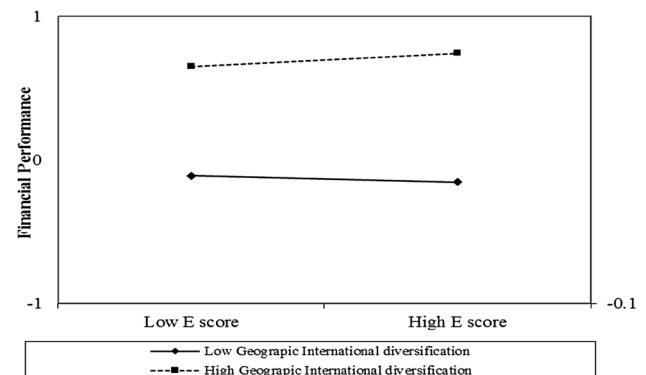


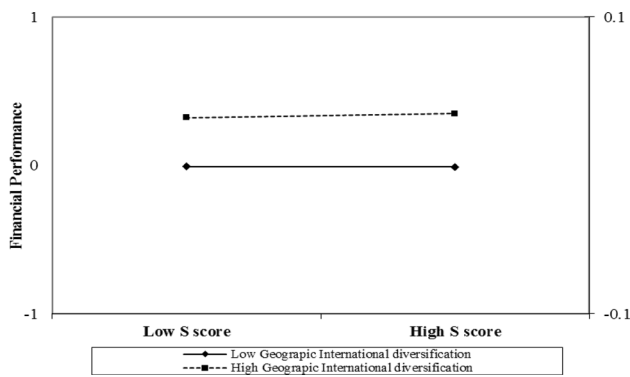
**Table 4** Results of the regression analysis: geographic international diversification

	Model 9 (H3)	Model 10 (H3a)	Model 11 (H3b)	Model 12 (H3c)
Constant	− 0.212 (0.186)	− 0.254 (0.183)	− 0.208 (0.186)	− 0.288 (0.185)
Control variables				
S21	− 0.004 (0.028)	− 0.000 (0.028)	− 0.008 (0.028)	− 0.006 (0.028)
S22	− 0.029 (0.026)	− 0.030 (0.026)	− 0.026 (0.026)	− 0.037 (0.027)
S23	− 0.029 (0.035)	− 0.030 (0.035)	− 0.045 (0.035)	− 0.027 (0.035)
S31	− 0.081 (0.024)***	− 0.070 (0.023)**	− 0.080 (0.024)**	− 0.077 (0.024)***
S44	− 0.021 (0.023)	− 0.018 (0.023)	− 0.026 (0.023)	− 0.024 (0.023)
S48	− 0.016 (0.036)	− 0.015 (0.036)	− 0.019 (0.036)	− 0.021 (0.036)
C1	− 0.129 (0.094)	− 0.134 (0.094)	− 0.139 (0.094)	− 0.168 (0.094)
C2	− 0.021 (0.042)	− 0.025 (0.042)	− 0.027 (0.042)	− 0.031 (0.041)
C3	− 0.039 (0.048)	− 0.045 (0.048)	− 0.047 (0.049)	− 0.057 (0.048)
C4	− 0.072 (0.075)	− 0.076 (0.075)	− 0.082 (0.076)	− 0.101 (0.075)
LogSales	0.043 (0.011)***	0.045 (0.011)***	0.046 (0.011)***	0.040 (0.013)***
Lev	− 0.009 (0.006)***	− 0.009 (0.001)***	− 0.009 (0.001)***	− 0.009 (0.001)***
GPD	0.124 (0.079)	0.123 (0.079)	0.120 (0.077)	0.144 (0.080)*
GID	0.015 (0.012)	0.021 (0.012)*	− 0.022 (0.012)*	0.019 (0.012)
Independent variables				
ESG score	− 0.001 (0.000)*			
E score		− 0.0007 (0.000)		
S score			− 0.001 (0.000)	
G score				− 0.0004 (0.000)
Moderating effects				
ESG score × GID	0.001 (0.001)*			
E score × GID		0.001 (0.000)*		
S score × GID			− 0.0001 (0.000)	
G score × GID				0.001 (0.000)*
R <sup>2</sup> within	0.1406	0.1371	0.1349	0.1351
F static	15.123***	19.113***	14.904***	19.809***
VIF	1.576	1.222	1.203	1.298

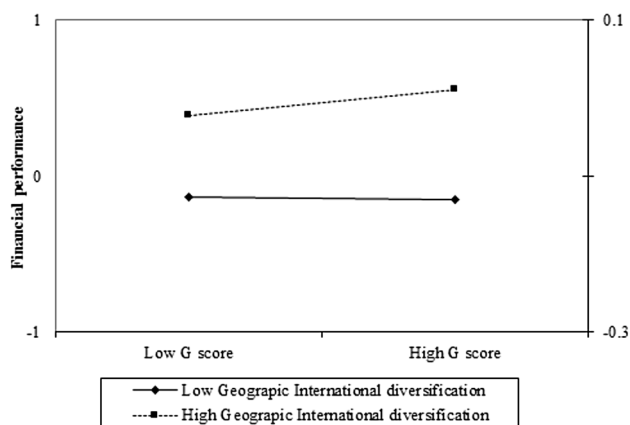
Number of observations ( $n$ )=520; number of groups (Multilatinas)=104. Numbers shown in parentheses are robust standard errors

\*\*\* $p < 0.001$ , \*\* $p < 0.01$ , \* $p < 0.05$

**Fig. 6** Moderation of geographic international diversification in the ESG score–FP relationship for multilatinas**Fig. 7** Moderation of geographic international diversification in the E score–FP relationship for multilatinas



**Fig. 8** Moderation of geographic international diversification in the S score–FP relationship for multilatinas



**Fig. 9** Moderation of geographic international diversification, G score and FP

matters, multilatina managers do not recognized the need to implement environmentally responsible activities. Thus, when these firms decide to invest in environmental initiatives, they find their financial resources being compromised and their performance decreases, since environmental goals are not priorities in their corporate strategies (neither are investments in environmental matters). Our results are consistent with the findings of prior studies conducted on the Latin American context and support inverse relationships between E, S and G, and FP (Branco and Rodrigues 2008; Garcia et al. 2017).

We also analyse whether the existence of slack financial resources and degrees of GID in our sample of multilatinas weaken the relationship between ESG scores and multilatinas' FP. First, we find that the presence of FS resources in multilatinas that operate in diversified markets reverses the relation between ESG performance and FP, allowing for more intense application of the E, S and G initiatives that improve FP. This finding clearly indicates that excess financial resources can facilitate multilatinas' efforts to invest

in concerns other than their own operations such as environmental, social and governance issues, thereby improving their long-term FP because such resources can be designated adequately to meet the many demands of interest groups (Yang and Rivers 2009) and to address the diversity of these groups' demands (Kang 2013), improving multilatinas' reputations and visibility (Hah and Freeman 2014). Financial resources may also have a positive impact on good governance in these firms because this possibility enables them to attract specialized personnel with more knowledge and superior abilities to achieve more efficient results in terms of ESG issues (Bowen 2002), in accordance with norms that integrate environmental, social and corporate governance principles. Consequently, investors can have more trust in decisions implemented by managers, enhancing company value creation.

Second, we find that a high degree of GID enables multilatinas to improve their FP based on the implementation of better practices concerning the environment and governance. In fact, the presence of multilatinas in other markets with different institutional profiles (Aguilera-Caracuel and Ortiz-de-Mandojana 2013) allows them to acquire valuable knowledge (Hitt et al. 1997). This knowledge leads their administrative board members and executive managers to act more responsibly and transparently. Consequently, they gain competitive advantages and become more attentive to the needs and expectations of a wide range of stakeholders, leading firms to take proactive action towards the environment, contributing positively to performance (Brulhart et al. 2017). On the other hand, contrary to our expectations, we did not find evidence of a moderating effect of GID on the relationship between S scores and FP. This may be the case because, although multilatinas operate in markets with different institutional social indicators, the issue of social responsibility does not have enough influence on financial indicators for these firms. Concretely, in the Latin American context, investors do not really value activities and investments related to social issues, as such actions are not visible enough and are not clearly publicized.

Our paper contributes to the literature on internationalization by extending the natural resource-based view of firms (Hart 1995; Russo and Fouts 1997) and Institutional Theory (Campbell 2007; Doh et al. 2010) to analyse the influence of FS and GID on the relation between ESG performance and FP in the Latin American context. When the directors of multilatinas enjoy the availability of financial resources, they can dedicate their efforts to adopting more efficient and sustainable ESG practices and integrating these into the company's strategy. These actions can help to make them more visible and to enjoy greater stakeholder recognition, enabling them to reduce costs and improve their FP. In addition, multilatinas that increase their presence in new markets with differentiated profiles seem to be motivated to

carry out ESG best practices as a legitimization mechanism, which gives them licence to operate and enjoy the reputation of companies that are transparent and committed to the environment and society.

This study differs from those reported in the literature review. Previous findings on the value relevance of relations between ESG and FP for DMNs cannot be generalized to emerging market multinationals such as multilatinas due to different institutional conditions in their home countries. Indeed, these firms occupy different stages of CSR maturity. This study thus addresses an international research gap with respect to what has been examined in the previous International Business literature in the context of EMNs. In addition, the study uses panel data and a diverse and complex methodology to strengthen the results obtained.

Our study also has significant implications for managers and policy makers. From a managerial point of view, the results suggest that managers and CEOs should pay attention to FS as a monetary tool that should both form an integral part of a firm's strategy and contribute to targeted issues in the societies in which they operate. Another implication of this study for managers relates to the benefits derived from GID. The importance of multilatinas' presence in different international markets allows them to have greater reputation, visibility and sales volume. Our results can motivate managers to deploy efforts and resources towards long-lasting ESG initiatives that seek to achieve the company's legitimacy in foreign markets. At the same time, managers must consider ESG as an investment rather than an expense. A series of commitments must be met, however, when multilatinas are willing to enjoy these benefits. Such commitments include addressing the different social and environmental needs, institutional requirements and expectations of stakeholders in the different markets in which they operate. By satisfying such needs, multilatinas will be able to improve their ESG performance, enhance their competitive power against DMNs and consequently enhance their long-term FP.

In addition, public and regulatory powers at the national and international levels should be able to create incentive programmes (i.e. subsidies) for companies that apply best ESG practices while showcasing the most responsible companies in terms of environmental and social issues. In this way, multilatinas and other firms will follow means for formulating and implementing advanced and responsible environmental, social and governmental initiatives.

Our study has several limitations. First, the EMNs considered in our sample originate from five Latin American countries due to availability of data. In future research, it would be interesting to study multilatinas from the other countries of Latin America and EMNs from other continents for comparison. Second, the data used for each of the ESG dimensions have a global score based on secondary data. Although these variables have been widely used in the recent

International Business literature and are treated to facilitate statistical analyses, the score assigned to each variable is not free of subjective influences, which may decrease the validity of our results. Thus, future studies should propose other alternative and innovative measures of ESG performance (i.e. information derived from other secondary databases such as Sustainability and KLD, and information obtained through questionnaires and interviews). Second, given that the dimensions E, S and G are each shaped by several factors, analyses must be further disaggregated to determine the impacts of each factor on FP.

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## Compliance with Ethical Standards

**Conflict of interest** Eduardo Duque-Grisales and Javier Aguilera-Caracuel declare that they have no conflict of interest.

**Ethical Approval** This article does not refer to any studies of human participants or animals performed by the authors.

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