



## **Abstract**

We investigate the effect of national culture on women manager appointments. We argue that culture influences women manager appointments through their effects on managerial decision-making. Using firm-level data on 2456 microfinance institutions (MFIs) across 61 countries, we document that fewer women managers are appointed in societies high on individualism and uncertainty avoidance. On the contrary, high power distance societies are positively associated with the appointment of women managers. We demonstrate that a greater number of women non-managers reduces (increases) the appointment of women managers in high individualistic (uncertainty avoidance) cultures. Our findings challenge the “one size fit all” approach adopted by policymakers around the world to increase women manager appointments. Our results are robust to endogeneity.

Keywords: National Culture, Women Managers, Microfinance Institutions

Given global concerns about the underrepresentation of women at higher levels in organisations, a large stream of literature has examined job inequalities and labour market discrimination against women. Typically, these studies focus on establishing the existence or the prevalence of the discrimination against women and thus assume that their evidence would trigger policy responses to redress the situation (Reskin, 2000). Nevertheless, little is known about the causes of workplace discrimination against women<sup>1</sup>. This may be partly due to the difficulty involved in predicting the causes of human behaviour, actions and intentions (Ajzen & Fishbein, 1969; Ajzen & Madden, 1985). Recently, however, some scholars have echoed the need for gender diversity studies to consider the causes of gender stereotyping and workplace discrimination against women (Gyapong et al., 2016; Liu et al., 2014; Saeed et al., 2016; Saeed & Sameer, 2017). We investigate how national culture<sup>2</sup> affects managerial gender diversity.

We are motivated to focus on national culture and managerial gender diversity due to the following broad considerations. The paucity of women in managerial positions is influenced by the supply and demand for women managers. From the supply side, social role theory suggests that society ascribes different characteristics across sexes and this leads to men and women occupying different roles in society (Eagly & Wood, 1999). Stereotypically, women are thus classified as having attributes that make them unsuitable for managerial roles but suitable for caretaking roles (Chizema et al., 2015; Eagly & Wood, 2012). Furthermore, culture has been used to legitimize violence against women (Krob & Steffen, 2015; Nayak et al., 2003; Rimonte, 1991). In fact, prior literature suggests that women in Asian and Middle Eastern communities believe that it is culturally acceptable for women to be disciplined by men if they do not stay within their prescribed gender roles (Huisman 1996; Raj & Silverman, 2002; Song, 1996). Consequently, women in societies with cultures that legitimize gender stereotypes may be less likely to take up managerial roles.

On the demand side, culture affects the demand for women managers by influencing the way people think, feel and act (Kluckhohn, 1951). Culture affects the behaviour and motivation of individuals so that differences in cultures explain the different construal people have about others (Markus & Kitayama, 1991; 2010; Strandell, 2016). It influences the various decisions people make (Marcen, 2014). Accordingly, existing studies suggest that culture affects managerial decisions associated with capital structure (Li et al., 2011), corporate governance (Chan & Cheung, 2012), risk (Li et al., 2013), and software piracy (Husted, 2000). We hypothesise that culture affects hiring managers' decision to appoint women managers.

The article uses data on microfinance institutions (MFIs). Although MFIs are an unusual context (Bamberger & Pratt, 2010), they provide an interesting setting for addressing issues relating to national culture and women manager appointments. First, microfinance is a business for women (Strom, et al., 2014). In terms of client base, the mission orientation of MFIs is such that they mainly depend on women borrowers (Armendariz & Morduch, 2010). This is because MFIs specialise in the provision of financial services to the informal sectors which are mainly women-dominated (Strom et al., 2014; Tchuigoua, 2016). In fact, women are the beneficiaries of more than seventy percent of loans granted by MFIs (Daley-Harris, 2009; Sanyal, 2009). Further, in terms of managers, women managers in MFIs is high relative to traditional firms. For example, although Iskenderian (2011) report a decreasing trend in women in top positions in MFIs, Strom et al. (2015) report that 29% of board seats in MFIs are still held by women. In contrast, in traditional firms, women directors constitute only 10.2% of total board seats in China (Liu et al., 2014) and 8.8% in the USA (Adams & Ferreira, 2009). The centrality of women in the microfinance industry makes it imperative to examine women-related issues in MFIs.

Second, MFIs are mainly located in developing countries (Tchuigoua, 2016) where culture is imbued in religion, fatalism, and ethnicity (Mendonca & Kanungo, 1996).

Consequently, in these countries, cultural perceptions permeate the entire fabric of life, including decisions to seek ante-natal care (Simkhada et al., 2008), and even treatment for certain ailments (Patcher, 1994). There is also evidence that culture affects CSR priorities in developing countries (Visser, 2008). It is thus delusional to think that in these countries, “when employees arrive at work they can or should leave at the point of entry their cultural baggage, and pick it up at the end of the workday for use in their non-work life and non-work activities” (Mendonca & Kanungo, 1996, p.67). The extreme cultural influence in the countries where MFIs are mainly located “allows us to capture constructs and relationships that may be too weak to notice or capture in traditional settings” (Bamberger & Pratt, 2010, p 668).

Using a sample of 2456 MFIs across 61 countries, we document that national culture (as captured by Hofstede, 1984; 2001; Hofstede et al., 2010) influences managerial gender diversity. Specifically, the results show that MFIs in countries that are high on uncertainty avoidance and individualism appoint fewer women managers. Conversely, MFIs in high power distance countries appoint more women managers. Further analysis reveals that MFIs in societies high on individualism and power distance appoint fewer women into non-managerial positions. In contrast, more women non-managers are appointed in high masculine cultures. Also, consistent with the glass ceiling hypothesis, increasing the number of women non-managers reduces the number of women managers in high individualistic countries. However, appointing more women non-managers increases women manager appointments in countries that are high on uncertainty avoidance and power distance. These findings probe the boundaries of the glass ceiling hypothesis and suggest that increasing women presence in non-managerial roles increases (reduces) glass ceiling in high individualistic (uncertainty avoidance) countries.

The study offers several contributions to the literature. First, despite the recent surge in gender diversity literature, studies that focus on the financial sector mainly examine the consequences of gender diversity. These studies primarily examine the effects of women

managers/directors on bank-level attributes such as CEO compensation (Owen et al., 2018), financial fragility (Farag & Mallin, 2017), performance (Owen & Temesvary, 2018) and capital structure (Adusei & Obeng, 2019). Our study is different because it focuses on the causes (not effects) of women manager appointments in the financial sector. More importantly, we focus on MFIs, which despite their importance (especially in developing countries) have escaped the attention of researchers in this area. Second, in contrast to prior single country studies, we use data on 2456 MFIs across 61 countries. This is necessary to capture salient institutional diversity around the world (Chizema et al., 2015) and augurs well for generalizations.

Third, we empirically link culture to managerial gender diversity. We, therefore, contribute to the literature by documenting that differences in the level of workplace gender diversity, as well as women manager appointments across countries, can be explained by national culture. Lastly, from a policy perspective, our results challenge the existing “one size fits all” approach adopted globally to increase the number of women in higher positions. For example, our results show that, whereas appointing more women non-managers reduces the appointment of women managers in countries that are high on individualism, it leads to the appointment of more women managers in high uncertainty avoidance and power distance countries. Impliedly, policies aimed at reducing workplace gender homogeneity should also consider national culture.

The remainder of the article is structured as follows. Section 2 presents the theoretical framework whilst literature review and hypotheses are presented in section 3. We present the data and methods in section 4. The results are discussed in section 5. Section 6 presents further analysis. We conduct robustness tests in section 7. We discuss the results, limitations and future directions in section 8. Section 9 concludes the article.

## **Theoretical Framework**

### *Social Role Theory*

Social role theory (SRT) offers one of the most convincing explanations for workplace gender homogeneity. According to SRT, different characteristics exist across sexes and this leads to men and women occupying different roles in society (Eagly & Wood, 1999). Society establishes a sexual division of labour where productive activities are solely carried out by one sex (Eagly et al., 2000; Murdock & Provost, 1973). That is, “feminine behaviours prevail in social situations and masculine behaviours in work situations” (Yockey, 1978 p. 917). Social role theory suggests that culturally, men are expected to be “breadwinners” and women “homemakers” (Eagly & Wood, 1999). Accordingly, these culturally differentiated roles result in sex-differentiated preferences for long-term partners where men seek women who are likely to be successful in the domestic role while women seek men who have the potential to succeed economically (Diekmann & Eagly, 2000; Johannesen-Schmidt & Eagly, 2002).

SRT ascribes communal and agentic attributes to sexes (Eagly, 1987, Koenig, et al., 2011). The communal feature is ascribed to women and pertains to a notorious concern for others and manifests through a demonstration of affection, empathy, and a concern for the welfare of others (Chizema et al., 2015; Eagly & Karau, 2002). These stereotypes lead to a heightened societal expectation that occupations such as nursing and social work should be women-dominated (Eagly et al., 2000). In contrast, agentic features such as assertiveness and confidence are ascribed to men (Eagly & Karau, 2002). However, to the extent that “there are no sex differences in cognitive abilities” (Hakim, 2006 p. 279), the stereotypical ascription of communal and agentic attributes makes it atypical for women to exhibit traits required to succeed in male-dominated occupations. For example, existing studies Chizema et al. (2015) suggest that relative to the agentic features attributed to men, the communal attributes ascribed to women are less valuable in the labour market. Consequently, women who find themselves

in societies with a cultural orientation that accept inequalities may aspire less to get into managerial roles.

### *Other Supporting Theories*

Attribution theory and prototypicality (inferential observer processes) (Elgar, 2016; Jacquart & Antonakis, 2015; Martinko et al., 2007) may also explain the incidence of women advancement at the workplace. Attribution theory suggests that “attributions are the results of the fundamental cognitive processes by which people ascertain cause and effect so that they can solve problems and become more efficacious in their interactions with their environment” (Martinko et al., 2007, p. 562). When applied to manager appointments, performance is thought to be an indicator of a manager’s competence and effectiveness (Calder, 1977; Jacquart & Antonakis, 2015). Consequently, managers get a positive evaluation and a reappointment if good performance is attributed to them or replaced if poor performances are attributed them.

More so, prototypicality refers to “peoples’ judgment” about the extent to which “attributes fit with categories” (Lord et al., 1984). That is, people have a deducible prototype of a manager or leader (Antonakis et al., 2011) and those who exhibit traits that fit this prototype are viewed favourably for managerial positions. Accordingly, existing studies suggest that height (Gladwell, 2005) and age (Elgar, 2016; Rosing et al., 2011) are important for a manager prototype. Similarly, Jacquart and Antonakis (2015) suggest that people with charisma typify the prototypicality that followers seek.

From attribution theory perspective, women may only be appointed into managerial positions if good performance is attributed to them (Brancato & Patterson, 1999). Nevertheless, empirical studies attempting to link women managers to firm performance have only produced mixed results (Adams & Ferreira, 2009; Liu et al., 2014; Ntim, 2015; Smith et al., 2006). There is also evidence that no single theory directly predicts the nature of the relationship between



women managers and performance (Carter et al., 2010). Clearly, the link between women managers and performance remains ambiguous. However, Jacquart and Antonakis (2015) propose an attributional ambiguity theory of managerial selection. They suggest that prototypicality (inferential observer processes) will matter more to selectors in the presence of attributional ambiguity. Thus, due to the prevalence of attributional ambiguity surrounding the women manager-performance nexus, prototypicality (rather than attribution) will be instrumental in women manager selection. Nevertheless, prototypical views are shaped by society in the way espoused by SRT (Abrams & Hogg, 2010; Goldman & Hogg, 2016; Hogg, 2005; Isenberg, 1986). Prototypicality is a function of SRT—people in societies that believe in the sexual division of labour where productive activities are ascribed to men (Eagly & Wood, 1999) are likely to view the male gender as a manager prototype. Consequently, although prototypicality offers some insights into women manager selection the theoretical framing and hypotheses development are grounded in SRT.

## **Literature Review and Hypotheses**

### *National Culture and Women Managers*

Smith (1997) defines culture as a “myriad ways of living exhibited by a particular group of people, ways that are transmitted from one generation to the next and which distinguish that group from others” (as quoted in Yates & Oliveira, 2016). It is a system of fixed values and beliefs that are fairly transmitted from generation to generations (Guiso et al., 2006). Culture affects how people make decisions (Yates & Oliveira, 2016). We argue that decisions regarding the extent to which productive activities are solely carried out by one sex may be greatly influenced by culture.

Strandell (2016) suggests that culture explains the differences in construal that people have about themselves and others. Arguably, culture will affect how people form implicit

prototypes of managers. This is because SRT ascribes “homemaker” and “breadwinner” roles to women and men respectively (Eagly & Wood, 1999). Therefore, in cultures that encourage (discourage) this sexual division of labour, selectors may be uncooperative (corporative) to the appointment of women managers. Culture may also indirectly affect women manager appointment by altering how women exhibit traits of a prototype manager. For example, Jacquart and Antonakis (2015) suggest that charisma is important for managerial prototype. Charismatic managers mirror the prototypicality that people seek (Hogg, 2001). In line with this, existing literature emphasizes the importance of charisma in assessing peoples’ capacity for managerial roles (Judge & Picolo, 2004; Steffens et al., 2016; Wang et al., 2011). However, charisma involves being exceptionally expressive (Gardner & Avolio, 1998; Jacquart & Antonakis, 2015) as well as the ability to challenge the status quo (Conger & Kanungo, 1987). Consequently, in societies with culture (such as high power distance) that forbid women to be expressive and challenge the status quo, women are unable to exhibit charisma and are less likely to be viewed favourably as manager prototype.

Eagly et al. (2002) argue that the existence of status and power in societies typically favour men. We argue that the pervasiveness of such unequal distribution of power and status in favour of men will be influenced by the prevailing culture in that society. Cultural orientation that favours inequality may legitimize and reinforce the inferior status ascribed to women and thus prevent them from assuming managerial roles. In contrast, stereotypes against women may wane in cultures that frown on inequalities and thus allow more women into managerial positions.

### *Hypotheses Development*

Prior national culture-related studies have employed one of the Hofstede cultural framework (Hofstede, 1980) and the GLOBE cultural measures (House et al., 2004). Relative to the

Hofstede framework, the GLOBE cultural measure is more recent and currently gaining popularity among contemporary researchers. Thus, a major caveat against the use of the Hofstede (1984) dimensions is the fact that situations might have changed and the framework may be unable to capture recent changes in national culture. However, Licht et al. (2007) note that changes in cultural values if any occur slowly over centuries. More so, because the Hofstede dimension scores represent relative positions with respect to other countries rather than an absolute position, a change in culture is unlikely to result in a change in these dimensions (Hofstede, 2001). This is corroborated by Tang and Koveos (2008) who indicated the stickiness of the Hofstede cultural dimensions over time. Indeed, the Hofstede dimensions are highly robust (Murphy, 1999) and have been widely replicated and validated in several studies (Flynn & Saladin, 2006; Hoppe, 1990; Sondergaard, 1994). Between the periods 1980 to 2002, over 170 published studies had used the Hofstede cultural framework (Kirkman et al., 2006). Relative to the GLOBE, the Hofstede framework is more familiar among researchers because it is intuitive, simpler (Hadwick, 2011) and able to capture national cultural differences while focusing on the universals of each culture that connect society (Song et al., 2018). Therefore, consistent with previous studies (Galego-Alvarez & Ortas, 2017; Graafland & Noorderhaven, 2018; Husted, 2000; Li et al., 2013; Song et al., 2018) we use the Hofstede cultural dimensions as proxies for national culture due to its wide acceptance and applications.

The Hofstede (1984) framework originally uses a sample of IBM employees across 50 countries to categorize national cultural traits into four different dimensions—power distance, uncertainty avoidance, individualism, and masculinity. Later, two new dimensions namely: long-term orientation (Hofstede & Bond, 1988), and indulgence (Hofstede et al., 2010) were added. Nevertheless, the new dimensions have attracted severe criticisms. For example, Chorou et al. (2018) argued that the new dimensions were based on different sample coverage and are not comparable with the other four dimensions. Indeed, the new dimensions were only an

attempt to bring in an Eastern construct (Hadwick, 2011) and have neither integrated with the other four constructs nor understood the Eastern perspective (Fang, 2003). Eringa et al. (2015) reported that long-term orientation consists of many values that overlap with the original four dimensions. Accordingly, Yeh and Lawrence (1995) caution against using individualism and long-term orientation together due to the high similarity. Consequently, existing studies (Ashraf et al., 2016; Chen et al., 2017; Ghoul & Zheng, 2016; Salzmann & Soypak, 2017) mainly concentrate on the original four dimensions. Thus, relying on insights from prior studies and to facilitate results comparability, we focus on the four dimensions (Uncertainty avoidance, Individualism, Masculinity and power distance) espoused in Hofstede (1984).

***Uncertainty avoidance (Uncert)***. Hofstede (1984) defined uncertainty avoidance (*Uncert*) as the degree to which members of society embrace ambiguity or uncertainty. In high *Uncert* societies, people are conservative, bent on upholding the status quo, and intolerant towards foreign or alien practices (Chan & Cheung, 2012). In contrast, weak *Uncert* societies tolerate deviant behaviours in a relaxed atmosphere where practice is more important than principles (Hofstede, 1984).

Social role theory suggests a sexual division of labour and opines that men are expected to be involved in productive activities whilst women take care of the home (Eagly & Wood, 1999). To reduce uncertainty or ambiguity, high *Uncert* societies rely on rigid rules and norms (Hofstede, 1997). People in High *Uncert* societies frown on ambiguity and are less likely to accept unknown situations (Husted, 2000). In fact, social role theory suggests that “perceivers” tend to have strong conformity to sex-typical behaviours because they often ask others for guidance in ambiguous situations (Eagly et al., 2000; Festinger, 1954). We argue that women in high uncertainty avoidance countries may conform to the sexual division of labour and refuse to offer themselves for managerial appointments because moving into managerial may be a

source of ambiguity. Further, within SRT, the male gender is viewed more favourably as a manager prototype because agentic features which are highly valued at the workplace are only ascribed to men (Chizema et al., 2015). Accordingly, *Uncert* may reduce women manager appointments by indirectly influencing selectors' choice of a manager prototype. This is because appointing a woman manager when the female gender is viewed as an unfavourable manager prototype may represent ambiguity or uncertainty. Therefore, uncertainty avoidance may result in the appointment of fewer women managers because it amounts to a certain degree of ambiguity and creates uncertainty. We, therefore, hypothesise that

*H1: High uncertainty avoidance impacts negatively on the number of women managers.*

*Individualism (Indiv)*

***Individualism.*** Is concerned with a preference for a loosely knit society (Hofstede, 1984). In contrast, collectivism refers to the degree of interdependence or the extent of close ties between individuals (Husted, 2000). Individualistic societies exhibit assertive and self-orientated traits embedded in selfishness so that rules and principles that hinder self-interests are ignored (Priem & Shaffer, 2001). People from individualistic cultures place much emphasis on individual rights (Chan & Cheung, 2012). Individualists are egoistic and are less concerned with ethical issues that promote the well-being of others (Vitell et al., 2003). Moreover, SRT consistently defines socially acceptable household responsibilities for women (Eagly & Wood, 1999; Rao, 2012). Within SRT womanhood is synonymous with domesticity and societies expect women to focus on the home (Rao, 2012). This domesticity ideology also echoes the subordination of women to men (Jackson, 1998). Given these SRT postulations, vis-à-vis the self-centred nature of dominant males in individualistic societies (Chan & Chang, 2012), they may prioritize their advantageous societal ascriptions to the detriment of women (Triandis,

1989). Consequently, they will resist attempts to implement rules that further the advancement of women at the workplace leading to a reduction in the number of women managers.

Triandis (1994) and Husted (2000) describe how national culture shapes social behaviours and preferences. They argue that social behaviour is a function of in-group norms in both collectivist and individualist cultures. “In individualist cultures, equity is preferred over equality, while in collectivist cultures, equity is preferred in dealing with outgroups only, but equality is preferred in dealing with the ingroup” (Husted, 2000 p. 203). Gender equity is about giving women whatever they need to enable them to compete, whilst gender equality is concerned with equal treatment for women so they can compete fairly (Halai, 2011; Kumar & Quisumbing, 2015). However, the global call for corporate gender diversity<sup>3</sup> (Liu et al., 2014; Ntim, 2015) is premised on equality, not equity. This is because it aims at removing discriminatory impediments (such as glass ceiling) that hinder the advancement of women so that women can have the same chance as men in career progression (Carter et al., 2003; Gyapong et al., 2016). Accordingly, others including Adams and Ferreira (2009), Brancato and Patterson (1999), Liu et al. (2014) suggest that focusing the corporate gender diversity argument solely on equity will only result in tokenism. Therefore, to the extent that individualism is associated with equity and not equality, there will be fewer women managers in individualist societies. We, therefore, hypothesize that:

*H2: High individualism impacts negatively on the number of women managers.*

#### *Masculinity (Masc)*

**Masculinity.** Refers to the extent to which society has a preference for “achievement and material success” (Hofstede, 1984). In contrast, femininity is concerned with the care and quality of life (Husted, 2000). “Masculinity” and “femininity” are not in reference to the male and female gender because males can be feminine just as females can be masculine (Hofstede,

1984). This view is synonymous with the social psychology literature that suggests that both men and women can be masculine, feminine or androgynous (Bem, 1977; O'Connor & Brown, 2016; Robbins et al., 2001).

Men in feminine countries are as caring as women (Hofstede, 2011). Femininity emphasizes corporation, consensus building and equality for both men and women (Hofstede, et al., 2010). Arguably, there will be less workplace gender discrimination in high feminine societies. In contrast, women in masculine countries are not as assertive and competitive as men (Hofstede, 2011). Consequently, men in masculine societies are given outgoing and assertive roles whilst nurturing and caring roles are ascribed to women (Hofstede, 1984). For example, Hofstede (2011) notes that few women are elected into political positions in masculine countries. This is also consistent with the social role theory's prescription of agentic and communal features for men and women respectively (Eagly & Wood, 1999; Koenig et al., 2011). Feminine features which are similar to the communal attributes stereotypically ascribed to women are less valuable in labour markets (Chizema et al., 2015; Kilbourne & England, 1996). We argue that institutions in masculine societies are likely to be male-dominated. Based on these arguments, we hypothesize that:

*H3: Low masculinity impacts positively on the number of women managers.*

*Power Distance (PWD)*

**Power distance.** "Is the extent to which the members of a society accept that power in institutions and organizations is distributed unequally" (Hofstede, 1984 p.83). It creates a subordinate-superior relationship where subordinates have a heavy reliance on their superiors (Husted, 2000). Children in high power distance societies are taught to obey authorities whilst those in lower power distance countries are treated as equals and are able to question issues relating to inequalities (Hofstede, 1997). In high *PWD* cultures, important business decisions

are made by the rich and more powerful who consider their interests as paramount and the less powerful are very wary of contradicting authorities (Blodgett et al., 2001). *PWD* is thus conceptually related to Young (1990) “five faces of oppression” where the *PWD* cultural orientation becomes an imperialist culture so that actions that further the interests of the wealthy and the powerful become the norm whilst the powerless are placed such that they must take orders and seldom have the right to give them (Dubrosky, 2013; Young, 1990).

Consequently, in terms of women representation in managerial positions high, *PWD* will impact both the demand and the supply sides. From the supply side to the extent that women in high *PWD* societies accept that power is unequally distributed and feel reluctant to challenge the status quo, they may be comfortable with non-managerial roles for two main reasons. First, they may be reluctant to challenge the sexual division of labour espoused in SRT. In this case, they may conform to the “homemaker” role stereotypically ascribed to them (Eagly & Wood, 1999). Thus, they are likely to accept the male gender as a manager prototype. Second, women in high *PWD* societies may be incentivised to accept and exhibit the communal attributes society ascribes to them. This will hinder them from exhibiting the “agentic” traits perceived to be a requirement to succeed in managerial roles. All these factors will reduce their willingness to offer themselves up for managerial positions which are perceived to be reserved for men (the supposed “breadwinners” with “agentic” features). From the demand side, because inequalities are acceptable in high *PWD* cultures (Hofstede, 1984), discrimination against women is more likely to be acceptable and the women will refuse to question it. Therefore, the dominant male managers may be comfortable enforcing gender role stereotypes against them. This will keep women in non-managerial roles and reduce their appointment to managerial positions which for a long time have been reserved for men. We, therefore, hypothesize that:

*H4: High power distance impacts negatively on the number of women managers.*



## **Method and Data**

Data for this study are mainly from the Microfinance Information Exchange (MIX) database. The MIX database hosts high-quality data on microfinance institutions (MFIs) around the world (Tchuigoua, 2016; Servin et al., 2012). MFIs reported by the MIX focus on a large number of MFI clients (Bogan, 2012). Unsurprisingly, the MIX data have recently been used extensively in several studies (Blanco-Oliver et al., 2016; Bogan, 2012; Servin et al., 2012; Tchuigoua, 2014; 2016; Wijesiri, 2016). We also collect country-level data from the World Bank's World Development Indicators (WDI) website. The final sample resulted in 2456 unique MFIs across 61 countries (Appendix) over the period 2005-2015.

### *Dependent variable*

The objective of this study is to examine the effect of national culture on managerial gender diversity. Specifically, the study seeks to examine how national cultural orientation may impact on women representation in the workforce at the managerial level. Previous gender diversity research either focus on the percentage of women on boards (Adams & Ferreira, 2009, Gul et al., 2011; Gyapong et al., 2016) or the fraction of women managers (Geiler & Renneboog, 2015). However, since we focus on women managers we follow Geiler and Renneboog (2015) and use the fraction of women managers (MGRS).

### *Main Independent Variables- National Culture*

Consistent with previous studies (Husted, 2000; Li et al., 2013) and as argued in section 3, we use the Hofstede cultural dimensions as proxies for national culture. More specifically, we focus on the four cultural dimensions (individualism, uncertainty avoidance, power distance and masculinity) espoused in Hofstede (1984). These scores are obtained from the results of the Hofstede psychological survey of IBM employees between 1967 and 1973.

### *Control Variables*

***MFI-Specific Controls.*** We control for several firm-level characteristics. We argue that the number of women managers may be influenced by the particular market being targeted by MFIs. For example, it is reasonable to expect MFIs that target low-end customers consisting mainly of women traders to have a higher number of women managers. MIX market puts the target market into four main categories, broad, small business, low-end and high-end. We control for this by including indicator variables for each of these categorizations. Further, we expect the number of women non-managers to affect the appointment of women managers. That is, ordinarily, MFIs with more women in non-managerial roles are likely to appoint women managers. To control for this, we use the percentage of women non-managers ( $F/Staff$ ). More so, whether or not an MFI is operationally self-sufficient (*OSS*) may impact on the fraction of women managers. That is, whereas MFIs that are not operationally self-sufficient may be mainly guided by performance when making appointments and promotion decisions, operationally self-sufficient MFIs may simply make appointments and promotions based on other social considerations (such as the pursuance of a gender-equality objective) rather than performance. We, therefore, include an indicator variable to capture whether an MFI is operationally self-sufficient (*OSS*). We also control for MFI size (*SIZE*) as bigger MFIs are more likely to have more managers which may offer them the luxury of appointing women managers.

***Country-Specific Controls.*** A country's level of economic development/growth affects how businesses are run (Chan & Cheung, 2012). We argue that the level of women participation in the workforce will be influenced by the level of real economic activity. We, therefore, control for the wealth of a country by including the GDP growth per capita ( $GDPgrt$ ). Further, because MFIs belong to the financial sector it is envisaged that the level of financial sector development

may affect the fraction of women managers in particular. We, therefore, control for the level of financial sector development (*FSD*). More so, a major argument advanced for the lack of managerial gender diversity is a lack of qualified women (Gyapong et al., 2016). MFIs in countries with higher levels of female literacy are expected to have more women managers. We, therefore, control for the level of female literacy (*Literacy*) in the country where an MFI is located. Also, women in countries where laws mandate equal remuneration for both men and women may be incentivised to aspire for managerial roles. We, therefore, include a dummy variable (*Law*) equal to one for the existence of laws mandating equal remuneration for both men and women. All country-level variables were obtained from the World Bank (World Development Indicators).

**Method.** The study utilises an unbalanced panel data that consist of several repeated observations hierarchically nested within firms that are hierarchically nested in countries. These present two major methodological issues. First, the three hierarchies in the data require an estimation technique that is able to deal with three levels of analyses. Second, the unbalanced nature of our data imply unequal block sizes and will involve the estimation of inter-block and intra-block weights that are not necessarily equal. Based on these constraints, we employ a hierarchical linear model (HLM) with residual maximum likelihood (REML). Our choice is based on two main reasons.

First, HLM deals with statistical models and parameters that vary at more than one level (Raudenbush & Bryk, 2002). It is based on a Bayesian approach and effectively controls for different level effects (such as time, firm or country) by partitioning out the variance across these different levels of analyses (Erkan et al., 2017; Hoffmann, 1997; Raudenbush & Bryk, 2002). HLM allows for direct and simultaneous estimations at each level of analysis whilst holding other levels constant (Erkan et al., 2013; Hoffmann, 1997, Ozkaya et al., 2017).

Consequently, it alleviates concerns associated with the violation of independence that can bias standard errors in OLS estimates (Fong, 2010).

Second, in balanced designs the fixed parameters are known, therefore the variance component can be efficiently estimated via the usual maximum likelihood (ML) approach because the blocks are of equal sizes (Nelder, 1968; Twisk, 2006). However, in unbalanced designs where the variances are random (Twisk, 2006) REML produces accurate estimates. This is because, the REML eliminate biases in unbalanced panels by dividing the mean squared deviation by the degrees of freedom instead of by sample size (Patterson & Thompson, 1971; Harville, 1977).

***The Econometric Specification.*** To test the effect of national culture on managerial gender diversity (our main hypotheses), we estimate the following hierarchical regression model:

$$MGRS_{i,t} = \beta_0 + \sum_{i=4}^n \beta_1 Culture_{i,t} + \sum_{i=6}^n \beta_2 Z_{i,t} + \sum_{i=2}^n \beta_3 K_{ic,t} + \varepsilon_{i,t} \quad (\text{Model 1})$$

As additional analyses, we also examine the effect of national culture on non-managerial gender diversity, as well as how exposure to women non-managers affects culturally-embedded gender stereotypes.

To examine the effect of national culture on non-managerial gender diversity we estimate the following hierarchical regression model:

$$F / Staff_{i,t} = \beta_0 + \sum_{i=4}^n \beta_1 Culture_{i,t} + \sum_{i=6}^n \beta_2 Z_{i,t} + \sum_{i=2}^n \beta_3 K_{ic,t} + \varepsilon_{i,t} \quad (\text{Model 2})$$

To examine how the exposure to women non-managers affect culturally-embedded gender stereotypes we estimate the following hierarchical regression model:

$$MGRS_{i,t} = \beta_0 + \sum_{i=4}^n \beta_1 Culture_{i,t} + \beta_2 F / Staff_{i,t} + \sum_{i=4}^n (\beta_3 Culture_{i,t} * \beta_4 F / Staff_{i,t}) + \sum_{i=6}^n \beta_5 Z_{i,t} + \sum_{i=2}^n \beta_6 K_{i,c,t} + \varepsilon_{i,t}$$

(Model 3)

Where:

$MGRS_{i,t}$  = The fraction of women managers in MFI  $i$  at time  $t$ .

$F/Staff$  = The fraction of women non-managers in MFI  $i$  at time  $t$ .

$Culture_{i,t}$  = Uncertainty avoidance, Individualism, Masculinity and Power Distance for MFI  $i$  at time  $t$ .

$Z_{i,t}$  = Matrix of MFI-specific controls such as fraction of women non-mangers (F/Staff), Operational self-sufficiency (OSS), Size (SIZE), target market dummies (TargetMkt),

$K_{i,t}$  = Matrix of controls that capture conditions in the country where the MFI is active.

All variables are as defined in Table 1.

[INSERT TABLE 1 ABOUT HERE]

## Results

### *Descriptive Statistics and Correlation Matrix*

Table 2 presents results for Pearson's correlation matrix. Generally, the correlation matrix shows low correlations between the independent variables. We also evaluated multicollinearity using the variance inflation factor (VIF). The unreported results showed a mean VIF of 1.8 with a maximum of 3.8. These indicate reduced multicollinearity. Interestingly, as hypothesised the correlation matrix shows that the fraction of women managers is negatively associated with all the four cultural variables. However, whereas uncertainty avoidance, individualism and masculinity have statistically significant associations with the fraction of women managers, power distance does not.

Results for the descriptive statistics are also shown in Table 3. It indicates that MGRS has a mean of 0.11 and a standard deviation of 0.23. This indicates that on average 11.38% of

managerial seats are occupied by women. Similarly, F/Staff has a mean and standard deviation of 0.14 and 0.25 respectively. This implies that women constitute 14% of non-managerial staff. However, the mean for the fraction of women non-managers (14%) is greater than that of women managers (11%) suggesting that in relative terms, there are more women non-managers than women managers. Unsurprisingly, the mean of MGRS (0.11) and F/Staff (0.14) are higher than the median (MGRS= 0.00; F/Staff= 0.00). This indicates that they are positively skewed. Impliedly, a greater number of the sampled MFIs appoint fewer women managers and women staff with very few MFIs having a higher number of women staff and women managers. For the control variables, we find that 21% of the sampled MFIs are operationally self-sufficient (OSS) whilst 35.2% are located in countries with laws that mandate equal remuneration for both men and women (Law). Further, countries in the sample have an average GDP growth per capita (GDPgrt) of 3.57%. Also, financial sector development (FSD) and size (SIZE) have means of 35.31, and 15.64 respectively.

In terms of the cultural variables, power distance has the highest mean (74.21) followed by uncertainty avoidance (61.01) before masculinity (51.97). Further, Individualism has the lowest mean of the four cultural variables (25.81). These results indicate that most of the countries in the sample are collective societies with high power distance and a moderate appetite for uncertainty. Given that most MFIs are located in developing countries (Strom et al., 2014) which are mainly collectivist societies with high power distance, the result is not surprising.

**[INSERT TABLE 2&3 ABOUT HERE]**

### *Regression Results*

***Culture and Managerial Gender Diversity.*** Table 4 presents results for the HLM analyses used to test the hypotheses. This table presents regression estimates for model 1.

Column 1 only includes the control variables and column 2 tests the hypotheses. In line with HLM procedures, the measure of model fit is reported in the form of a likelihood ratio test (LR) (Raudenbush & Bryk, 2002). The LR ratio provides a comparison of the fully unrestricted models with no predictors with their respective more complex models (Fong, 2010). As evident in Table 4, the LR test statistics Chi-square is significant across all the models.

The results in column 1 show the effects of the control variables on managerial gender diversity. Interestingly, the existence of laws mandating gender pay equality (*Law*) has no statistically significant relationship with the fraction of women managers ( $P\text{-value} > 0.1$ ). Similarly, the level of female literacy (*literacy*) does not influence the appointment of women managers ( $P\text{-value} > 0.1$ ). These suggest that gender pay-equality laws and high female literacy rates do not improve managerial gender diversity. The results for the full regression (including the hypothesised variables) are shown in column 2. It indicates that uncertainty avoidance (*Uncert*) impacts negatively on the fraction of women managers ( $P\text{-value} < 0.01$ ). This result supports H1 and indicates that fewer women managers are appointed in high uncertainty avoidance societies. More so, the results in Table 4 (column 2) show that individualism exhibit a negative and statistically significant relationship with the fraction of women managers ( $P\text{-value} < 0.01$ ). This also supports H2, which states that individualistic societies have fewer women managers. Further, masculinity has a positive relationship with the fraction of women managers but the relationship is not statistically significant ( $P\text{-value} > 0.1$ ). This indicates that the masculinity cultural orientation does not affect managers' decision to appoint women managers, thus H3 is not supported. Again, power distance has a positive and statistically significant relationship with the fraction of women managers ( $P\text{-value} < 0.01$ ). This finding is in contrast to H4 and suggests that the fraction of women managers is high in high power distance societies. Given that corporate gender diversity is a corporate governance issue (Ntim, 2015) the results contradict the findings of Chan and Cheung (2015) who reported a negative

relationship between power distance and corporate governance. Nevertheless, Hofstede (2001) suggests that people in high power distance societies are taught to obey authorities without questioning. Therefore, with the advent of SRT that suggests role play according to sexes (Eagly et al., 2001), it could be that PWD impact negatively on women representation at a different level in the organization. We explore the possibility that high PWD legitimizes sex roles by preventing women participation at lower levels in the organisation (non-managerial roles).

**[INSERT TABLE 4 ABOUT HERE]**

### **Further Analysis**

#### *Culture and Non-Managerial Gender Diversity*

Existing studies on gender stereotypes mainly focus on women managers (Geiler & Renneboog, 2015) or board members (Adams & Ferreira, 2009; Liu et al., 2014) and thus assume that gender stereotype is evident when women are unable to climb up the corporate ladder. However, although, women's labour force participation rates are as high as 67% in China and 57.5% in the USA (Chen et al., 2014), they are as low as 16% and 15% in Afghanistan and Algeria (World Bank, 2014) respectively. Impliedly, culturally-embedded gender stereotypes generally affect women participation in the workforce and not only at the top level.

We explore the extent to which national culture affects women participation in the workforce albeit at the non-managerial level by running model 2. The result is presented in Table 5. It shows that although uncertainty avoidance (Uncert) has a positive relationship with the fraction of women non-managers (F/Staff), the relationship is not statistically significant. This suggests that women representation at non-managerial levels is not a source of uncertainty or ambiguity so that even in high uncertainty avoidance societies, women representation at



lower levels of the organisation is not restrained. In contrast, individualism (Indiv) impacts negatively on women representation at non-managerial levels (F/Staff) and the relationship is statistically significant ( $P\text{-value}<0.01$ ). Further, results in Table 5 indicate that masculinity (Masc) has a positive and statistically significant relationship with women in non-managerial positions (F/Staff) ( $P\text{-value}<0.01$ ). This suggests that the masculinity cultural orientation increases the appointment of women into non-managerial roles. Interestingly, power distance has a negative and statistically significant relationship with the fraction of women at the non-managerial level (F/Staff) ( $P\text{-value}<0.05$ ).

**[INSER TABLE 5 ABOUT HERE]**

#### *The Mere Exposure Effect and Culturally-Embedded Gender Stereotypes.*

The mere exposure hypothesis suggests that people's attitudes are enhanced by merely exposing them to a stimulus or an object (Zajonc, 1968). Exposing people to stimulus, object or group leads to increases in "experienced familiarity" and then "increased liking" (Becker & Rinck, 2016). In fact, mere exposure can non-consciously alter people's perception of a group in their community and causes them to feel connected to others in their society (Kwan et al., 2015). Investors have special preferences for investments that they have been previously exposed to (Cao et al., 2009) because merely exposing customers to a product, or a brand name increases the consumer's favourable attitude towards the brand (Janiszewski, 1993). For example, to reduce gender stereotypes against women in business, the dean of Harvard Business School proposes doubling the rate of female protagonists in business cases (Patel, 2014). There is also evidence of a drastic reduction in biases at the random exposure to women colleagues (Finseraas et al., 2016), and to black females in colleges (Boisjoly et al., 2006).

Beaman et al. (2009) investigated the effect of the mere exposure effect on Indian villagers who had a preference for male leaders. They reported that exposure to women leaders

weakens stereotypes about gender roles and concluded that mere exposure can “successfully alter social norms or perceptions”. We argue that the mere exposure effect can successfully alter culturally embedded norms and perceptions. Therefore, *ceteres paribus*, exposure to women non-managers<sup>4</sup> may change how culturally embedded stereotypes affect the appointment of women managers. For example, there may be fewer women managers in high uncertainty avoidance cultures because their presence may result in uncertainty and ambiguity. However, after their entry into the workforce, male managers may become exposed to them and become familiar with their skills and abilities. Their presence may thus cease to be a source of ambiguity and uncertainty in high *Uncert* cultures. This may enable them to rise to the highest level in the organization. We examine how exposure to women subordinates affects the appointment of women managers in different cultures.

To do this we run Model 3. The results are presented in Table 6. Column 1 presents the results for the *Uncert-F/Staff* interaction (*Uncert\*F/Staff*). It indicates that the *Uncert-F/Staff* interaction has a positive and statistically significant relationship with *MGRS* (*P-value*<0.01). The findings suggest that increasing the number of women in non-managerial roles in high *Uncert* cultures reduces the uncertainty and ambiguity associated with women manager appointments. Column 2 presents results for the interaction of *F/Staff* and *Indiv* (*Indiv\*F/Staff*). The results show that the interaction of *Indiv* and *F/Staff* is negatively related to *MGRS* (*P-value*<0.01). Results in column 2 also indicate a negative and statistically significant effect of *Indiv* on *MGRS* (*P-value*<0.01). These results imply that fewer women managers are appointed in high individualistic societies, and exposure to women subordinates does not reduce the discriminatory attitudes against women in these societies. The findings of this study suggest that the mere exposure effect does not reduce the glass ceiling against women in individualistic societies. Further, Column 3 shows that the interaction of *Masc* and *F/Staff* (*Masc\*F/Staff*) has no statistically significant relationship with *MGRS* (*P-value*>0.1). Also, *Masc* has a positive

relationship with *MGRS* but the relationship is not statistically. These findings indicate that the masculinity cultural orientation does not influence women manager appointments and this relationship is unaffected by the number of women subordinates. Lastly, column 4 presents results for the *PWD-F/Staff* interaction (*PWD\*F/Staff*). It shows that the interaction of *PWD* and *F/Staff* impacts positively on *MGRS* and the relationship is statistically significant (*P-value*<0.01). This implies that exposure to women subordinates in high power distance societies increases the fraction of women managers. Further, *PWD* remains positive but not statistically significant in column 4 (*P-value*>0.1) indicating that in the absence of women subordinates, high power distance has no effect on the fraction of women managers.

Overall, the findings indicate that the mere exposure effect has no influence on how culturally embedded attitudes impact women manager appointments in high masculine (*Masc*) societies. Conversely, the mere exposure effect reduces (increases) the fraction of women managers in high individualistic (power distance and uncertainty avoidance) societies.

**[INSERT TABLE 6 ABOUT HERE]**

### **Robustness Test: Endogeneity**

#### *The Hausman-Taylor Estimator*

Our studies examine the effect of national culture on managerial gender diversity in MFIs. Nevertheless, culture and managerial gender diversity may be endogenously related (through reverse causality, omitted variable bias etc). Therefore, following Oh et al. (2016) we adopt the Hausman-Taylor estimator (Hausman & Taylor, 1981) to deal with endogeneity. The Hausman-Taylor (HT) estimator is an instrumental variable estimator that uses both the within and between variation of the strictly exogenous variables as instruments (Baltagi et al., 2003). Specifically, it uses the individual means of the strictly exogenous regressors as instruments for the time-invariant regressors that are correlated with the individual effects (Baltagi, 2001).

The HT estimator removes biases in parameter estimates arising from endogenous unobserved effects by specifying different subsets of variables that were assumed to be endogenous (Oh et al., 2016).

The results of the HT estimator are shown in Table 7. Consistent with the HLM regressions, column 2 shows that uncertainty avoidance and individualism impact negatively on the fraction of women managers. Similarly, masculinity exhibits no statistically significant relationship while power distance has a positive and statistically significant relationship with the fraction of women managers. Also, results for the mere exposure effect (as displayed in columns 3-6) are consistent with the HLM regressions. These indicate that overall, our results are robust to endogeneity concerns.

#### *Further Tests*

We conduct further tests to ascertain the robustness of our results. First, although the results of the correlation matrix indicate no serious multicollinearity we note that theoretically, it may be possible to infer a correlation between some of the cultural variables. We thus re-run all our regressions by including the cultural variables separately. The unreported results show that our results remain qualitatively similar. Further, our analyses excluded two of the Hofstede cultural variables (long-term orientation and indulgence) because these were missing for most countries in our sample. However, we included these in a different set of regressions and our results remained qualitatively similar. Lastly, almost 10% of the sampled MFIs are from India raising the possibility that the India sample could drive the results. We, therefore, re-run all our regressions by excluding the Indian sample. The unreported results are qualitatively similar to all our previous results indicating that our results are not blurred by the India sample.

#### **Discussion, Limitations and Future Directions**

The results show that workplace gender diversity is a function of national cultural orientation. More specifically, although uncertainty avoidance and individualism reduce the appointment of women managers, masculinity has no effect on managerial gender diversity. In contrast, power distance increases managerial gender diversity. The results also indicate that while fewer women non-managers are employed in societies high on power distance and individualism, uncertainty avoidance has no effect on the participation of women in non-managerial roles. However, in high masculine societies, higher numbers of women are employed in non-managerial roles. Interestingly, in societies high on uncertainty avoidance and power distance, increasing the number of women non-managers results in higher numbers of women managers. On the contrary, in high masculine societies, a higher number of women in non-managerial roles reduces the appointment of women managers. These findings offer several contributions.

First, the study offers an empirical contribution. The fact that studies on the relationship between ownership structure and the appointment of women to managerial positions have produced mixed results leave researchers to seek an explanation for such findings. For example, Martin-Ugedo and Minguéz-Vera (2014) report a positive (negative) and statistically significant relationship between family (corporate) ownership and corporate gender diversity in Spain. In contrast, the findings of Saeed et al. (2016) indicate that family ownership has no effect on workplace gender diversity in Russia and Brazil. One explanation for the mixed results could be that relative to Russia and Brazil, daughters of wealthy business families in Spain may be relatively educated and are able to assume managerial roles in the family business. Alternatively, it could be that shareholders' decision to favour or oppose women manager appointments are influenced by their cultural environment. Our study follows the logic of Scott (1995) and argues that different classes of ownership may have an effect on the appointment of women managers, but the direction may depend on cultural factors that surround their societies and grant them legitimacy. For example, owners in countries with a

cultural heritage that promote the advancement of women in the workplace, are more likely to champion the appointment of women managers to gain societal legitimacy. On the contrary, shareholders from cultures that do not support the advancement of women in the workplace may support conservative decisions that will result in managerial gender homogeneity. We test how different national cultural orientation affects the advancement of women to managerial roles. We find that uncertainty avoidance and individualistic societies oppose the appointment of women managers while masculinity has no effect. On the contrary, high power distance societies encourage the appointment of women into managerial roles. To the extent that people make decisions cognisant of their legitimacy implications (Scott, 1995; Suchman, 1995), the study contributes to the literature by documenting that culturally-entrenched beliefs of various stakeholders including shareholders may influence their women managerial appointment decisions.

Second, the study has practical implications for managers and regulators. The debate over workplace gender diversity has attracted global attention. In response regulators in several countries including Norway, Sweden, Spain, Australia, the UK and Germany instituted either a mandatory gender quota or a recommendation requiring firms to increase women representation in managerial positions. In the US, California recently introduced a mandatory gender quota. Also in 2017, the UK supplemented their gender recommendation with a gender pay-gap act. This Act aims to increase workplace gender diversity by reducing pay-gaps between men and women. Nevertheless, questions have been raised about whether gender quota is expedient. For example, Bohren and Staubo (2014) question the effectiveness of mandatory gender quotas at the board level and suggest that firms change organizational form to circumvent board upheaval.

The results show that in countries high on uncertainty avoidance as well as those in high power distance, merely increasing the number of women in non-managerial roles results

in increases in the number of women managers. Impliedly, in these cultures, exposure to women at lower levels of the organisation alter culturally-embedded norms, weaken stereotypes about gender roles and augurs well for women managerial appointments. This view is consistent with arguments in the social psychology literature (Beama et al., 2009; Becker & Rinck, 2016; Cao et al., 2009; Zajonc, 1968) that attitudes are enhanced by exposure. Moreover, the fact that women non-managers are able to assume managerial roles in these cultures indicates that managerial gender homogeneity in these societies is not due to unfair discrimination against women employees. This obviates the need for mandatory gender quota aimed at reducing gender-based inequalities at the workplace that hinder the progress of women. Therefore, we suggest that policymakers in societies high on power distance and uncertainty avoidance focus on increasing women's participation in the workforce (in non-managerial roles) which is far easier to do than compelling firms to appoint women into critical managerial roles.

The result also shows that increasing the number of women non-managers in high individualistic societies reduces the number of women managers, and has no effect on the appointment of women managers in high masculine societies. The fact that a higher number of women in non-managerial roles does not encourage more women manager appointments implies that governments and policymakers in countries high on individualism and masculinity may need to adopt an alternative approach rather than merely increasing the number of women non-managers if they are to reduce managerial gender homogeneity. In these countries, we recommend the use of gender legislation, quotas and recommendations to increase managerial gender diversity. These imply that a consideration of national culture may provide a nuanced regulatory response to increasing managerial gender diversity.

Third, important theoretical contributions are offered. Social role theory suggests that society establishes a sexual division of labour where masculine behaviours prevail in work

situations and feminine behaviours in social situations (Eagly & Wood, 1999; Yockey, 1978). Consequently, men and women exhibit traits reminiscent of these stereotypical gender role ascriptions making it atypical for women to succeed in the workplace. SRT, therefore, offers credible explanations for workplace gender homogeneity. Nevertheless, within SRT, what is not clear is whether there are inter-societal differences in gender role beliefs. If as demonstrated in previous studies (Adams & Ferrera 2009; Gyapong et al., 2016; Liu et al., 2014), different societies have different levels of managerial gender diversity, then this may be because different societies place a different level of emphasis on gender role stereotypes

This study theorizes that culture influences workplace gender diversity through its effect on the extent to which societies uphold the stereotypical ascription of gender roles. SRT argues that men and women perform different roles in society where men are “breadwinners” and women are “homemakers” (Eagly & Wood, 1999). Similarly, Hofstede (1984) opines that people in high uncertainty avoidance societies are conservative and are apt to uphold the status quo and avoid ambiguity and uncertainty. In consonance with this, our results suggest that high uncertainty avoidance impacts negatively on the fraction of women managers. Thus, the appointment of women into managerial roles is a source of ambiguity and uncertainty since it implies that women become “breadwinners” contrary to their “homemaker” role. Therefore, drawing on SRT, we interpret the results to mean that to avoid uncertainty and ambiguity, managers in high uncertainty avoidance societies uphold traditional gender role stereotypes and thus become intolerant to the appointment of women managers. Alternatively, given that SRT stereotypically ascribes “homemaker” roles to women the findings may be because women in high uncertainty avoidance countries regard managerial roles as atypical to their gender and avoid it because it represents uncertainty and ambiguity. The results indicate that uncertainty avoidance societies place greater emphasis on traditional gender stereotypes leading to increased managerial gender homogeneity.



Further, Hofstede (1984) suggests that individualistic societies are egoistic, self-centred and selfish. Our results complement this by suggesting that fewer women managers are appointed in individualistic societies. Thus, managerial positions in most companies are male-dominated and the gender stereotypes argued in SRT favour men. Consequently, individualistic male managers demonstrate selfishness and self-centeredness by upholding these gender stereotypes against women resulting in the appointment of fewer women managers. However, we do not find statistically significant results for the effects of masculinity on the fraction of women managers. This indicates that high masculine societies neither emphasize nor downplay stereotypical gender roles against women.

More so, the findings suggest that power distance impact negatively (positively) on the fraction of women non-managers (managers). In high power distance cultures, society accepts the unequal distribution of power (Hofstede, 1984), and the interests of the most powerful are paramount whilst the less powerful accept inequalities (Blodgett et al., 2011). The findings, therefore, indicate that high power distance legitimises the sexual division of labour argued in SRT, leading to the appointment of fewer women into non-managerial roles. Nevertheless, the few women that make it to non-managerial roles are able to challenge the status quo, lessen the effects of gender stereotypes and increase their presence in managerial positions. Overall, drawing on the societal lens, the results indicate that although gender role stereotype-shared expectations reduce (increase) the appointment of women managers in societies high on uncertainty avoidance and individualism (Power distance), it has no effect in high masculine societies. This study thus contributes to a better understanding of how the gender role stereotypes argued in SRT may vary across countries and societies with different cultural orientation.

The study has some limitations. First, similar to other related studies (Galego-Alvarez & Ortas, 2017; Graafland & Noorderhaven, 2018; Husted, 2000; Li et al., 2013; Song et al.,

2018) our study uses the Hofstede (1984) original four cultural dimensions. Focusing on the four dimensions bring in its trail two major advantages. First, prior studies (Hodwick, 2011; Fang, 2003; Eringa et al., 2015) suggest that the new two dimensions (long-term orientation and indulgence) are related to several attributes of the original four dimensions, hence their omission help mitigate potential multicollinearity issues. Second, the high popularity and usage of the Hofstede cultural dimensions relative to the GLOBE cultural indices improve results comparability. Nevertheless, a contrary view is that the GLOBE study is more recent and with nine different cultural dimensions, it provides a fine-grained approach to measuring national culture. Future studies could focus on the GLOBE cultural indices. Second, our study uses data on MFIs which are mainly located in developing countries. While this provides important evidence on managerial gender diversity, generalizability may be limited due to the focus on developing countries. Future studies may explore developed countries where advancement and modernisation may weaken the grip of local culture. Third, India has the highest number of firms in our sample. However, given that India is a big country with huge cultural variations across regions care should be taken when generalizing our results with respect to India.

## **Conclusions**

In conclusion, this study examines how different dimensions of national culture account of inter-country differences in managerial gender diversity. The article is premised on the argument that managerial gender homogeneity is a function of the sexual division of labour that encourages men and women to value and exhibit different traits. Thus, there is a societal perception that men exhibit “agentic” features while women exhibit communal features. However, society views the “agentic” features attributed to men as important for a manager prototype because it involves features such as assertiveness and confidence. This leads to the appointment of a few women managers. By extension, the results suggest that the extent to

which this gender role stereotype may increase managerial gender homogeneity is subject to whether local culture upholds or opposes this perception. For example, people in high uncertainty avoidance cultures are wary of opposing this perception and as such tend to appoint fewer women managers. Nevertheless, increasing the number of women non-managers in high uncertainty avoidance societies reduces this perception and increases women manager appointments. On the contrary, individualistic societies uphold gender role stereotypes and appoint fewer women managers regardless of the number of women non-managers. Further, societies high on masculinity neither uphold nor oppose these gender stereotypes and as such does not affect the appointment of women managers irrespective of the number of women in non-managerial positions. Interestingly, high power distance societies oppose (uphold) these gender stereotypes against the appointment of women managers (non-managers). As a result more (less) women managers (women non-managers) are appointed in high power distance cultures. However, increasing the number of women non-managers increases the appointment of women managers in these societies. The findings imply that national culture is an important determinant of workplace gender diversity. Although regulators and businesses have adopted a “one size fit all” approach to reducing workplace gender homogeneity, our results suggest that contrasting approaches cognisant of national cultural orientation may be effective in increasing managerial gender diversity.

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<sup>1</sup> The few studies (Bobbit-Zeher, 2011; Burgess & Borgida, 1999; Glicke & Fiske, 2007; Gorman, 2005) that examine the causes of workplace gender discrimination focus on how gender stereotyping and organizational factors contribute to discrimination against women. However, although the findings of these studies are useful, they do not address why these gender stereotyping and organizational factors that discriminate against women at the workplace exist, as well as why they are more prevalent in some societies relative to others.

<sup>2</sup> In this article, we use the words “culture” and “national culture” interchangeably to refer to national culture.

<sup>3</sup> Several countries around the world are calling on firms to increase the number of women managers and directors. For example, Norway signed a law requiring firms to increase the number of female directors to 40% by 2008. Similarly, Iceland, Spain, Finland, France, Germany, Italy, and Belgium have introduced various quotas to facilitate managerial and board gender diversity. In the USA, California introduced a bill in 2018 that requires firms to increase the number of women in top positions. Others including the UK, Australia, New Zealand etc. have introduced voluntary recommendations that encourage firms to appoint more women into top management.

<sup>4</sup> Prior studies mainly focus on peer-to-peer exposure (Finseraas et al., 2016; Boisjoly, et al., 2006). However, we focus on subordinates-to-superior exposure for two main reasons. First, the global call for gender diversity is premised on the argument that there are too many female subordinates but male-dominated managers. Consequently, a focus on subordinate-to-superior exposure is necessary to capture how culture either inhibit or prohibit the ‘many female subordinates but fewer female managers’ problem. Second, existing studies suggest that most firms either do not have women in managerial positions or just appoint “token” women (Kanter, 1977; Carter et al., 2003; Liu et al., 2014; Gyapong et al., 2016). However, the critical mass theory suggests that women need a critical mass to make the desired impact (Kristie, 2011). Therefore, we believe that the mere exposure effect is best captured at the lower level of the organization where women are more likely to have a critical mass.

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**Table 1.**  
Variable Description and Definitions

<b>Variable</b>	<b>Proxy</b>	<b>Description</b>	<b>Source</b>
<i>Dependent Variable</i>			
MGRS	Fraction of women managers	Number of women managers expressed as a fraction of total managers.	MIX Market
<i>Main Independent Variables</i>			
Uncert	Uncertainty Avoidance	The Uncertainty-avoidance dimension expresses the degree to which the members of a society feel uncomfortable with uncertainty and ambiguity. The country mean scores from the survey questions are used to form an index that range between 0 and 100. Higher scores represent a higher level in that specific dimension. The method in calculating the culture scores are similar across all Hofstede's cultural dimensions.	Hofstede (1984; 2001; 2010)
Indiv	Individualism	Individualism is defined as a preference for a loosely-knit social framework in which individuals are expected to take care of only themselves and their immediate families.	Hofstede (1984; 2001; 2010)
Masc	Masculinity	The Masculinity side of this dimension represents a preference in society for achievement, heroism, assertiveness and material rewards for success.	Hofstede (1984; 2001; 2010)
PWD	Power Distance	This dimension expresses the degree to which the less powerful members of a society accept and expect that power is distributed unequally.	Hofstede (1984; 2001; 2010)
<i>Control Variables</i>			
F/Staff	Fraction of women non-managers	Number of women non-managers expressed as a fraction of total non-managers staff	MIX Market
OSS	Operational Self Sufficiency	= {(Operating revenue)/ (financial expense+ loan-loss provision expense + operating expense)}  An indicator variable equal to "1" if an MFI has OSS>= "1" otherwise "0"	MIX Market
SIZE	Total Assets	Natural logarithm of total assets {Ln(total assets)}	MIX Market
TargetMkt	Target Market Dummies	Indicator variables for four target markets classified as broad, small business, low-end and high-end.	MIX Market
GDPgrt	Gross Domestic Product Growth per Capita	The rate of GDP per capita growth.	World Development Indicators
FSD	Financial Sector Development	Domestic credit by the financial sector. Includes all credit to various sectors. The financial sector includes monetary authorities and deposit money banks, as well as other financial corporations	World Development Indicators
Law	Remuneration law.	An indicator variable equal to "1" for whether there is a law that obligates employers to pay equal remuneration to male and women employees who do work of equal value otherwise "0"	World Development Indicators
Literacy	Female Literacy	The percentage of female aged 15 and above who can both read and write with understanding a short simple statement about their everyday life.	World Development Indicators

**Table 2.**  
Pearson's Correlation Matrix

	1	2	3	4	5	6	7	8	9	10	11	12	
MGRS	1												
Uncert	2	-0.02+	1										
Indiv	3	-0.07+	-0.42+	1									
Masc	4	-0.02+	-0.09+	0.26+	1								
PWD	5	-0.00	-0.21+	0.07+	0.40+	1							
Law	6	0.02+	0.00	-0.01	0.01	-0.03+	1						
Literacy	7	0.00	-0.05+	-0.02+	0.02	-0.00	0.24+	1					
FSD	8	0.20+	-0.25+	0.32+	-0.15+	-0.11+	-0.00	0.01	1				
OSS	9	0.02+	0.12+	-0.06+	0.00	-0.04+	-0.05+	-0.20+	-0.03+	1			
F/Staff	10	0.45+	0.02+	-0.07+	-0.01	-0.03+	0.01	-0.00	0.19+	0.04+	1		
GDPgrt	11	0.00	-0.01	-0.01	0.02+	0.05+	0.08+	0.09+	0.01	-0.10+	0.00	1	
Size	12	0.04+	0.19+	-0.05+	0.10+	0.02+	-0.00	0.00	0.05+	0.07+	0.09+	0.02	1

This table presents the Pearson's correlation coefficients of the variables used in the regressions. The national culture variables include uncertainty avoidance (Uncert), individualism (Indiv), Masculinity (Masc) and power distance (PWD). The other variables include the fraction of women managers (MGRS), existence of gender pay-gap law (Law), female literacy (Literacy), financial sector development (FSD), operational self-sufficiency(OSS), target market(TargetMarket), the fraction of women non-managers (F/staff), GDP growth per capita (GDPgrt) and MFI size (Size). + indicates a 2-tailed statistical significance at the 5% level.

**Table 3**  
Descriptive Statistics

	Full Sample						With MGRS		Without MGRS	
	Mean	Std Dev	25th	Median	75th	95th	Mean	Std. Dev	Mean	Std. Dev
MGRS	0.11	0.23	0.00	0.00	0.07	0.66				
Uncert	61.01	18.27	44.00	55.00	80.00	90.00	59.04	18.63	61.79	18.07
Indiv	25.81	12.33	15.00	25.00	32.00	48.00	25.81	13.25	25.81	11.95
Masc	51.97	11.05	42.00	55.00	63.00	69.00	52.03	10.64	51.95	11.20
PWD	74.21	10.76	69.00	77.00	80.00	94.00	74.24	10.25	74.19	10.95
Law	0.352	0.47	0.00	0.00	1.00	1.00	0.36	0.48	0.34	0.47
Literacy	77.92	20.95	62.98	82.91	93.81	99.73	78.48	20.58	77.69	21.09
FSD	35.31	19.11	22.81	29.54	44.82	70.45	40.96	21.86	33.34	17.64
OSS	0.21	0.41	0.00	0.00	0.00	1.00	0.25	0.43	0.20	0.40
F/Staff	0.14	0.25	0.00	0.00	0.25	0.69	0.43	26.00	0.02	12.26
GDPgrt	3.57	3.32	2.03	3.57	5.05	7.79	3.46	3.32	3.61	3.31
Size	15.64	2.15	14.27	15.54	17.02	19.38	16.35	1.96	15.37	2.15

This table presents descriptive statistics of the variables used in the regressions. The national culture variables include uncertainty avoidance (Uncert), individualism (Indiv), Masculinity (Masc) and power distance (PWD). The other variables include the fraction of women managers (MGRS), existence of gender pay-gap law (Law), female literacy (Literacy), financial sector development (FSD), operational self-sufficiency(OSS), target market(TargetMarket), the fraction of women non-managers (F/staff), GDP growth per capita (GDPgrt) and MFI size (Size).

**Table 4**  
Hierarchical Linear Regressions of Culture and Managerial Gender Diversity

	(1)	(2)
	MGRS	
Law	0.559	0.645
Literacy	0.007	0.003
FSD	0.071***	0.087***
OSS	-0.189	-0.162
F/Staff	0.701***	0.697***
GDPgrt	-0.017	-0.031
SIZE	-0.294***	-0.271***
TargetMarket	YES	YES
Uncert		-0.043***
Indiv		-0.103***
Masc		0.008
PWD		0.053***
Constant	3.227*	3.327
Wald $\chi^2$	8972.53***	9090.80***
LR $\chi^2$	61.90***	56.90***
N	7007	7007

This table presents hierarchical linear regression model for the effects of national culture on the fraction of women managers. The dependent variable is the fraction of women managers (MGRS). The national culture variables include uncertainty avoidance (Uncert), individualism (Indiv), Masculinity (Masc) and power distance (PWD). The control variables include existence of gender pay-gap law (Law), female literacy (Literacy), financial sector development (FSD), operational self-sufficiency(OSS), target market(TargetMarket), the fraction of women non-managers (F/staff), GDP growth per capita (GDPgrt) and MFI size (Size). The residual maximum likelihood is employed in all regression. Unstandardized coefficients are reported. \*, \*\* and \*\*\* indicate statistical significance at 10%, 5% and 1% levels respectively. All variables are as defined in Table 1.

**Table 5**  
Hierarchical Linear Regressions of Culture and Non-Managerial Gender Diversity

	(1)	(2)
	F/Staff	
Law	0.518	0.410
Literacy	0.000	-0.010
FSD	0.240***	0.325***
OSS	3.598***	2.569***
GDPgrt	0.020	0.014
TargetMarket	YES	YES
SIZE	1.062***	0.799***
Uncert		0.0236
Indiv		-0.336***
Masc		0.186***
PWD		-0.0736**
Constant	2.259***	2.229***
Wald $\chi^2$	410***	586***
LR $\chi^2$	218.03***	204.41***
N	7007	7007

This table presents hierarchical linear regression model for the effects of national culture on the fraction of women non-managers. The dependent variable is the fraction of women non-managers (F/Staff). The national culture variables include uncertainty avoidance (Uncert), individualism (Indiv), Masculinity (Masc) and power distance (PWD). The control variables include existence of gender pay-gap law (Law), female literacy (Literacy), financial sector development (FSD), operational self-sufficiency (OSS), target market (TargetMarket) GDP growth per capita (GDPgrt) and MFI size (Size). The residual maximum likelihood is employed in all regression. Unstandardized coefficients are reported. \*, \*\* and \*\*\* indicate statistical significance at 10%, 5% and 1% levels respectively. All variables are as defined in Table 1.



**Table 6**  
Hierarchical Linear Regressions of Mere Exposure Effect and the Culture- Managerial Gender Diversity Relationship

	(1)	(2)	(3)	(4)
	MGRS			
Law	0.593	0.687	0.638	0.646
Literacy	0.003	0.004	0.0042	0.005
FSD	0.079***	0.082***	0.085***	0.086***
OSS	-0.117	-0.264	-0.136	-0.246
F/Staff	0.829***	0.758***	0.733***	0.447***
GDPgrt	-0.034	-0.026	-0.029	-0.037
SIZE	-0.275***	-0.273***	-0.262***	-0.287***
TargetMarket	YES	YES	YES	YES
Uncert	-0.010	-0.041***	-0.044***	-0.043***
Indiv	-0.092***	-0.063**	-0.104***	-0.099***
Masc	0.004	0.002	0.019	0.010
PWD	0.054***	0.052**	0.052***	0.001
Uncert*F/Staff	0.002***			
Indiv*F/Staff		-0.002***		
Masc*F/Staff			-0.001	
PWD*F/Staff				0.003***
Constant	1.557	2.691	2.788	7.342**
Wald $\chi^2$	9193***	9130***	9098***	9165.24***
LR $\chi^2$	49.91***	55.39***	57.48***	53.15***
N	7007	7007	7007	7007

This table presents hierarchical linear regression model for the mere exposure effects of the culture-managerial gender diversity relationship. The dependent variable is the fraction of women managers (MGRS). The national culture variables include uncertainty avoidance (Uncert), individualism (Indiv), Masculinity (Masc) and power distance (PWD). The control variables include existence of gender pay-gap law (Law), female literacy (Literacy), financial sector development (FSD), operational self-sufficiency (OSS), target market (TargetMarket) the fraction of women non-managers (F/staff), GDP growth per capita (GDPgrt) and MFI size (Size). The residual maximum likelihood is employed in all regression. Unstandardized coefficients are reported. \*, \*\* and \*\*\* indicate statistical significance at 10%, 5% and 1% levels respectively. All variables are as defined in Table 1.

**Table 7**  
Endogeneity- Hausman Taylor Estimation

	(1)	(2)	(3)	(4)	(5)	(6)
	MGRS					
Law	0.715	0.797*	0.754	0.809*	0.791*	0.771
Literacy	0.005	0.002	0.001	0.001	0.001	0.003
FSD	0.074***	0.090***	0.082***	0.087***	0.085***	0.086***
OSS	0.495	0.337	0.298	0.324	0.342	0.218
F/Staff	0.688***	0.685***	0.786***	0.717***	0.716***	0.455***
GDPgrt	0.020	0.005	0.003	0.009	0.005	0.003
SIZE	-0.266***	-0.253***	-0.261***	-0.257***	-0.256***	-0.278***
TargetMarket	YES	YES	YES	YES	YES	YES
Year	YES	YES	YES	YES	YES	YES
Uncert		-0.038***	-0.014	-0.037***	-0.038***	-0.038***
Indiv		-0.097***	-0.088***	-0.078***	-0.094***	-0.091***
Masc		0.009	0.005	0.004	0.013	0.007
PWD		0.049**	0.051***	0.049**	0.050**	0.001
Uncert*F/Staff			0.002***			
Indiv*F/Staff				-0.001*		
Masc*F/Staff					-0.000	
PWD*F/Staff						0.003***
Constant	-76.3	-30.5	-19.61	-31.72	-20.16	-12.11
Wald $\chi^2$	6116***	6313.63***	8626.16***	8311.96***	8857.71***	9096.32***
N	7007	7007	7007	7007	7007	7007

This table presents results from the Hausman Taylor estimation. The dependent variable is the fraction of women managers (MGRS). The national culture variables include uncertainty avoidance (Uncert), individualism (Indiv), Masculinity (Masc) and power distance (PWD). The control variables include existence of gender pay-gap law (Law), female literacy (Literacy), financial sector development (FSD), operational self-sufficiency (OSS), target market (TargetMarket) the fraction of women non-managers (F/staff), GDP growth per capita (GDPgrt) and MFI size (Size). The residual maximum likelihood is employed in all regression. Unstandardized coefficients are reported. \*, \*\* and \*\*\* indicate statistical significance at 10%, 5% and 1% levels respectively. All variables are as defined in Table 1.

**Appendix 1**  
List of Countries

No	Country	Firms	No	Country	Firms
1	Afghanistan	17	31	Iraq	11
2	Argentina	16	32	Kazakhstan	36
3	Armenia	14	33	Kenya	36
4	Azerbaijan	39	34	Kosovo	12
5	Bangladesh	51	35	Kyrgyzstan	43
6	Benin	30	36	Laos	30
7	Bolivia	25	37	Madagascar	16
8	Bosnia and Herzegovina	13	38	Mali	21
9	Brazil	39	39	Mexico	106
10	Bulgaria	26	40	Mongolia	12
11	Burkina Faso	28	41	Morocco	10
12	Burundi	22	42	Nepal	44
13	Cambodia	20	43	Nicaragua	32
14	Cameroon	26	44	Niger	17
15	China, People's Republic of	67	45	Nigeria	75
16	Colombia	39	46	Pakistan	34
17	Congo, Democratic Republic	24	47	Palestine	11
18	Costa Rica	18	48	Peru	63
19	Cote d'Ivoire (Ivory Coast)	26	49	Philippines	90
20	Dominican Republic	13	50	Russia	118
21	Ecuador	68	51	Rwanda	43
22	Egypt	16	52	Senegal	73
23	El Salvador	19	53	Sierra Leone	11
24	Ethiopia	25	54	Sri Lanka	23
25	Georgia	15	55	Tajikistan	45
26	Ghana	69	56	Tanzania	22
27	Guatemala	26	57	Togo	32
28	Honduras	26	58	Uganda	27
29	India	201	59	Uzbekistan	33
30	Indonesia	48	60	Vietnam	40
			61	Yemen	10
					<b>2456</b>